International Journal of Sustainable Development and Planning
Vol. 19, No. 10, October, 2024, pp. 3969-3978
Journal homepage: http://iieta.org/journals/ijsdp

Aspiration, Attitude, and Entrepreneurial Ability of College Students Oriented Towards Conservation and Green Economy

P. Eko Prasetyo[1*], Sunyoto[2], Khasan Setiaji[3]

[1] Department of Development Economics, Faculty of Economics and Business, Universitas Negeri Semarang, Semarang 55299, Indonesia
[2] Department of Mechanical Engineering Education, Faculty of Engineering, Universitas Negeri Semarang, Semarang 55299, Indonesia
[3] Department of Economic Education, Faculty of Economics and Business, Universitas Negeri Semarang, Semarang 55299, Indonesia

Corresponding Author Email: pekoprasetyo@mail.unnes.ac.id

Copyright: ©2024 The authors. This article is published by IIETA and is licensed under the CC BY 4.0 license (http://creativecommons.org/licenses/by/4.0/).

https://doi.org/10.18280/ijsdp.191025

Received: 23 March 2024
Revised: 15 July 2024
Accepted: 10 October 2024
Available online: 30 October 2024

Keywords:
aspiration, ability, attitude of conservation entrepreneurship, green economy

ABSTRACT

This research aimed to thoroughly explore various technological options and social determinants within the entrepreneurial interest of college students who are oriented toward conservation and a green economy. In order to achieve this aim, the research model was designed using an exploratory method with a path analysis approach, which was adopted to determine the direct, indirect, and total effects of various social determinants of the technological options. Furthermore, the primary data used comprise fundamental microdata, obtained through the distribution of structured surveys. The research comprised the participation of 250 respondents, all of which represented the entrepreneurial interests of students and were selected using a simple random sampling technique. In accordance with this, an illustrative block-pillar approach, which is typically used for housing construction, was adopted to facilitate understanding. The results obtained from this research show that the green economy has a significant positive influence on the direct and indirect outcomes of core determinant factors, aspirations, abilities, and attitudes of students in conservation entrepreneurship. During the course of this research, a new hypothesis was formulated, stating the presence of a causal and simultaneous relationship between green economy performance and student conservation entrepreneurship. Based on the observations made in this investigation, it is recommended that further examination be carried out on the causal relationship and simultaneous influence between conservation entrepreneurship interests and the green economy in relation to sustainable development goals. Accordingly, it is important to acknowledge that the obtained results contribute significantly to the existing theories stating the capability of university institutional policy strategies to provide relevant and targeted collective solutions suitable for mitigating the negative influence of global climate change.

1. INTRODUCTION

The tangible influence of global climate change has been observed to increasingly and negatively affect various aspects of societal life, and this has prompted various academic or institutional environments to participate in the formulation of relevant strategies tailored toward the mitigation of such adverse impacts [1-5]. In trying to mitigate some of the issues associated with climate change, Findik [6] suggested that appropriate environmentally friendly buildings be built, and these structures must be energy-efficient and use an aggregative circular economy [6]. However, previous research has indicated that the rapidly changing worldview significantly influences the manner in which the society perceives climate change, and the actions taken in this regard [7]. This implies the presence of persistent differences in the manner with which industrial companies and entrepreneurs respond to the issues associated with climate change, as detailed by Lee and Ahn [8]. For instance, most farmers and small business owners respond to these changes with simple low-cost adaptation strategies [9]. It is important to state that regardless of the various previous research carried out on this subject matter, none was found to be comprehensively scientific, possessing fewer or no limitations [10]. As a result, the present research is deemed very important, considering the fact that it majors on analyzing the capabilities of strategic and relevant institutional policies to provide focused collective solutions with the sole aim of mitigating the negative influence of global climate change.

According to the observations from the research conducted by Hou et al. [11], university-based entrepreneurial education has a significant influence on the entrepreneurial interests of students [11-14]. However, within the context of the present investigation, the interests, aspirations, attitudes, and abilities

of students in the domain of conservation-oriented and green economy entrepreneurship were not extensively examined [15]. As stated by Lobo et al. [15], conservation entrepreneurship has the potential to offer a more relevant approach to complement existing conservation efforts, however, this approach is not the ultimate solution [15]. Previous research results have affirmed that the perceptions of students about entrepreneurship climate depend solely on deliberate actions [16]. The specific research question is how are the relevant strategic roles of university institutions and student institutions in encouraging conservation entrepreneurship as an innovative solution to mitigate the negative impacts of global climate change? Furthermore, the specific objective is to examine the behavioral patterns of institutional policies in the dimensions of interests, aspirations, attitudes and entrepreneurial abilities of conservation-oriented and green economy students. The policy implications are expected to bridge the theoretical and empirical gaps in institutional theory and sustainable entrepreneurship. Theoretically, this implies the necessity of redirecting the institutional awareness of the entrepreneurial perceptions of students towards conservation-oriented and green economy entrepreneurship. This approach can be considered an effective solution, specifically considering the investigation carried out by Moiceanu et al. [17], where it was stated that students who engaged in green entrepreneurship tend to support sustainable practices and develop innovative, artistic, and leadership abilities [17]. However, the challenge remains that there are still uncertainties or difficulties associated with addressing green entrepreneurship [3, 17].

Other recent research has shown the importance of sustainable entrepreneurship cultural theory in educational institutions as organizational innovation [18-21]. The findings from these investigations affirm that entrepreneurial intention at a young age is highly dependent on entrepreneurial cultural innovation. This affirmation confirms the importance of culture in entrepreneurial education to enhance self-efficacy and entrepreneurial intention [21, 22]. Within the field of human relations theory, sustainable entrepreneurial culture is defined as a function of capacity building in university training and education. In accordance with this, other previous research has also explained the significant relationship between entrepreneurial culture, education, and intention [19]. However, the argument remains that these relationships influence the learning and decision-making process to find more meaningful, sustainable solutions in various ways [23]. It is important to emphasize that within the context of this investigation, sustainability can be divided into four categories namely economic, environmental, institutional, and social [24].

