

**Muslim Students Environment
Awareness and Green
Entrepreneurial Intention:
Extended Theory of Planned
Behavior Approach**

***Müslüman Öğrencilerin Çevre Bilinci ve
Yeşil Girişimcilik Niyeti: Genişletilmiş
Planlanmış Davranış Teorisi Yaklaşımı***

Titin Vegirawati

Dr., IBA University

titinvegirawati@gmail.com

<https://orcid.org/0000-0002-9195-8796>

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Muslim Students Environment Awareness and Green Entrepreneurial Intention through Extended Theory of Planned Behavior Approach

Abstract

This research examines the effect of environmental awareness, attitude toward green entrepreneurial, subjective norms on green entrepreneurial, and perceived behavioral control of green entrepreneurial on green entrepreneurial intention. This paper used a purposive method to collect data by distributing closed questionnaires to one hundred seventy-three Indonesian Muslim students who studied in Indonesia, Pakistan, and several Middle Eastern countries. PLS-SEM is mainly helpful in determining the influence of the variables. Overall, the findings of this research indicated that environmental awareness, attitude toward green entrepreneurship, subjective norms on green entrepreneurship, and perceived behavioral control on green entrepreneurship have positive and significant effects on green entrepreneurial intention. Specifically, attitude toward behavior and subjective norms do not significantly impact green entrepreneurial intention.

Keywords: Awareness, Student, Entrepreneurial, Intention

JEL Codes: D83, I23, M13, D03

Introduction

Entrepreneurs build their businesses and fight for survival. They focus on production and high profit and do the complicated process. It starts with creating the right idea, obtaining funds, purchasing equipment, establishing an office, making teamwork, identifying the target market, selling products, and engaging in many other ancillary activities (Wu, Matthews, & Dagher, 2007).

The main characteristic of an entrepreneur is innovation (Nair & Pandey, 2006). The other characteristics are independence, risk-taking, growth, need for control, goal achievement (Wu, Matthews, & Dagher, 2007), Future-oriented, motivated by knowledge development, responsible and self-confidence (Abdullah, 2013)

During this time, despite bringing economic benefits, businesses are often criticized for bringing negative impacts on the environment such as pollution and waste. Currently, the air quality in Indonesia is getting better. However, Indonesia is still the 26th worst country in the world for air pollution (IQAir, 2023). In addition to water pollution, 133 rivers in Indonesia are polluted and 76 rivers are slightly

polluted (Widodo, 2023). Therefore, since the launch of the SDGs in 2015, the government and businesses must make a mindset change that leads to actions that prioritize the environment in every step of their business.

Green entrepreneur are a model of entrepreneurship, in which they engage in entrepreneurial activities (producing goods/services) by balancing economic, environmental and community aspects. Thus, they do not only produce goods/services for profit. However, they also run businesses that have a better impact on the environment.

The forms of business activities of green entrepreneurs are very diverse. Some start businesses by targeting environmental issues, such as using waste/used goods to produce other valuable items, such as umbrellas, bags, and wallets. In addition, green entrepreneurs are now beginning to venture into the online world. Several startups have been established to manage waste, open waste banks, and digital waste savings.

In addition to utilizing waste, other forms of green entrepreneurs' businesses include offering goods or services that are more environmentally friendly. For example, a green entrepreneur makes products with natural ingredients, uses packaging made of biodegradable materials, and offers tourist attractions that are more environmentally friendly. By using more environmentally friendly goods, the pollution and waste generated by business activities can be minimized.

The different types of businesses of these green entrepreneurs show that they are concerned about real societal problems, especially environmental ones. They seek to solve these problems through their knowledge, skills, and businesses. The businesses they build have a positive impact not only on economic growth but also on the environment. With more and more green entrepreneurs, environmental problems caused by business are expected to be minimized and social development goals will be achieved.

Students are potential human resources who are prepared to be future green entrepreneurs. Generally, it is essential to study their intention, predict their behavior, and prepare them for future professional situations. Based on the Extended Theory of Planned Behavior, this research explains students' intentions to green entrepreneurial and affected factors.

1.Literature Review

1.1.Background Theory

Theory of Planned Behavior

The theory of planned behavior is used to explain one's behavior. This theory was developed by Ajzen (Ajzen, *The Theory of Planned Behavior*, 1991). The focus of this theory is one's intention to perform appropriate behavior. Intention is considered to be direct antecedent of behavior (Bosnjak, Ajzen, & Schmidt, 2020). It is considered a motivational factor indicating how much effort is made to perform the behavior. In the Islamic perspective, intention acts as the first step of behavior, and the value of behavior depends on intention (Kazaure, 2019).

