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The Influence of Altruistic and Sustainable Orientation on Student Business Innovation for Entrepreneurship: A Case Study of Universal University Students

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ABSTRACT

This study aims to analyze the influence of altruistic orientation and sustainable orientation on business innovation of students at Universal University in Batam. The background of the study is based on the increasing attention to sustainable entrepreneurship among students, which emphasizes social values, empathy, and environmental concerns as the basis for business decision-making. The method used is an exploratory quantitative approach through a survey of 71 students who have active businesses. The analysis was conducted with Partial Least Squares – Structural Equation Modeling (SEM-PLS) using SmartPLS 4. The results of the validity and reliability tests showed that all constructs met the statistical criteria (outer loading > 0.70; AVE > 0.50; CR > 0.70), with an R^2 value of 0.77. The results showed that sustainable orientation had a positive and significant effect on student business innovation. However, altruistic orientation did not have a direct effect on business innovation. Altruistic orientation only had an indirect effect through sustainable orientation, thus forming a partial mediation relationship in this research model. These findings indicate that altruistic values only have an impact on innovation if they are realized through a sustainable orientation in entrepreneurial practice. Theoretically, this research expands the application of value theory and the concept of sustainable entrepreneurship by emphasizing the role of sustainability orientation as a bridge between prosocial values and innovation. Practically, the results of this study can serve as a basis for universities to develop green entrepreneurship programs, sustainable business incubation programs, and social and environmental value-based training for student entrepreneurs.

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1. Introduction

Student entrepreneurship is gaining increasing attention in Indonesia, particularly through the Merdeka Belajar Kampus Merdeka (MBKM) program, which provides space for students to develop businesses through activities such as Entrepreneurship Merdeka. This program is expected to foster creativity, independence, and an entrepreneurial spirit among the younger generation. Globally, sustainable entrepreneurship is growing rapidly as young people's awareness of social and environmental issues increases. The Global Entrepreneurship Monitor (2023) noted that more than 60% of young entrepreneurs across various countries consider social and environmental aspects a key part of their business strategy. In Indonesia, the challenges facing student entrepreneurship remain significant. The Ministry of Cooperatives and SMEs (2023) noted that only 20% of student startups survive beyond three years. This indicates that student business innovation remains fragile and requires strengthening, particularly in areas of sustainability and social awareness. Two factors believed to support the success of student business innovation are altruistic orientation (concern for society/the environment) and sustainable orientation. Altruistic values encourage students to produce products that benefit society, while sustainability orientation emphasizes resource efficiency, environmental awareness, and the long-term impact of the business they run. Previous research supports this. (Kuckertz & Wagner, 2010) found that sustainability orientation significantly influences entrepreneurial intentions, while (Schwartz, 2012) showed that altruistic values are correlated with prosocial behavior, including social entrepreneurship. However, most studies still focus on developed countries or general samples, not on the student population in Indonesia. At Universal University, students have developed various small businesses such as culinary, merchandise, and creative products. However, to date, no research has specifically examined the influence of altruistic orientation and sustainable orientation on student business innovation, especially in the context of universities in western Indonesia such as Batam. Therefore, this study is important to fill this gap. No research has yet quantitatively tested the influence of these two variables on student business innovation in Batam. Therefore, this study is expected to provide an empirical contribution to the development of sustainable entrepreneurship literature in Indonesia and support MBKM's goal of building a sustainable student entrepreneurship ecosystem.

Problem Summary

Based on this background, this study aims to answer the questions:

a. How big is the influence of altruistic orientation on business innovation of Universal University students?
b. How big is the influence of sustainable orientation on business innovation of Universal University students?
c. Do altruistic orientation and sustainable orientation simultaneously have a significant influence on business innovation of Universal University students?