This research is considered very important, specifically because it answers the question regarding the manner in which the aspirations, attitudes, and entrepreneurial abilities of students are oriented toward conservation and the green economy. Furthermore, the investigation provides comprehensive information regarding the roles that can and should be played by higher education institutions in supporting the mitigation of global climate change through the awareness of the respondents. The obtained results showed that high temperatures negatively influence economic activities, both daily, seasonally, and annually [2]. However, if most farmers only respond to this issue with simple low-cost adaptation strategies, then higher education institutions must be more capable of mitigating the same changes at lower costs. It is also important to acknowledge that, while conservation-oriented and green economy entrepreneurship is not a panacea, it is a relevant approach complementing efforts channeled towards achieving sustainable development goals (SDGs). In summary, this research aims to further stimulate scientific interest in conservation entrepreneurship within education and other academic fields both empirically and theoretically.

2. LITERATURE REVIEW

According to Acemoglu et al. [25], radical environmentally friendly technological innovations are needed to address the negative influence of global climate change without sacrificing sustainable growth [25]. Currently, the dominant focus regarding this subject matter is on the development of more radical innovations comprising several social determinant factors in technology choices [25-28]. As a result, integrating the social dimension of technological innovation in the present research allows for a broader and more extensive conceptualization of the role of university entrepreneurship institutions [28]. As observed [29-30], the integration of academic and conservation entrepreneurship activities related to the green economy is becoming increasingly unique and important in supporting economic growth ecosystems and regional development [31]. Within the context of this present research, factors such as social entrepreneurship and "social innovation" are considered key elements of the increasingly relevant and beneficial "entrepreneurship ecosystem" for socio-economic development and community welfare, in line with previous explorations [12, 32]. Moreover, concerning gender, women have been observed to possess a stronger influence, in terms of moral obligation, on entrepreneurial intention than men [20, 33, 34].

As stated by Prasetyo et al. [3, 20, 32], the dimensions of social and green entrepreneurship performance are very crucial for identifying the success of sustainable entrepreneurship [3, 20, 32]. As a result, in this research, the literature review of investigations conducted on sustainable entrepreneurship and the integration of green and social entrepreneurship serves as the theoretical foundation and measurement dimensions of student conservation entrepreneurship intention. In accordance, attributes such as a good and elegant entrepreneurial attitude, aspiration, and ability were considered the fundamental dimensions of success that should be possessed by students in the field. These attributes were selected in line with the work of Prasetyo [32], where it was stated that the possession of a big aspiration and dream is the initial capital and key to achieving success in terms of entrepreneurial performance [32]. Moreover, the empirical research states that having a strong entrepreneurial mental attitude is a primary necessity when conducting entrepreneurial activities. This implies that the ability to seek business opportunities is the main driving force behind entrepreneurial performance success.

New institutional economics and entrepreneurship theories have gained substantial traction amongst a wide range of investigators [29, 32-37]. This is evidenced by the observations made by various previous research, some of which have laid the groundwork for entrepreneurship research to investigate the fundamental assumptions in other academic fields. In accordance, Thurik et al. [36], emphasized the importance of performing conservation entrepreneurship research, which includes the capability to provide novel insights into the antecedents, mechanisms, and consequences

of each core phenomenon and help legitimize other academic fields both practically and theoretically [36]. The novelty of this present research lies in the fact that its dominant focus is on the core issues surrounding the manner in which academic institutional strategies of conservation and green economy-oriented student entrepreneurship can mitigate the impacts of climate change while promoting the achievement of SDGs. Therefore, based on the theoretical and conceptual framework, the presence of core hypotheses and underlying assumptions stating that the conservation and green economy-oriented entrepreneurial aspiration, attitude, and ability of students are capable of driving the achievement of SDGs and mitigating the negative impacts of global climate change can be assumed. It is important to establish that this working hypothesis was formulated based on a fundamental recommendation, namely if the past is truly the beginning of the future, then the potential of conservation entrepreneurship research is expected to theoretically further extend its influence in shaping novel innovative thinking and ideas across various disciplines and other academic fields [36].

Following the integration of new institutional economics and entrepreneurship theories, this research aims to explore various factors related to newly created student conservation entrepreneurship. The argument, in this regard, is that although the roles of new institutional economics and national entrepreneurship theories have been important [29], the underlying impacts of the theories on conservation and green economy-oriented student entrepreneurship have not been extensively examined. Accordingly, the obtained results showed that factors such as culture and education are the dominant influencers of student entrepreneurship, even though the model is also influenced by the strengths of formal and informal institutions [38]. Theoretically and empirically, culture and education reflect the attitudes, interests, aspirations, and internal abilities of students in terms of social norms and openness to new experiences. Personal and subjective norms, on the other hand, have been observed to play a mediating role in shaping the intention of students to select sustainable entrepreneurship [33]. In summary, factors such as social norms, personal characteristics, openness to new experiences, caution, and positive attitude directly and/or indirectly influence student entrepreneurial interest [39].

Various research has been carried out with the aim of examining the relationships between the aforementioned factors, for instance, Abun et al. [40], found a significant positive correlation between entrepreneurial attitude and student intention. Similarly, Baber [34] also observed that a concrete entrepreneurial attitude has a positive influence on sustainable entrepreneurial intention [34]. From these results, it can be elucidated that students with a high entrepreneurial attitude also have a proportionally high entrepreneurial intention. Accordingly, Prasetyo et al. [41, 42] stated that the majority of SME entrepreneurs adopt a "tuna satak bathi sanak", translated as a "survival strategy" to evaluate business performance. The entrepreneurial performance ability of students has been viewed from a vast array of perspectives. Based on this understanding, it can be concluded that the subject matter is of significant importance, and, hence, research on entrepreneurial education and training ability becomes very important, as it has the capability to transform the lives of individuals, communities, and nations [43]. However, it is important to establish that no specific research has been conducted with a focus on examining the ability of students to mitigate the impacts of global climate change. In accordance, it was observed that the majority of available research mainly explored the factors influencing the entrepreneurial intention of students. These factors include perspectives on sustainable entrepreneurship, social norms, and perceived behavioral control [44].

Following the observations made by Acemoglu et al. [25], in order to efficiently address the negative impacts of climate change without sacrificing sustainable growth, targeted environmentally friendly technological innovation becomes a necessity [25]. The novelty of this research lies in the concept of integrating social innovation with digitalization technology of university-based conservation entrepreneurship, as a medium for mitigating the negative impacts of global climate change and promoting sustainable development [45]. Accordingly, the social innovation referred to within the context of this investigation represents the strategies adopted by social management bodies in responding positively to and mitigating global climate change. On the other hand, conservation entrepreneurship referred to is not only related to environmental conservation, but also closely associated with the social, cultural, and educational conservation of local communities. Lastly, it is important to understand that digitalization technology was also considered during the research. This is primarily because the aspect has been observed to significantly influence sustainable competitiveness at various social, economic, and cultural levels both theoretically and practically [46].