Some research applied this theory to predict intention. Maichum et al. (2016) explained the effect of some variables on green product intention. On the other hand, Bosnjak et al (2020) revealed that this theory is also applied to health and public science. Furthermore, some research on entrepreneurship based on this theory (Ambak, Kasvar, Daniel, Prasetijo, & Ghani, 2016); (Khoirunnisa, Salsabiil, Sodik, Dewanti, & Yusfiarto, 2023); (Lim, Kim, & Kim, 2021).

Ajzen (1991) explained that the intention to perform various types of behavior can be predicted with extreme accuracy from attitude toward behavior, subjective norm, and perceived behavioral control. Attitude toward behavior is a relatively persistent one-dimensional summary of evaluation that might energize behavior (Spears & Singh, 2004). In other words, attitude is an evaluative act represented in dimensions such as bad or good, unpleasant versus pleasant, or like or dislike. Attitude is based on a person's belief about a particular issue (Svenningsson, Host, Hultén, & Hallström, 2022).

Besides attitude, a person's subjective norm is assumed to predict intention. Subjective norms are normative beliefs or individual perceptions that influence someone's thoughts on whether to do or not do the action (Aji, Berakon, & Riza, 2021). It means subjective norms are associated with extrinsic incentives to perform behavior. The primary source of social influence comes from family members, friends, or neighbors. They act as essential others who evaluate an individual's behavior (Wan, Shen, & Choi, 2017).

Perceived behavioral control is a variable that is a significant predictor of intention. It is related to an individual's ability to perform behavior and capability to overcome any problems they may encounter. If a person believes he has sufficient resources, abilities, and opportunities and can solve the problem, he has the confidence to perform his behavior (Ajzen, 2002). Therefore, this variable combines perceived

control and self-efficacy or confidence in one's ability to perform behavior (Xiao & Wong, 2020).

Some research has applied this theory to predict appropriate intention; in addition, some studies have extended this theory by adding other variables to predict one's intention, such as awareness variable (Junaidi, 2021); (Makanyeza, Sivotwa, & Jaiyeoba, 2021); (Xu, Victor, & Blankson, 2018); (Wan, Shen, & Choi, 2017). For this reason, the Theory of Planned Behavior model is extended by combining this theory with variable awareness as an affected variable in a single integrated model variable

1.2. Previous Studies

The Theory of Planned Behavior is a theory that explains the basis for a person's actions. The theory developed by Ajzen (1991) explains that a person's actions are based on intention, while intention arises from several factors, namely attitude toward behavior, subjective norms, and perceived behavioral control. This theory has become the foundation of several studies regarding human behavior (Xu, Victor, & Blankson, 2018); (Kazaure, 2019); (Xiao & Wong, 2020); (Aji, Berakon, & Riza, 2021) which was researched in several different countries such as the United States, Nigeria, and Indonesia.

Table 1: Previous Studies

Author (s)	Building Theory	Respondents	Country
(Allen & Malin, 2008)	values, motivations, and beliefs of green entrepreneurs	Business owners	United States.
(Lee & Shin, 2010)	Awareness and purchase intention	Consumer	South Korean
(Cheng & Tung, 2014)	Extended Theory of Planned Behavior	Internet users	Taiwan
(Xu, Victor, & Blankson, 2018)	Theory of Planned Behavior	Automobile Buyers	Texas, United States
(Aji, Berakon, & Riza, 2021)	Theory of Planned Behavior and Theory of Acceptance Model	Bank customer	Indonesia
(Kazaure, 2019)	Theory of Planned Behavior	Owners/manager microenterprises	Nigeria
(Xiao & Wong, 2020)	Theory of Planned Behavior	Research paper	Five electronic databases (1) Pub Med, (2) PsycINFO, (3) Web of Science, (4) Communication and Mass Media Complete (5) Cumulative Index of

Source: Author

Previous studies have focused on the determinants of intentions. Xu, Victor, & Blankson (2018) observed the effect of some variables on purchase intention. They revealed that environmental attitude toward behavior positively and significantly affects intention. On the other hand, perceived behavioral control hurts this variable. Kazaure (2019) investigated the relationship between attitude, social influence, perceived behavioral control, awareness, and customer intention in takaful microfinance. The research findings of this study stated that awareness alone has no significant effect on customer intention. Contrary to previous research findings that track awareness, this study finds that awareness significantly affects intention. Besides that variable, the research conducted in Indonesia also stated that subjective norms significantly affect intention (Aji, Berakon, & Riza, 2021).