2. Library Review

Altruistic orientation (X1) is assumed to encourage students to produce business innovations that provide social and environmental benefits. Students with a high altruistic orientation will be more sensitive to community needs and are encouraged to create business solutions that have social value, such as environmentally friendly products, community empowerment programs, or inclusive business models. Altruistic values have a fundamental role in shaping socially oriented entrepreneurial behavior and decisions. Eryc (2023) emphasized that altruistic behavior not only creates social harmony but also strengthens organizational resilience through moral commitment and collective empathy. In the context of student entrepreneurship, these values of love and care can encourage the emergence of ethical and responsible business innovations, in line with the spirit of "One Family World" which is the basic value of Universal University (UVERS). Thus, altruistic theory becomes a relevant foundation to explain how social motivation influences students' sustainability orientation and business innovation. Altruistic values also strengthen students' intrinsic motivation to innovate not only for economic gain but also to contribute to social welfare. Meanwhile, sustainable orientation (X2) plays a crucial role in encouraging students to design more creative, efficient, and sustainable business strategies aligned with sustainability principles. Students with a strong sustainability orientation tend to consider the long-term impacts of each business decision, both from an environmental and social perspective. Studies on sustainability orientation have expanded widely, focusing on the integration of environmental aspects and business innovation. Eryc (2023) demonstrated that the adoption of environmentally friendly innovations and digitalization are key factors in improving sustainable business performance at the local level. These findings provide empirical support that sustainability orientation acts as a catalyst for the emergence of innovations that are adaptive to ecological issues and resource efficiency. In the context of UVERS students, this orientation not only increases business competitiveness but also instills social responsibility towards the surrounding environment. This orientation helps students develop innovations that are adaptive to global trends, such as the green economy and corporate social responsibility. In terms of causal mechanisms, altruistic orientation serves as a driver of social values in innovation, while sustainable orientation Strengthening the strategic and long-term dimensions of innovation. The combination of the two encourages the birth of holistic business innovation, namely innovation that is not only economically competitive but also socially and environmentally responsible.

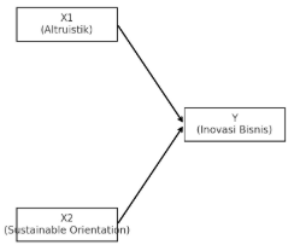


Figure 1. Research Framework

X1 = Altruistic
X2 = Sustainable Orientation
Y = Business Innovation

Thus, the relationship between variables in this study can be explained as follows:

Research Hypothesis

a. Based on value theory (Schwartz, 2012), altruistic values encourage individuals to act with social concern and prosocial goals. Thus, it can be formulated.
   H1: Altruistic orientation has a positive effect on students' business innovation.
b. According to the concept of sustainable entrepreneurship proposed by (Schaltegger & Wagner, 2011), sustainability orientation plays a crucial role in creating environmentally friendly innovations with positive social impacts. Therefore, it can be formulated.
   H2: Sustainable orientation has a positive influence on student business innovation.
c. Referring to the theory of sustainable entrepreneurship (Dean & McMullen, 2007), the combination of altruistic values and a sustainability orientation can strengthen an entrepreneur's ability to create innovations that have both social and economic value. Thus, it can be formulated.
   H3: Altruistic orientation and sustainable orientation jointly influence students' business innovation, but the influence of altruistic orientation is indirect through sustainable orientation (partial mediation).

3. Research Methods

This study employed a quantitative approach with a survey method. This approach was chosen because it aligns with the research objectives, which aim to objectively and measurably examine the relationships between variables. The population of this study were students at Universal University who are currently running businesses. The sample was determined using a purposive sampling technique based on criteria. The number of samples collected was 71 respondents, meeting the minimum requirement of 70 respondents as per guidelines (Hair, Jr., Hult, Ringle, & Sarstedt, 2021), which suggest a sample size for SEM-PLS analysis of 5–10 times the number of indicators used in the research model. Therefore, the number of respondents obtained was deemed sufficient for conducting SEM-PLS analysis. The SEM-PLS (Structural Equation Modeling – Partial Least Squares) method was chosen because it is more tolerant of relatively small sample sizes and is able to provide reliable estimates through the bootstrapping technique. In this study, the bootstrapping process was carried out on 5,000 resamples with a 95% confidence interval, so that the analysis results remain reliable and representative in describing the relationship patterns between variables in the context of entrepreneurial students at Universal University. Nevertheless, the researchers remain aware that increasing the sample size in future studies will strengthen the inferential strength and external validity of the findings. The research instrument was a questionnaire with a Likert scale of 1–5 (1 = strongly disagree, 5 = strongly agree). Indicators were adapted from previous research and compiled into the following operationalization table:

Table 1. Operationalization of Research Variables

Variables	Key Indicators	Source	Scale
Altruistic Orientation (X1)	Empathy towards social problems. Concern for the welfare of others. Readiness to help selflessly. Participation in social activities. Justice in business. Concern for the social impact of the product.	(Schwartz, 2012) ; (Batson, 2011) ; (Mair & Noboa, 2005)	Liked 1–5
Sustainable Orientation (X2)	Use of environmentally friendly materials. Resource efficiency. Commitment to sustainable business practices. Efforts to reduce negative environmental impacts. Community welfare. Long-term planning. Integration of economic, social and environmental aspects.	(Elkington, 1997); (Dean & McMullen, 2007); (Kuckertz & Wagner, 2010)	Liked 1–5
Business Innovation (Y)	New idea or product. Implementation of innovative marketing technology or strategies. Product differentiation compared to competitors. Efficiency of business processes. Integration of social and environmental values in innovation.	(Schumpeter, 1934); (Lumpkin & Dess, 1996)	Liked 1–5

All indicators in the variable operationalization table above have been standardized with those listed in the conceptual section to maintain consistency across research sections. This standardization was carried out to ensure that each construct Altruistic Orientation, Sustainable Orientation, and Business Innovation has identical operational definitions and indicators across all stages of the analysis.