3. RESEARCH METHODOLOGY

The research method was designed specifically with the aim of exploring and identifying the aspiration, attitude, and ability of students toward conservation and green economy-oriented entrepreneurial intention. In accordance with the research objectives, the relevant research method used is a two-stage mixed methods research design model, namely; exploratory design and explanatory design methods [47]. Because the exact population size is unknown, with a maximum margin of error of 5%, the large number of samples used is the well-known Cochran's formula model as follows [47].

$$n_o = \frac{Z^2.\rho.(1-\rho)}{e^2}$$

Furthermore, the method used an exploratory model with a path analysis approach to examine the direct, indirect, and total influences of the core determining variables of social innovation. It is crucial to elucidate that within the context of this exploration, the conservation-oriented and internationally reputable institutional vision of universities was measured using two distinct dimensions of endogenous variables namely student conservation entrepreneurial intention (SCE) and green economy (GE). To execute this vision, it can be measured through three major block dimensions as pillars or mission and target strategies. These three core pillar blocks include block-1, which is the Student Entrepreneurial Aspiration pillar variable (SEAS), block-2, referring to the Student Entrepreneurial Ability pillar variable (SEAB), and block-3, representing the Student Entrepreneurial Attitude pillar variable (SEAT). Furthermore, in order to effectively obtain the measurement values, all variables were operationally defined and measured using the dimension

approach of the Gini index value ratio, ranging from zero to one [29].

Following the measurement values, the research objectives were speculated to be achieved using the path analysis technique, and this necessitated the development of a model to handle the structural equation of exploratory function. Accordingly, in order to explore the influence of the research objectives, a concurrent triangulation design of mixed methods was adopted, in line with various previous investigations [47-49]. Although, Jefferson et al. [49] and Dopp et al. [50], emphasized that a specific approach is more suitable for such tasks as it can yield new insights through exploratory and detailed data analysis, it was necessary to adopt an integration approach based on phenomenological methods in this research since the dataset comprised both qualitative and quantitative data [48]. This approach has been observed both efficient and a significant influencer, enhancing the validity and reliability of data interpretation [48]. Furthermore, the primary data used for the investigation comprised fundamental microeconomics cross-sectional data obtained through the distribution of structured surveys on student entrepreneurship behavior to 250 respondents, all of which were selected using the simple random sampling technique.

Prior to the adoption of the path analysis model for better comprehension, it is generally advisable to first formulate the form of the structural equation function. With this understanding, a simplified form of the structural equation function for path analysis was formulated for the present investigation as follows:

$$\mathrm{SCE} = \rho_{\mathrm{SCE}} . \mathrm{SEAS} + \rho_{SCE} . \mathrm{SEAB} + \rho_{SCE} . \mathrm{SEAT} + \varepsilon_1 \quad (1)$$

$$\mathrm{GE} = \rho_{\mathrm{GE}} . \mathrm{SCE} + \rho_{\mathrm{GE}} . \mathrm{SEAS} + \rho_{GE} SEAB + \rho_{GE} SEAT + \varepsilon_2 \quad (2)$$

Based on the two forms of structural equation models 1 and 2 mentioned above, a basic diagram of the path analysis method can be described as Figure 1:

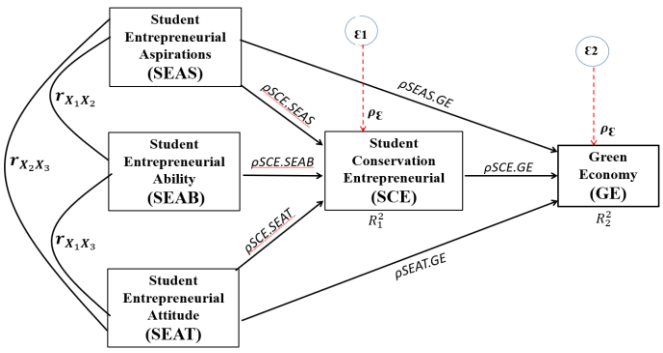

Figure 1. Path analysis model of students' entrepreneurial intention oriented towards conservation and green economy

In order to facilitate adequate comprehension of the process and the achievement of the research objectives in building students' conservation-oriented entrepreneurial intention (SCE), the whole procedure can be described using a house being constructed with three main pillars, namely the SEAS, SEAB, and SEAT variables representing pillars 1, 2, and 3 respectively. The three pillars, in this context, are considered crucial in erecting the structure. This is primarily because while a house may be able to stand without walls and structures, it cannot stay erected without pillars. Accordingly, for a clearer description, the model design for building student entrepreneurship performance-oriented towards conservation, which can also be termed SCE and GE performance, is anchored on the three main aforementioned pillars of student awareness, as shown in Figure 2 below. Following the three pillars, it is also important to acknowledge that GE performance is founded on the development of novel social innovation. This observation is plausible, specifically considering the fact that such innovations are introduced with a focus on sustainable well-being for both the present and future. As previously mentioned, the main pillars consist of three large blocks, serving as the core variables in this research. Therefore, its roof, which is represented as the development goal, refers to the performance of conservation entrepreneurship and green economy in mitigating the negative impacts of climate change while supporting the SDGs.

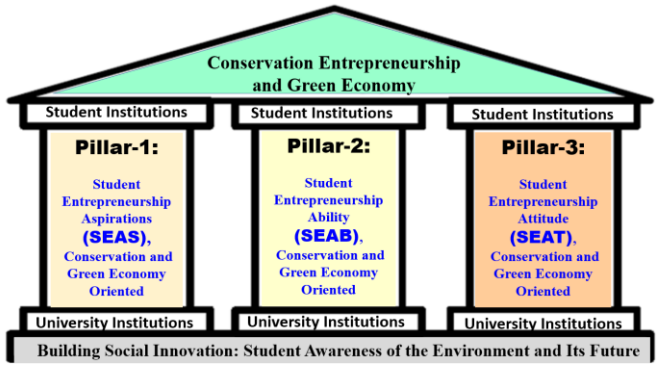

Figure 2. Student entrepreneurship model oriented towards conservation and green economy

4. RESULTS AND DISCUSSION

The concept of conservation entrepreneurship oriented towards the green economy was adopted in the present research, and this represents a novel solution explored to address the negative impacts of global climate change without compromising the quality of sustainable development. Conservation entrepreneurship is presented in this context as a form of socially innovative, environmentally friendly technology-driven choice. The basic concepts of this choice comprise the result of integrating social entrepreneurship and green entrepreneurship, collaborating with the utilization of digital technology in entrepreneurship to achieve greater adaptability to community life. Following this, the novelty of this research lies in its aim, which includes elucidating various social determinants in the array of choices for new environmentally friendly technological innovations to enhance community life comfort both in the present and future. During the course of the investigation, the dominant focus was on the mindset of student entrepreneurs, entrepreneurial education, and the utilization of digital technology roles in conducting conservation entrepreneurship. Based on the observations made, it can be theoretically stated that the adoption of this new institutional form of conservation entrepreneurship technology could serve as both a mitigating factor of the negative impacts of global climate change and as a facilitator to the achievement of SDGs.