These previous research findings indicated that several variables have different effects on intention. There are several reasons why the results are different. The differences between the research object, the variable constructs, and the object might cause them. None of the previous endogenous variables is green entrepreneurial intention. Since there are many differences in research findings regarding the current needs and intentions of green entrepreneurs, it is essential to conduct this research.

2. Methodology

2.1. Data

This research administered questionnaires to collect data from Muslim university students who study at several universities in Indonesia and several universities in other countries whose dominant student is Muslim. The convenience sampling method is used to choose members of the sample. Accessibility and time availability are the criteria for choosing members of the sample. Table 2 describes the detailed demographic of 173 respondents.

Table 2: Frequency of Respondents

Characteristic	Amount	Share
Gender		
Male	51	29%
Female	122	71%
Marital status		
Single	160	92%
Married	13	8%
University		

	Indonesia	120	69%
	Egypt	44	25%
	Tunisia	5	3%
	Syria	2	1%
	Turkiye	1	1%
	Pakistan	1	1%
Age			
	18-25	155	90%
	26-33	15	9%
	34-40	1	1%
	41-48	2	1%

Measurement of the construct is based on a seven-point Likert scale from strongly disagree (1) to strongly agree (7). Every question item of the questionnaire is adopted from the previous study. The variable of awareness contains six dimensions and was adopted by Khoiri et al. (2023). Variable attitude toward behavior contains three questionnaire items; subjective norm contains three questionnaire items; perceived behavioral control and intention each contain four questionnaire items. Questionnaire items for attitude toward behavior, subjective norm, perceived behavioral control, and intention variables were adopted from Maichum et al. (2016)

2.2.Method

This research used the Partial Least Square Structural Equation Model (PLS-SEM) to analyze the data using Smart PLS 3 software. This tool is an appropriate analytical tool to use in social and management research. PLS analysis tools can be applied to complex research models, variables, and small-size samples (Purwanto & Sudargini, 2021). This tool is employed in several entrepreneurship research (Manley, Hair, Jr, Williams Jr, & McDowell, 2020);(Doan & Phan, 2020). For the above reasons, this study employs the PLS-SEM approach.

Interpretation of the PLS-SEM approach contains two steps, namely, measurement (outer model) and structural (inner model). For the outer model, this study measures the contribution of indicators to construction (Khoirunnisa, Salsabiil, Sodik, Dewanti, & Yusfiarto, 2023). In this step, PLS-SEM examined multi-item latent variables. Validity and reliability values are obtained to determine the essential accuracy of each indicator before entering the inner model (Manley, Hair, Jr, Williams Jr, & McDowell, 2020).

For the inner model evaluation, PLS-SEM is applied to test the hypothesis by analyzing direct and indirect relationships. Indirect relationships accommodated an

interaction moderation approach. This study measures the level of significance with a p-value for a two-tailed significance (p-value 0.05). The obtained structural model is derived from a series of regression equations (Purwanto & Sudargini, 2021).

2.3. Model Development

2.3.1. Environmental Awareness (Aw)

The environment is chemical, biotic, and other physical factors that act as an ecological community (Sarkawi, Abdullah, & Dali, 2016). Environment awareness is a part of the character that affects the respondent, in this case, Muslim students, not only to protect and preserve the environment but also to prevent and repair environmental damage (Khoiri, Sunarno, Sajidan, & Sukarmin, 2023). The Muslim student has to realize that protecting and preserving the environment is part of man's obligation to God. In Surah Al Baqarah verse 30, Allah says Allah created man to be an earth khalifah. It means that man should protect, preserve, maintain, and prevent the environment from being damaged. Al Baqarah is the second Surah, meaning that the obligation to protect the earth and the environment was imposed on humanity at the beginning of the human creation (Rahman, Said, Salamun, & Aziz, 2018).

Previous research results confirm that environmental awareness can explain intention, influencing attitudes toward behavior, subjective norms, and perceived behavioral control (Xu, Victor, & Blankson, 2018). In addition, the research findings stated that environmental awareness and attitude toward behavior had influenced intention simultaneously (Alhamad, et al., 2023). Other research results proved the direct effect of environmental awareness on purchase intention (Lee & Shin, 2010). Some research makes a relationship between environmental awareness and intention, but the relationship between environmental awareness and green entrepreneurial intention still needs to be discovered. The following hypothesis is proposed based on the previous research explanation above:

H1: Environmental awareness has an impact on behavioral attitude

H2: Environmental awareness has an impact on subjective norm

H3: Environmental awareness has an impact on perceived behavioral control

H4: Environmental awareness has an impact on green entrepreneurial intention

2.3.2. Attitude Toward Green Entrepreneurial (Att)

Attitude is a psychological factor controlled and regulated through long, positive, or negative experiences; social stimuli often influence it reflected through thoughts and

behavior (Alhamad, et al., 2023). Several research findings stated that attitude toward behavior directly affects intention. Spears and Singh (2004) confirmed that attitude towards a brand significantly affects purchase intention. In line with a previous study, research on three main predictors of the Theory of Planned Behavior in takaful insurance simultaneously affects intention (Kazaure, 2019). Based on previous research, the researcher arranged this hypothesis:

H5: Attitude towards on green entrepreneurship has significant effect on green entrepreneurship intention

2.3.3. Subjective Norm (SNo) on Green Entrepreneurial

Subjective norm refers to social values and influences behavior. This norm refers to the perceived opinions of significant others who are close and often influence their decision to do something. The finding of previous research indicated that subjective norm positively influences intention; (Kazaure, 2019). Therefore, the hypothesis can be stated as follows: H6 : Subjective norm on on green entrepreneurship has a positive impact on green entrepreneurship intention.

This norm refers to the perceived opinions of significant others who are close and often influence their decision to do something (Cheng & Tung, 2014). The findings of previous research indicated that subjective norm positively influences intention (Aji, Berakon , & Riza, 2021); (Khoirunnisa, Salsabiil, Sodik, Dewanti, & Yusfiarto, 2023). Therefore, the hypothesis can be stated as follows:

H6 : Subjective norm on green entrepreneurship positively impacts green entrepreneurship intention

2.3.4. Perceived Behavioral Control on Green Entrepreneurial

Perceived behavioral control refers to the ability or resource availability and opportunity to perform the behavior, such as skill, time, money, relationship, and other resources (Ajzen, 2002). The research result of the effect of perceived behavioral control has a significant influence on intention (Ambak, Kasvar, Daniel, Prasetijo, & Ghani, 2016); (Maichum, Parichatnon, & Peng, 2016); (Bosnjak, Ajzen, & Schmidt , 2020).

H7: Perceived behavioral control over green entrepreneurship has a significant effect on green entrepreneurship intention