The results obtained from this research show its potential contribution to conservation entrepreneurship as a mitigation strategy for the negative impacts of global climate change, while simultaneously advancing the achievement of sustainable development goals. However, it is important to acknowledge that the fundamental concept of conservation entrepreneurship does not represent a final decision. Rather, it serves as a relevant and targeted innovative solution, with a more contemporary approach to mitigating the influence of global climate change while also focusing on sustainable and continuous living in the future. It is crucial to also comprehend that the present exploration contributes significantly to the stimulation of the scientific interests of other investigators towards the examination of conservation entrepreneurship as a growing phenomenon, both empirically and theoretically. Currently, conservation entrepreneurship remains relatively unexplored in mainstream scientific discourse. However, the subject, in relation to the concept of sustainable development, can be viewed as a twin sibling of social and green entrepreneurship. This implies that through the performance of various institutional-related research works, conservation entrepreneurship is expected to provide increasingly relevant theoretical and empirical insights as an influential solution to global entrepreneurial economic challenges.

Institutional policy strategies within universities, in terms of organizational theory, are increasingly crucial for fostering entrepreneurial intention among students. Meanwhile, in a previous investigation, the question regarding the manner in which university-based entrepreneurial education facilitates the development of region-based entrepreneurial intentions and competencies has been addressed [11]. The novelty of this research lies in the integration of new institutional economic theory approaches and sustainable entrepreneurship in generating socially innovative solutions and more targeted digital technology choices. It was carried out with the expectation that through the policy foundation which includes the utilization of various socially innovative solutions and digital technology choices, awareness of student entrepreneurship can become more relevant both presently and in the future. As a result, the initial stages of this research necessitated the exploration of various key determinants of new social innovations alongside various dominant new technology options that support the awareness of conservation entrepreneurship intentions among university academics. These findings corroborate previous research indicating the valuable implications of student entrepreneurship in driving sustainable business practices among business students and the importance of addressing global environmental and social challenges [51].

Based on the results of the structural equation model design, if the variable name falls within the student's conservation entrepreneurship intention (SCE), the concept of international reputation can be measured by the green economy (GE) variable dimension. Meanwhile, the vision activities can be measured through three main pillar dimensions namely, block-1, representing the pillar of Student Entrepreneurship Aspirations (SEAS), block-2, denoting the pillar of Student Entrepreneurship Abilities (SEAB), and block-3, which is the variable pillar of Student Entrepreneurship Attitudes (SEAT). If analyzed based on the obtained results, the research design model can be represented using Tables 1 and 2 below. In the initial stage, the observations from the structural equation of model 1 can be seen in Table 1 while that of the structural equation of model 2 is documented in Table 2. Both models were the best forms of regression models resulting from experiments that, econometrically, have been declared suitable without the violation of Classical assumptions. Therefore, the results can be considered as Best Linear Unbiased Estimators (BLUE).

Following the information presented in Table 1, each of the three main pillars is capable of providing a positive and significant contribution or response to building conservation entrepreneurship oriented toward the future green economy. This research possesses some theoretical implications, including the fact that it views university institutional organizations and student institutions as bodies capable of playing an effective role in developing the circular economy within the ecosystem of sustainable entrepreneurship performance [52, 53]. The obtained results show that the primary and largest significant contribution in model-1 is driven by the response of the SEAS when choosing SCE. Furthermore, the second largest contribution was observed to be given by the response of SEAT, which was then followed by the response of SEAB. This implies that empirically, aspirational factors were observed as the primary and initial awareness in addressing various life issues, followed by an awareness of attitudes and abilities. The research results also explained that most respondents accurately stated the current environmental conditions and made demands for the provision of measures to help facilitate better future sustainability. These findings are in line with the results obtained by previous research, which emphasizes the dominant role of aspirational entrepreneurial intentions in building sustainable entrepreneurship [32].

Based on the results presented in Table 1, it can be seen that SEAS constitutes the main competence of future-oriented and sustainable conservation entrepreneurship. This finding supports previous investigations where it was stated that future-oriented entrepreneurial competencies are the key factors in entrepreneurial aspirations [54]. In other words, entrepreneurial aspirations serve as the primary driver in student's conservation entrepreneurship intentions. According to previous explorations, entrepreneurial aspirations in digital societies are greatly influenced by individual competencies in terms of digital technology [45, 54]. However, it is important to also comprehend that the research results in Table 1 only empirically confirmed the positive and significant influence of students' entrepreneurial aspiration competencies on conservation entrepreneurship intentions as temporary, with a tendency for the relationship to be mediating rather than causal. This is because, based on the research results presented in Table 2, the role of SEAS diminishes and is under the significant positive role of SEAB in driving sustainable entrepreneurship.

Following the competence of SEAS, the performance of SCE was found to possess the capability to drive the achievement of SDGs measured in the dimension of GE-oriented entrepreneurial performance. In this research, GE comprises the direct and indirect result of the three core pillars, namely, students' aspirations, abilities, and attitudes in shaping the performance of SCE, which subsequently drives GE performance as a dimension of global sustainable entrepreneurship performance. Essentially, GE is a positive response to university institutional policies and student institutions to develop novel social innovations in a directed manner as determinants of social and technological innovation on conservation campuses. Therefore, theoretically, it is suggested that the GE institution be continually driven by the

performance of student conservation entrepreneurship. The results presented in Table 2 show the direct most dominant, positive, and significant contribution of the performance of SCE to GE performance. In accordance, it indicates that the main pillar of SEAB directly makes the second largest positive and significant contribution to the performance of GE. This phenomenon empirically implies that in order to drive GE performance, a positive response from the abilities of students, as the primary dimension of student entrepreneurship performance, is necessary, and this usually exceeds the dimensions of the aspirations and attitudes of the students.