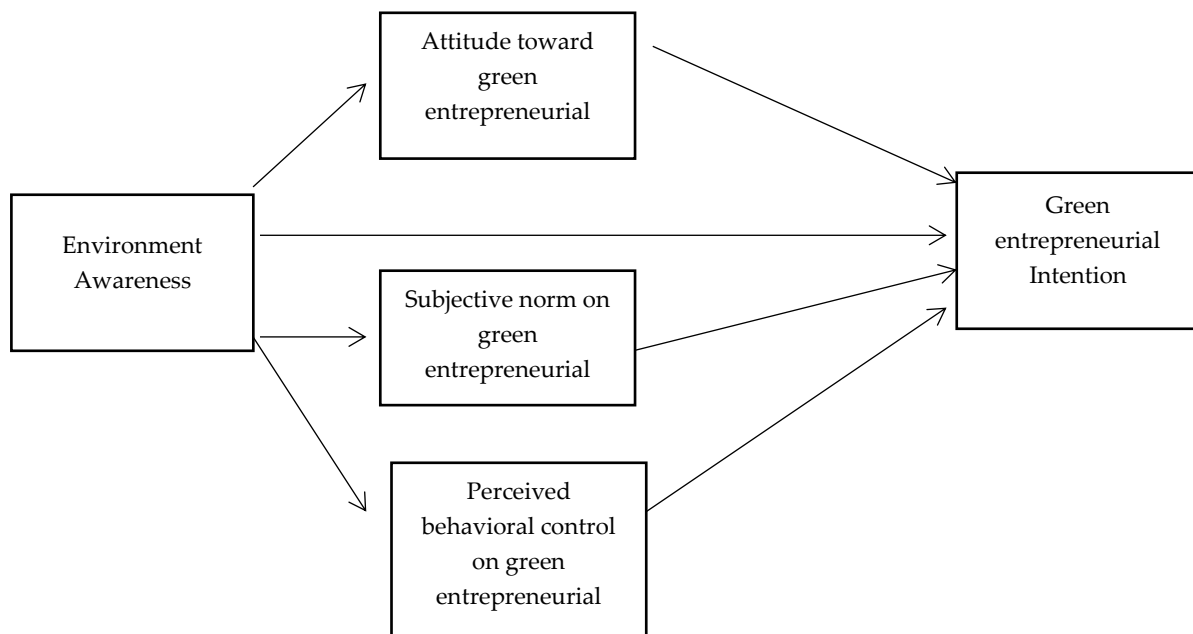
2.3.5.Green Entrepreneurial Intention

Green entrepreneurship is a new concept of entrepreneurship that claims to have the potential to be a major force in the overall transition toward a more sustainable business paradigm (O'Neill & Gibbs, 2016). Green entrepreneurs seek new schemes to promote social change and maintain a healthy environment (Mia, et al., 2022). Intentions are people's motivational factors that influence their behavior. They can be seen in people's strong desire to try or make an effort to perform the behavior (Ajzen, 1991). Green entrepreneurial intention refers to the intention to be an entrepreneur who cares about the environment and prevents environmental damage. Several previous findings confirm the influence of attitude, subjective norms, and perceived behavioral control on green entrepreneurship. (Chee & Nordin, 2020); (Aji, Berakon, & Riza, 2021) (Kazaure, 2019) (Khoirunnisa, Salsabiil, Sodik, Dewanti, & Yusfiarto, 2023) (Lim, Kim, & Kim, 2021).

H8: Environmental awareness, attitude toward behavior, subjective norm, perceived behavioral control have significant effect on green entrepreneurial intention

Based on extenden theory of planned behavior and previous research result, then formed research model:

Figure 1: Conceptual Model



3.Result and Analysis

3.1.Result

3.1.1.Data and Sample Adequacy

The questionnaires were structured using a Google form, and all questions were asterisked so that respondents had to answer all questions before sending them back to the researcher. Only 173 people were willing to answer the questions in the Google form. Therefore, all questionnaires were filled and can be used as research data.

3.1.2.Measurement Model Assessment (outer model)

Before proving the hypothesis, the researcher checks the value of Cronbach's alpha and the value of composite reliability (CR). The value of Cronbach alpha is in the range of 0.850 to 0.948, while CR is in the range of 0,886 to 0,966. These results revealed the reliability of the construct's internal consistency (alpha and CR value more than 0,70).

All constructs in this research model indicate discriminant validity, except the first two questions of the environment awareness construct. The examination shows that outer loading values are higher than 0,70, except for two items that are less than 0,70, at 0,597 and 0.669. Fortunately, these values are not less than 0.4; therefore, these constructs can still be the constructs of this model. The table below provides the results of validity and reliability detail:

Table 3: Reliability and Convergence Validity Outcomes

Measurement Item	Loadings	
Environment Awareness $\alpha = 0,850$ CR= 0,886, AVE =0,569		
A1	I care about environmental damage	0,597
A2	I care about harm to the environment	0,669
A3	I care about environmental health	0,777**
A4	I want to know how to preserve the environment	0,803**
A5	I explore knowledge about environmental health	0,835**
A6	I find out how to solve environmental problems	0,815**
Attitude toward green entrepreneur $\alpha = 0,934$ CR= 0,958, AVE =0,883		
Att1	I think being an entrepreneur who thinks about the environment is fun	0,933**
Att2	I think it's a good idea to be an entrepreneur who thinks about the environment	0,935**
Att3	I think being an entrepreneur who thinks about the environment is safe	0,951**
Subjective Norm on Green Entrepreneur $\alpha =0,948$ CR=0,966, AVE =0,906		
SNo1	If I become an entrepreneur, my family suggests that I become a green entrepreneur, one that pays attention to the environment	0,954**
SNo2	If I were to become an entrepreneur, my close friend suggested becoming a green entrepreneur	0,957**

SNo3	If I become an entrepreneur, the people around me advise me to become a green entrepreneur	0,945**
Perceived Behavioral Control to green entrepreneur $\alpha = 0,943$ CR=0,959, AVE =0,854		
PBC1	I am confident that I can become a green entrepreneur	0,940**
PBC2	I am capable of becoming a green entrepreneur in the future	0,948**
PBC3	I have the resources, time and willingness to become a green entrepreneur	0,909**
PBC4	Many opportunities to become a green entrepreneur	0,899**
Intention to be green entrepreneur $\alpha = 0,889$ CR=0,923, AVE =0,751		
I1	I want to be a green entrepreneur	0,854**
I2	I plan to become an entrepreneur who pays attention to the environment	0,894**
I3	I would like to invite my friends to use the concept of "green" in every business they build	0,858**
I4	I like to tell people about green entrepreneurship	0,859**

The resulting test of discriminant validity examined the value of outer loadings and Average Variance Extracted (AVE). The output of the Fornell-Larcker Criterion in Table 4 shows that each AVE construct's square root AVE value is more than the highest correlation value with the others. These values in the table below indicate the discriminant validity of all constructs in this research model.

Table 4: Discriminant Validity Outcome

	Environment Awareness	Attitude	GE Intention	PBC	SN
Environment Awareness	0,754				
Attitude	0,468	0,940			
GE Intention	0,573	0,671	0,866		
Perceive Behavioral Control (PBC)	0,507	0,686	0,839	0,924	
Subjective Norm (SN)	0,487	0,677	0,687	0,720	0,952

Source: Processing Research Result

3.1.3. Structural Model Assessment (Inner Model)

Hypothesis Test: Table 5 presents the PLS-SEM Analysis result. It indicates that environment awareness has a positive and significant effect on attitude toward green entrepreneurial intention (p-value ≤ 0.05), environment awareness has a positive and significant effect on Subjective Norm of the Green entrepreneur (p-value ≤ 0.05), environment awareness has a positive and significant effect on Perceived Behavior Control of Green entrepreneur (p-value ≤ 0.05). Environment awareness positively

and significantly affects Green entrepreneur Intention (p-value ≤ 0.05). Attitude toward green entrepreneurs has an insignificant effect on green entrepreneur intention (p-value ≥ 0.05), Perceived Behavior Control has a positive and significant effect on green entrepreneur intention (p-value ≤ 0.05), and the subjective norm has an insignificant effect on green entrepreneur intention (p-value ≥ 0.05). Therefore hypothesis H1, H2, H3, H4, and H6 are proved, and H5 and H7 are not proved.

Table 5: Hypothesis Test

	β	Mean (M)	St-Dev	t-stat	P Values	Supported
AW -> Att	0,468	0,468	0,093	5,043	0,000	Yes
AW -> PBC	0,507	0,513	0,079	6,389	0,000	Yes
AW -> SNo	0,487	0,489	0,073	6,679	0,000	Yes
AW -> GE Intention	0,573	0,577	0,069	8,268	0,000	Yes
Att -> GE Intention	0,111	0,113	0,067	1,656	0,098	No
PBC -> GE Intention	0,615	0,611	0,067	9,181	0,000	Yes
SNo-> GE Intention	0,088	0,094	0,068	1,289	0,198	No

Source: Processing Research Result

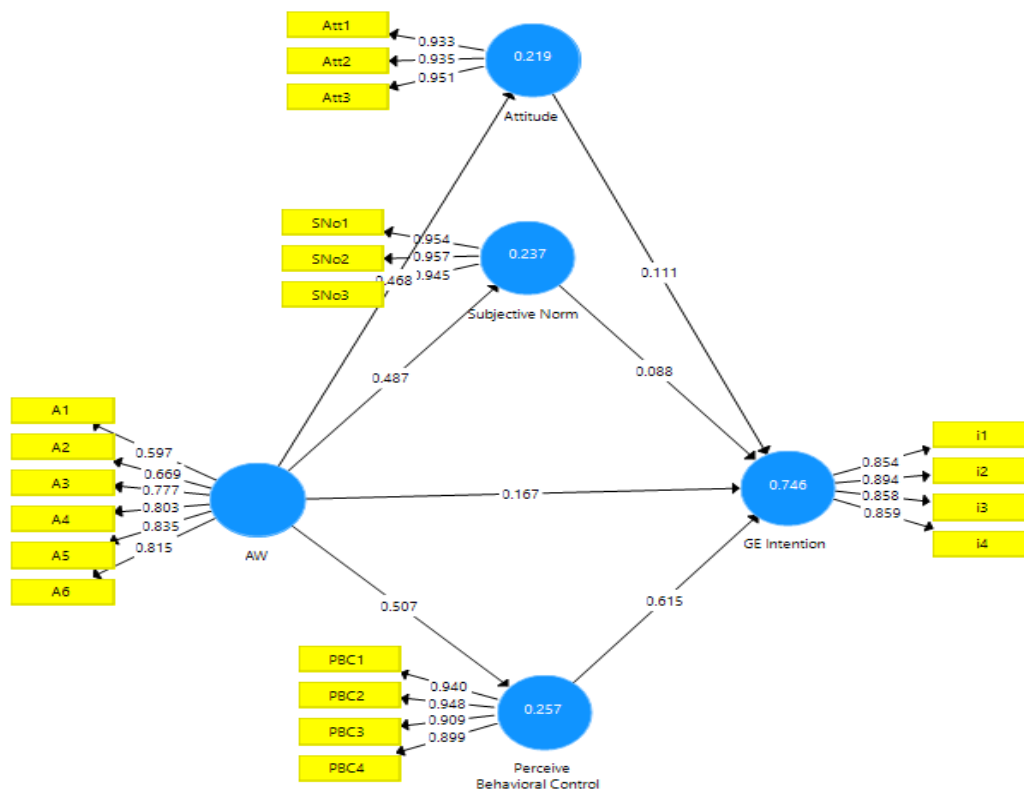
Coefficient of Determination: The following table shows the coefficient of determination value, the most significant of which is GE intention ($R^2 = 0.740$). According to Hair et al. (2019), the higher the R^2 value, the higher the explanatory power. GE intention R^2 value is close to substantial explanatory power (0.75). Meanwhile, the second level is the coefficient determination of PBC ($R^2 = 0.252$), followed by SNo ($R^2 = 0.232$) and Att ($R^2 = 0.215$). These values are more significant than 0.20, indicating that they are close to the limit of weak explanatory power (0.25), as Hair et al. (2019) described.