Table 1. Results of path analysis regression model of student conservation entrepreneurship

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.925[b]	.856	.853	9.77519	1.948

Model		Unstandardized Coefficients		Standardized Coefficients	t-stc	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.024	1.473		3.411	.001		
	SEAS	33.135	3.839	.442	8.631	.000	.374	2.672
	SEAB	17.006	4.512	.191	3.769	.000	.383	2.614
	SEAT	31.444	4.790	.374	6.565	.000	.303	3.302

1. Dependent Variable: SCE
2. Predictors: (Constant), SEAS, SEAB, SEAT

Table 2. Results of regression path analysis model of conservation entrepreneurship and green economy

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	.992[b]	.985	.984	3.08495	2.040

Model		Unstandardized Coefficients		Standardized Coefficients	t-stc	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
2	(Constant)	1.253	.483		2.596	.010		
	SCE	.780	.026	.808	29.860	.000	.144	6.964
	SEAS	4.556	1.489	.063	3.060	.003	.248	4.036
	SEAB	6.944	1.492	.081	4.655	.000	.349	2.868
	SEAT	5.934	1.720	.073	3.449	.001	.234	4.276

1. Dependent Variable: GE
2. Predictors: (Constant), SCE, SEAS, SEAB, SEAT.

Assuming related research results directly influence GE and entrepreneurship orientation intentions [55], a new hypothesis can be formulated, stating a cause-and-effect correlation (causality) between GE performance and student conservation entrepreneurship. It is important to comprehend that besides the causal relationship established through the three main pillars, there is also a simultaneous relationship between students' conservation entrepreneurship intentions and GE in terms of achieving SDGs. Therefore, it can be asserted that entrepreneurship intentions reflected in the three main pillars namely aspirations, attitudes, and abilities of students have a significant positive and causal relationship between conservation entrepreneurship performance and GE. This implies that the support from university institutional policies and student institutions must be continuously fostered and realized, both theoretically and empirically, through increasing awareness and expanding the learning capacity of the students in the aspect of conservation entrepreneurship. As observed, the aforementioned approach is becoming increasingly relevant as an effective solution for the mitigation of the negative impacts of global climate change and as a simultaneous driver of the achievement targets of SDGs by 2030. Therefore, institutional higher education or university policy strategies, which are typically tailored towards enhancing conservation entrepreneurship learning among students, can serve as an important contribution to achieving SDGs and play a substantial role in mitigating the negative impacts of global climate change.

Based on the data presented in Table 2, it can be affirmed that SCE is a new, quite radical, and targeted innovation due to the integration of social and green entrepreneurship with environmentally friendly digitalization technology choices. Therefore, conservation entrepreneurship, as the integration of social and technological innovation in this research, becomes increasingly relevant and beneficial for sustainable development. Within the context of the investigation, changes in students' social behavior as new determinants in technology-based conservation entrepreneurship can be beneficial as drivers of societal change awareness. Typically, the development of novel, efficient, effective, and adaptive technological innovations have been observed to possess the capability to drive societal change. These findings are in line with previous research stated that a substantially integrative research approach can facilitate a better understanding of various meaningful normative issues and promote sustainable development [56].

Following the results presented in Table 2, it can also be observed that realizing the potential of SCE requires the creation of three concrete and innovative main pillars, which can subsequently drive GE as a dimension of sustainable development and mitigation of global climate change. Therefore, SCE can be considered a crucial and primary driving force for realizing catalysts for socially and sustainably oriented academic institutional change. Although SCE is not an absolute solution, the mechanisms of social innovation and its technology choices are important innovation forces, serving as a source of substantially efficient and adaptive new information. These insights are expected to increasingly guide the formulation of university institutional policy strategies in implementing more effective programs to promote new generations and conservation entrepreneurship in the future. Hence, the critical analysis to be explored in this regard is related to the basic capital of student conservation entrepreneurial intention, which is a new social-technological

innovation.

Using the values documented in Tables 1 and 2, a path analysis diagram was developed which is shown in Diagram 2. Furthermore, using the values in this diagram, the coefficient values of the path analysis were derived, as shown in Table 3 below. From Diagram 2, it can be observed that the starting point of the largest arrow indicates the strength of the roles played by the exogenous variables on the endogenous variable. Meanwhile, the coefficient values presented in Table 3 indicate the magnitude of the direct, indirect, and total influences of the exogenous variables on the conservation and green economy-oriented entrepreneurship, which is the endogenous variable. By considering Figure 3 and Table 3, it becomes increasingly apparent that the primary and most significant roles, in terms of driving conservation entrepreneurship is largely driven by SEAB, which subsequently drives the sustainable entrepreneurship reflected in the dimension of GE.

Based on the entire results presented in Table 3, it can be deduced that the role and response of conservation entrepreneurship positively and significantly provide the first largest contribution to sustainable entrepreneurship, as reflected in the dimension of GE. In this context, GE serves not only as a dimension of sustainable entrepreneurship but also as a strategy for mitigating the negative impacts of global climate change. This implies that in order to be used as a mitigator of the negative impacts of global climate change and sustainability, conservation entrepreneurship, both directly and indirectly, must be driven by the strength of the three main pillars namely the aspiration, attitude, and ability of the students to drive conservation entrepreneurial intention. Following the observations and discussions, it can be concluded that conservation entrepreneurship should be recognized as an important solution for the mitigation of the negative impacts of global climate change as well as a driver of the achievement of SDGs.

The main research results explain that; integration between institutions in conservation universities with conservation entrepreneurship is very important to mitigate the impacts of climate change and as a catalyst for achieving sustainable development goals. To achieve this important integration successfully, there must be an innovation in collective behavioral awareness institutionally in conservation universities. An interesting critical note from the research results is that the SEAS response through the role of SCE is able to provide the most dominant contribution as a catalyst in achieving GE as illustrated in diagram-2. This means that there has been a fundamental aspiration as a very urgent collective awareness in creating SCE which then acts as a catalyst for GE and achieving sustainable development goals. An important implication of the results of this research is institutional regulation to further explain the importance of green entrepreneurship as an important innovation in achieving sustainable development goals. The results of this main research also support previous research [11, 51], which concluded that university-based entrepreneurship facilitates entrepreneurial intentions that are effectively able to overcome global challenges. The novelty of this research's originality theoretically tends to integrate new institutional economic theory with green entrepreneurship. Meanwhile, empirical originality further explores and identifies collective awareness in responding to the impacts of global climate change. However, this research still has limitations in the theory of student entrepreneurial dynamics behavior as the main object of research and has not examined the general public globally. Therefore, its theoretical implications are recommended to further integrate new institutional theory with the theory of sustainable entrepreneurship in the future which is increasingly strong.

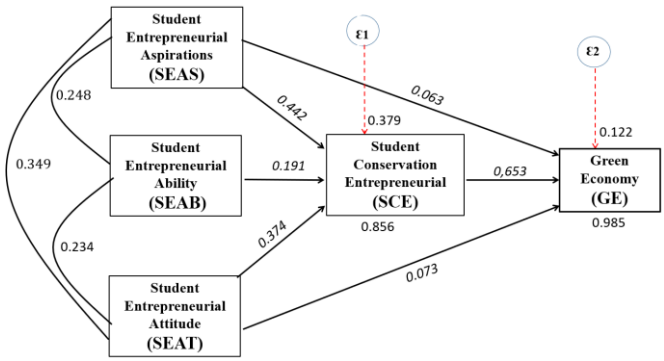

Figure 3. Results of path analysis research model on conservation and green economy-oriented student entrepreneurial intention

Table 3. Results of direct, indirect, and total influences on conservation and green economy-oriented entrepreneurship

Variable	Direct Influence	Indirect Influence					Total Influence
		SCE	SEAS	SEAB	SEAT	Sub Total	
SCE	.653		0.018	0.031	0.017	0.219	0.872
SEAS	.063	0.012		0.014	0.009	0.035	0.098
SEAB	.081	0.031	0.014		0.019	0.064	0.145
SEAT	.073	0.017	0.009	0.019		0.045	0.118
Total	0.870					0.363	1.233

Source: Primary data processed by researchers

5. CONCLUSIONS

In conclusion, this research aims to elucidate the concept of student conservation entrepreneurship, which theoretically represents new institutionalism as a local effort or activity having global impacts. Therefore, the fundamental concept of conservation entrepreneurship can be considered a necessity for sustainable entrepreneurship development worldwide, serving as a relevant solution in mitigating the negative impacts of global climate change and driving the achievement of SDGs. The fundamental concept of conservation entrepreneurship can be seen as a novel and targeted radical social innovation concept, that has been observed to effectively serve as an alternative solution to mitigating the adverse impacts of global climate change without sacrificing sustainable growth. The obtained results showed that the green economy (GE) is a positive influencer both from the direct and indirect work results and the total influence of core

determining factors, namely aspiration, ability, and attitude was substantial in shaping conservation entrepreneurial interest. Furthermore, conservation entrepreneurship performance was found to possess the capability to serve as a relevant solution to mitigate the impacts of global climate change and drive sustainable development performance reflected in the dimension of the GE variable. It is also important to state that a new hypothesis was formulated during the course of the investigation, namely the existence of causality and simultaneous influence between GE performance, student conservation entrepreneurship, and sustainable development concepts.

This research possesses some scientific limitations and constraints, specifically as a relatively radical and novel concept, posing full objective challenges in operationalizing variables. The investigation also aims to ensure that scientific meaning remains well-preserved, rational, relevant, logical, and properly represented. As a result, conservation entrepreneurship was measured through the integration of social and green entrepreneurship as social innovation, with various choices of environmentally friendly sustainable entrepreneurship digitalization technologies. Lastly, it was recommended that further investigations should be extensively carried out with the aim of thoroughly examining the causality and simultaneous influence of student green entrepreneurship interest on GE. These results contribute to understanding that university institutional policy strategies are capable of providing relevant and more targeted collective attention in mitigating the negative impacts of global climate change. This implies that the concept of student conservation entrepreneurship can be considered increasingly relevant and an important social innovation for mitigating global climate change, while simultaneously driving the achievement of SDGs. In accordance with the observations made, it was suggested that the role of conservation entrepreneurship should be continually promoted. This suggestion was made simply because it has been observed that no conservation effort can last long without a close relationship with conservation values and various simultaneous sustainable goal achievement efforts. Therefore, the application of conservation entrepreneurship development in entrepreneurial education is expected to produce more optimal results.

ACKNOWLEDGMENT

Researchers would like to thank the UNNES Research and Community Service Institute (LP2M). To support research costs for the Expertise research scheme based on Attachment to Letter Number B/10058/UN37/PG/2023 dated 10 April 2023 concerning the Announcement of Determining Winners for Research and Community Service Fund Sources for DIPA PNBP UNNES 2023. Implementation of Research Number: 224.12.4/ UN37/PPK.10/2023 12 April 2023.

REFERENCES

[1] Kabir, M., Habiba, U.E., Khan, W., Shah, A., Rahim, S., Rios-Escalante, P.R. Farooqi, Z.U.R., Ali, L., Shafiq, M. (2023). Climate change due to increasing concentration of carbon dioxide and its impacts on environment in 21st century; A mini review. Journal of King Saud University-Science, 35(2023): 102693. https://doi.org/10.1016/j.jksus.2023.102693

[2] Linsenmeier, M. (2023). Temperature variability and long-run economic development. Journal of Environmental Economics and Management, 21: 102840. https://doi.org/10.1016/j.jeem.2023.102840

[3] Prasetyo, P.E., Kistanti, N.R. (2023). The potential of informal institutions in promoting green entrepreneurship (GE) and sustainable socio-economic development. Economics, 11(s1): 1-20. https://doi.org/10.2478/eoik-2023-0061

[4] Wu, J., Liu, L., Yang, H. (2023). Development paths of people's sustainable livelihood based on (climate change: A case study of Yunnan minority areas). International Journal of Climate Change Strategies and Management, 15(3): 432-455. https://doi.org/10.1108/IJCCSM-01-2023-0003

[5] Shivannan, K.R. (2022). Climate change and its impact on biodiversity and human welfare. Proceedings of the Indian National Science Academy, 88: 160-171. https://doi.org/10.1007/s43538-022-00073-6

[6] Findik, F. (2022). Green concrete for structural buildings. Heritage and Sustainable Development, 4(1): 67-76. https://doi.org/10.37868/hsd.v4i1.84

[7] Duchia, L., Lombardib, D., Paasa, F., Loyensa M.M. (2020). How a growth mindset can change the climate: Power of implicit beliefs in influencing people's view and action. Journal of Environmental Psychology, 70(2): 101461. https://doi.org/10.1016/j.jenvp.2020.101461