Predictive Relevance: The following table also describes predictive relevance value based on Stone –Geisser’s Q^2 . The calculation of Q^2 is based on the blindfolding procedure. Q^2 value indicates the predictive accuracy of the specific endogenous construct of the structural model for each construct. GE Intention construct has the most considerable Q^2 value ($Q^2 = 0.547$). This value shows a considerable predictive relevance of the PLS Path model. Meanwhile, the second level of predictive relevance value is PBC ($Q^2 = 0.217$), followed by SNo ($Q^2 = 0.209$) and Att ($Q^2 = 0.188$). These three values are classified on minor predictive relevance of these PLS Path models. This blindfolding analysis result indicates that this research model has been well-reconstructed and can be an accurate predictor (see Table 6). The structural model result of this PLS Path Model can be seen in Figure 2.

Table 6: Coefficient of Determination (R^2) and Blindfolding

Constructs	SSO	SSE	Q^2	R^2	R^2 Adj
Att	519,000	421,256	0,188	0.219	0.215
GE Intention	692,000	313,652	0,547	0.746	0.740
PBC	692,000	541,688	0,217	0.257	0.252
SNo	519,000	410,417	0,209	0.237	0.232

Figure 2: PLS_SEM Outcome



3.1.4. Robustness Test

Unobserved Heterogeneity: This study implemented Finite Mixture PLS (FIMIX-PLS) to confirm whether the entire dataset's analysis is reasonable (Hair, Risher,, Sarstedt, & Ringle, 2019). This analysis started by determining the maximum number of segments using the Gpower application to calculate the minimum sample size required for each segment. The minimum sample size is 5% significant, α at 0.15, and the number of predictors is four. Therefore, the calculation result of the minimum sample size for each segment is 89. For 173 samples, we applied two segments. The result of the FIMIX-PLS analysis can be seen in Table 7 and Table 8. Based on this analysis, the unobserved heterogeneity is not at a critical level because (1). The potential segment has two, with the minimum value of AIC3 and CAIC in the same

segment; in the second segment, (2) the number of potential segments and the minimum value of AIC are in the same segment. (3) Entropy statistic normed is 0.738 and more than 0.5.

Table 7: Unobserved Heterogeneity Outcome

	Segment 1	Segment 2
AIC (Akaike's Information Criterion)	1607,859	1396,603
AIC3 (Modified AIC with Factor 3)	1618,859	1419,603
AIC4 (Modified AIC with Factor 4)	1629,859	1442,603
BIC (Bayesian Information Criteria)	1642,545	1469,129
CAIC (Consistent AIC)	1653,545	1492,129
HQ (Hannan Quinn Criterion)	1621,931	1426,027
MDL5 (Minimum Description Length with Factor 5)	1869,290	1943,232
LnL (LogLikelihood)	-792,930	-675,302
EN (Entropy Statistic (Normed))		0,738
NFI (Non-Fuzzy Index)		0,783
NEC (Normalized Entropy Criterion)		45,264

Source: Processing research result

Table 8: Relative Segment Sizes

Number of Segment	Segment 1	Segment 2
1	1,00	
2	0.504	0.496

Source: Processing research result

Non-linearity: Data nonlinearity tests should be done in order to detect nonlinear relationships between two constructs (Khoirunnisa, Wibowo, & Suharsono, 2016). This test is needed because when the relationship between the two constructs is nonlinear, the effect size depends on the magnitude of the change in the exogenous constructs and their value (Khoirunnisa, Salsabiil, Sodik, Dewanti, & Yusfiarto, 2023). For this reason, this research considers a polynomial model and adds quadratic effects. With 1000 samples, the bootstrapping results indicated that all relationships of nonlinear effect are not significant. This result can be seen in Table 9.