[8] Lee, S.Y., Ahn, Y.H. (2018). Climate-entrepreneurship in response to climate change: Lessons from the Korean emissions trading scheme (ETS). International Journal of Climate Change Strategies and Management, 11(2): 235-253. https://doi.org/10.1108/IJCCSM-09-2017-0177

[9] Aboye, A.B., Kinsella, J., Mega, T.L. (2023). Farm households' adaptive strategies in response to climate change in lowlands of southern Ethiopia. International Journal of Climate Change Strategies and Management, 15(5): 579-598. https://doi.org/10.1108/IJCCSM-05-2023-0064

[10] Fernandes, C.I., Veiga P.M. (2023). Entrepreneurship as a transition to the circular economy. Environment, Development and Sustainability, 25(6): 4889-4909. https://doi.org/10.1007/s10668-023-03513-5

[11] Hou, F., Qi, M.D., Su, Y., Wu, Y.J., Tang, J.Y. (2023). How does university-based entrepreneurship education facilitate the development of entrepreneurial intention? Integrating passion-and competency-based perspectives. The International Journal of Management Education, 21(2): 100798. https://doi.org/10.1016/j.ijme.2023.100798

[12] Prasetyo, P.E., Pujiati, A., Setyadharma, A., Kistanti, N.R. (2022). The spirit of social entrepreneurship and institutional environment as drives of sustainable economic growth. International Journal of Sustainable Development and Planning, 17(8): 2485-2492. https://doi.org/10.18280/ijsdp.170816

[13] Manuilova, K., Motorny, V., Koval, O., Mykyyty, O., Nirchu, Y. (2023). Economic security management for sustainable planning. International Journal of Sustainable Development and Planning, 18(7): 2055-2060. https://doi.org/10.18280/ijsdp.180707

[14] Prihanto, J.B., Suprapto, N., Winarsih, W., Iriani, S.S., Hariyono, E. Rizki, I.A., Vebianawa, E.A. (2024). Water

and sustainable development: Implementation and impact of eco-enzyme flushing program in green universities. International Journal of Sustainable Development and Planning, 19(2): 567-576. https://doi.org/10.18280/ijsdp.190214
[15] Lobo, D., Reich, P.B., Ardichvili, A.A. (2023). Conservation entrepreneurship: A new frontier in conservation science. Biological Conservation, 282(6): 110078. https://doi.org/10.1016/j.biocon.2023.110078
[16] Bergmanna, H., Geissler, M., Hundt, C., Grave, B. (2018). The climate for entrepreneurship at higher education institutions. Research Policy, 47(4): 700-716. https://doi.org/10.1016/j.respol.2018.01.018
[17] Moiceanu, G., Popescu, M., Barbu, A., Moiceanu, A.D. (2023). Green entrepreneurship among students. International Conference of Management and Industrial Engineering, 11(2): 100-104.
[18] Zemlyak, S., Gusarova, O., Khromenkova, G. (2023). Entrepreneurial initiatives, education and culture: Hubs for enterprise innovations and economic development. Sustainability, 15: 4016. https://doi.org/10.3390/su15054016
[19] Al-Lawati, E.H., Kohar, U.H.A., Suleiman, E.S. (2022). Entrepreneurial culture in educational institu-tions: A scping review. Cogent Business & Management, 9: 1997237.
[20] Prasetyo, P.E., Azwardi, Kistanti, N.R., (2023). Gender equality and social inclusion (GESI) and institutions as key drivers of green entrepreneurship. International Journal of Data and Network Science, 7(1): 391-398. http://doi.org/10.5267/j.ijdns.2022.9.008
[21] Porfirio, J.A., Felicio, J.A., Carrilho, T., Jacinto, J. (2022). Promoting entrepreneurial intentions from adolescence: The influence of entrepreneurial culture and education. Journal of Business Research, 156(2023): 113521. https://doi.org/10.1016/j.jbusres.2022.113521
[22] Newsome, D., Newsome, K.B., Miller, S.A. (2023). Teaching, learning, and climate change: Anticipated impacts and mitigation strategies for educators. Behavior and Social Issues, 32(2): 494-516. https://doi.org/10.1007/s42822-023-00129-2
[23] Feeney, M., Grohnert, T., Gijselaers, W., Martens, P. (2023). Organizations, learning, and sustainability: A cross-disciplinary review and research agenda. Journal of Business Ethics, 23(184): 217-235. https://doi.org/10.1007/s10551-022-05072-7
[24] Fox, S., Charla G.B. (2024). Sustainable technology in society: Technology in Society Briefing. Technology in Society, 77(2): 102486.
[25] Acemoglu, D., Aghio, P., Barrage, L., David, H. (2023). Green innovation and the transition toward a clean economy. Working Paper, Peterson Institute for International Economics, 13-14(6): 1-21. https://doi.org/10.2139/ssrn.4816734
[26] Ahmad, N., Youjin, L., Zikovic, S., Beyaeva, Z. (2023). The effects of technological innovation on sustainable development and environmental degradation: Evidence from China. Technology in Society, 72(2): 102184. https://doi.org/10.1016/j.techsoc.2022.102184
[27] Nguyen, L.T., Tran, L.B., Nguyen, N.T.T., Le, L.D., Nguyen, T.H. (2024). The impact of perceived happiness on the green entrepreneurship intention among university students in Vietnam. Kurdish Studies, 12(1): 362-381.
[28] Guerrero, M., Menter M., (2024). Driving change in higher education: The role of dynamic capabilities in strengthening universities' third mission. Small Business Economics, 62(2): 1-17. https://doi.org/10.1007/s11187-024-00869-4
[29] Prasetyo, P.E., Kistanti, N.R. (2020). Human capital, institutional economics and entrepreneurship as a driver for quality & sustainable economic growth. Entrepreneurship and Sustainability Issues, 7(1): 2575-2589.
[30] Satrianto, A., Juniardi, E., (2023). Inclusive human development and inclusive green growth: A simultaneous approach. International Journal of Sustainable Development and Planning, 18(2): 523-530. https://doi.org/10.18280/ijsdp.180221
[31] Johannisson, B., Dahlstrand, S. (2024). Bridging the functional and territorial views on regional entrepreneurship and development: The challenge, the journey, the lessons. European Planning Studies, 17(8): 1105-1115. https://doi.org/10.1080/09654310902980971
[32] Prasetyo, P.E., Setyadharma, A., Kistanti, N.R. (2022). The role of institutional potential and social entrepreneurship as the main drivers of business opportunity and competitiveness. Uncertain Supply Chain Management, 10(1): 101-108. http://doi.org/10.5267/j.uscm.2021.10.006
[33] Baber, H., Fanea-Ivanovici, M., Sarango-Lalangui, P. (2024). The influence of sustainability education on students' entrepreneurial intentions. International Journal of Sustainability in Higher Education, 25(2): 390-415. https://doi.org/10.1108/IJSHE-11-2022-0369
[34] Baber, H. (2023). Gender differences among university students towards sustainable entrepreneurship. Small Enterprise Research, 30(3): 1-17. https://doi.org/10.1080/13215906.2023.2293756
[35] Steinhauser, V.P.S., Rocha, A., Paula F.O. (2022). Institutional theory and international entrepreneurship: A review. Review of International Business, 17(2): 264-283. https://doi.org/10.18568/internext.v17i2.684
[36] Thurik, R., Audretsch, D.B., Block, J.H., Burke, A., Carree, M.A., Dejardin, M., Rietveld, C.A. Sanders, M., Stephan, U., Wiklund, J. (2024). The impact of entrepreneurship research on other academic fields. Small Business Economics, 62(2): 727-751. https://doi.org/10.1007/s11187-023-00781-3
[37] Prasetyo, P.E., Setyadharma, A., Kistanti, N.R. (2021). Integration and collaboration of determinants of entrepreneurial competitiveness. Uncertain Supply Chain Management, 9(3): 585-594. http://doi.org/10.5267/j.uscm.2021.6.002
[38] Ayob, A.H. (2023). Institutions and student entrepreneurship: The effects of economic conditions, culture education. Educational Studies, 47(6): 661-679. https://doi.org/10.1080/03055698.2020.1729094
[39] Phuong, N.T.M., Quoca, T.H., Cup, L.V., Lien, L.T.K. (2021). The students' attitudes and entrepreneurial intention: Evidence from Vietnam universities. Management Science Letters, 11(3): 783-794. http://doi.org/10.5267/j.msl.2020.10.028
[40] Abun, D., Foronda, G.L., Agoot, F., Belandres, M.L. Magallanez, T. (2018). Measuring entrepreneurial attitude and entrepreneurial intention of ABM grade XII. International Journal of Applied Research, 4(4): 100-114.

[41] Prasetyo, P.E. (2019). The reliability of entrepreneurial productivity as driver of economic growth and employment. International Journal of Entrepreneurship, 23(4): 1-25.
[42] Prasetyo, P.E., Setyadharma, A., Kistanti, N.R. (2020). Social capital: The main determinant of MSME entrepreneurship competitiveness. International Journal of Scientific & Technology Research, 9(3): 6627-6637.
[43] Mensah-Williams, E., Derera, E., (2023). Conceptualising impact measurements of entrepreneurship education outcomes: A scoping review. Acta Commercii - Independent Research Journal in the Management Sciences, 23(1): 1-12. https://doi.org/10.4102/ac.v23i1.1053
[44] Yasir, N., Xie, R., Zhang, J. (2022). The impact of personal values and attitude toward sustainable entrepreneurship on entrepreneurial intention to enhance sustainable development: Empirical evidence from pakistan. Sustainability, 14(11): 6792. https://doi.org/10.3390/su14116792
[45] Prasetyo, P.E., Setyadharma, A. (2022). Digitalization technology for sustainable rural entrepreneurship and inequality. Journal of Human Resource and Sustainability Studies, 10(3): 464-484. https://doi.org/10.4236/jhrss.2022.103028
[46] Dabbous, A., Barakat, K.A., Kraus, S. (2023). The impact of digitalization on entrepreneurial activity and sustainable competitiveness: A panel data analysis. Technology in Society, 73: 102224. https://doi.org/10.1016/j.techsoc.2023.102224
[47] Creswell, J.W., Creswell, J.D. (2018). Research Design Qualitative, Quantitative, And Mixed Methods Approaches (5th ed.). SAGE Publications, Inc.
[48] Fisher, W.P., Stenner, A.J. (2023). Metrology for the social, behavioral, and economic sciences. In Explanatory Models, Unit Standards, and Personalized Learning in Educational Measurement, pp. 217-222. Springer, Singapore.
[49] Jefferson, T., Austen, S., Sharp, R., Ong, R., Lewin, G., Adam, V. (2014). Mixed-methods research: What's in it for economists? The Economic and Labour Relations Review, 25(2): 290-305. https://doi.org/10.1177/1035304614530819
[50] Dopp, A.R., Mudey, P., Beasley, L.O., Silovsky, J.F., Eisenberg, D. (2019). Mixed-method approaches to strengthen economic evaluations in implementation research. Implementation Science, 14(1): 2. https://doi.org/10.1186/s13012-018-0850-6
[51] Jebsen, S., Senderovitz, M., Winkler, I. (2023). Shades of green: A latent profile analysis of sustainable entrepreneurial attitudes among business students. The International Journal of Management Education, 21(3): 100860. https://doi.org/10.1016/j.ijme.2023.100860
[52] Boffa, D., Prencipe, A., Papa, A., Corsi, C., Sorrentino, M. (2023). Boosting circular economy via the b-corporation roads. The effect of the entrepreneurial culture and exogenous factors on sustainability performance. International Entrepreneurship and Management Journal, 2023(19): 523-561. https://doi.org/10.1007/s11365-023-00835-8
[53] Hossain, M.I., Tabash, M.I., Siow, M.L., Ong, T.S., Anagreh, S. (2023). Entrepreneurial intentions of Gen Z university students and entrepreneurial constraints in Bangladesh. Journal of Innovation and Entrepreneurship, 12(12): 1-34. https://doi.org/10.1186/s13731-023-00279-y
[54] Bachmmann, N., Rose, R., Maul, V., Katharian H. (2024). What makes for future entrepreneurs? The role of digital competencies for entrepreneurial intention. Journal of Business Research, 174(3): 11448. https://doi.org/10.1016/j.jbusres.2023.114481
[55] Aurellia, J., Nuringsih, K. (2023). The role of green entrepreneurial orientation and self-efficacy to encourage student intention in green entrepreneurship. International Journal of Application on Economics and Business (IJAEB), 1(1): 199-207.
[56] Havas, A., Schartinger, D., Weber, M. (2023). Innovation studies, social innovation, and sustainability transitions research: From mutual ignorance towards an integrative perspective? Environmental Innovation and Societal Transitions Journal, 48: 100754. https://doi.org/10.1016/j.eist.2023.100754