Table 9: Quadratic Effects

	β	Mean (M)	(StDev)	T-value	P-Values
Quadratic Effect AW- GE Intention -> GE	-0,034	-0,034	0,036	0,953	0,341

Intention					
Quadratic Effect Att-AW -> Attitude	-0,039	-0,013	0,061	0,635	0,525
Quadratic Effect Att-GE intention -> GE Intention	-0,015	-0,008	0,042	0,353	0,724
Quadratic Effect Aw PBC -> Perceive Behavioral Control	-0,003	0,030	0,066	0,046	0,963
Quadratic Effect PBC-GE Intention -> GE Intention	0,064	0,047	0,066	0,960	0,337
Quadratic Effect SNo-AW -> Subjective Norm	-0,001	0,021	0,050	0,017	0,986
Quadratic SNo-GE Intention -> GE Intention	0,045	0,047	0,070	0,640	0,522
Subjective Norm -> GE Intention	0,103	0,107	0,078	1,327	0,185

Source: Processing research result

3.2. Analysis

This study examines awareness, attitude toward behavior, subjective norms, and perceived behavioral control as predictor variables of intention to perform behavior. This study reexamines The Theory of Planned Behavior, which states that intention to perform behavior is driven by the three factors: attitude toward behavior, subjective norms, and perceived behavior control (Ajzen, 1991) (Ajzen, 2002). The study results show that the three variables in this theory remain predictors of a person's intention to do something. This research shows that this theory can be extended by adding construct awareness, a motivational factor in an intention (Xu, Victor, & Blankson, 2018).

This paper focuses on green entrepreneurial intentions. The population of this research is Muslim students in several countries. The emphasis of Muslim students as a research population is environment awareness that has been instilled in the hearts of Muslims as an order from Allah SWT, God of the universe, which asks Muslims to become caliphs on earth and have an awareness of the environment. (Khoiri, Sunarno, Sajidan, & Sukarmin, 2023) (Rahman, Said, Salamun, & Aziz, 2018). (Khoiri, Sunarno, Sajidan, & Sukarmin, 2023) (Rahman, Said, Salamun, & Aziz, 2018).

This finding supports previous research showing significant effects of environmental awareness on behavioral attitudes, subjective norms, and perceived behavioral control (Xu, Victor, & Blankson, 2018). Besides that, this result also supports previous studies that have shown that environmental awareness significantly affects intention, although not green entrepreneurial intention. (Lee & Shin, 2010); (Alhamad, et al., 2023).

Contrary to previous research, this finding shows no significant effect of attitude on intention (Alhamad, et al., 2023); (Spears & Singh, 2004). This finding is also contrary to the Theory of Planned Behavior, which states that attitude toward behavior has a significant effect and becomes a motivational factor of intention. (Ajzen, 1991); (Ajzen, 2002).

Likewise with the variable subjective norm, although the Theory of Planned Behavior has explained that subjective norm is a predictor of an intention, the results of this study do not show the same results. This research is different from some of the results of previous studies (Cheng & Tung, 2014); (Kazaure, 2019); (Khoirunnisa, Salsabiil, Sodik, Dewanti, & Yusfiarto, 2023; Aji, Berakon, & Riza, 2021).

4. Conclusion and Recommendation

4.1. Conclusion

The results of this study are the results of empirical research conducted on Indonesian Muslim students in several countries. These findings indicate that environmental awareness, attitude toward green entrepreneurship, subjective norms on green entrepreneurship, and perceived behavioral control are predictors for a student's green entrepreneurial intention, which Stone-Geisser's Q2 proves. This model has substantial explanatory power.

Furthermore, the student environment awareness to protect and preserve the environment as man's obligation to God has a positive and significant effect on green entrepreneurial intention as perceived behavioral control, too. On the other hand, attitudes toward behavior and subjective norms have not.

These findings show that The Theory of Planned Behavior needs to expand by adding awareness as an essential construct to influence intention. Besides that, this theory has opportunities to expand by adding any variables out of this model.

4.2. Recommendation

Several limitations require the interpretation of this study result. In this study, students were studied as respondents or samples. Students still need more information about practicing green entrepreneur. In such a study, it would be more appropriate to broaden the research objective by including, for example, young entrepreneurs who understand green entrepreneur. The Theory of Planned Behavior is applied theories related to intention. From the research findings, some variables can be included in the theory of planned behavior and expanded with a deeper discussion.

Educational institutions that pay attention to environmental protection and conservation must evaluate curriculum to create true green entrepreneurs and increase their role in environmental protection without neglecting corporate profits. The government should make it easier for educational institutions and other interest groups to speed up various regulations related to environmental protection and efforts to raise awareness among students who will become entrepreneurs in the future.

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