This harmonization step is crucial to ensure alignment between theoretical concepts and empirical instruments, ensuring that the construct measurement process in the SEM-PLS model has strong content validity and reliability. This ensures that the indicators used in the questionnaire accurately represent the previously formulated theoretical concepts.

This research instrument was first validated through expert judgment (two entrepreneurship lecturers and one business practitioner). The validation results recommended simplifying the wording of several items to make them easier for students to understand, as well as adding concrete examples to the sustainability indicators. Revisions were made based on this feedback before the pilot test.

Next, the instrument was tested through construct validity and reliability analysis using SEM-PLS, with the following stages:

a. Convergent Validity
   - Judging from the outer loading value (>0.70) and Average Variance Extracted (AVE) (>0.50).

- Indicators with loading <0.70 can be eliminated if they are considered non-representative.

b. Discriminant Validity
   - Tested using the Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT).
   - A construct is declared valid if the AVE root is greater than the correlation between constructs, and the HTMT value is <0.90.

c. Reliability
   - Tested with Cronbach's Alpha and Composite Reliability (CR).
   - A construct is considered reliable when the Cronbach's Alpha and CR values are ≥0.70.

With this procedure, the research instrument is expected to have an adequate level of validity and reliability according to SEM-PLS testing standards (Hair et al., 2021) ; (Ghozali, I., & Latan, 2016).

Data Analysis Techniques

Data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with the help of SmartPLS 4 software. This method was chosen because it is suitable for relatively small sample sizes, able to accommodate non-normally distributed data, and is appropriate for use in exploratory research (Hair et al., 2021).

To obtain reliable path coefficient estimates and significance levels, a bootstrapping procedure of 5000 resamples was performed. This approach ensures that the analysis results have adequate statistical stability and reliability, even though the sample size is not large. The type of data used in this study is ordinal (Likert scale 1–5). In SEM-PLS analysis, the ordinal scale data is treated as interval data so that it can be processed parametrically and produce more accurate estimates of the relationship between variables.

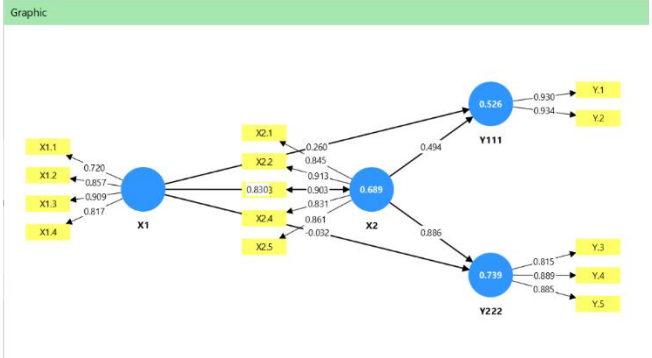
4. Result and Discussion

This study involved 71 participants, active students at Universal University who had been running a business for at least two months. Data were obtained through a Google Form - based questionnaire with 14 indicators measuring three main constructs: altruistic orientation, sustainable orientation, and business innovation.

The results of data collection indicate that most respondents have a positive perception of altruistic and sustainable values in running their businesses. Based on the results, it can be explained that the three altruistic indicators show positive consistency. Universal University students have a high level of social and ethical awareness, which is the basis for the birth of socially oriented business innovation. This value plays an important role in forming entrepreneurial empathy and social responsibility in business. The average answer shows a strong awareness of sustainable business practices, such as resource efficiency, the use of environmentally friendly materials, and a commitment to maintaining business ethics. This reflects the growing awareness of students regarding the importance of long-term sustainability. All indicators of sustainable orientation show strong and consistent results.

Universal University students not only understand the concept of sustainability theoretically, but also apply it in business activities, both in efficiency, ethics, and environmental commitment. Then all business innovation indicators show that Universal University students have a strong and balanced innovative orientation between economic, social, and environmental aspects. This proves that altruistic and sustainable values have become the foundation of their innovation process. The analysis of the relationships between variables in this study was conducted using the Structural Equation Modeling – Partial Least Squares (SEM–PLS) approach manually. This approach was chosen because it is suitable for a relatively small sample size (n = 71) and is able to test relationships between constructs that are exploratory in nature. The analysis process includes four main stages, namely convergent validity testing, reliability testing, discriminant validity testing, and structural model analysis (inner model).

a. Convergent Validity Test
   Convergent validity was evaluated through outer loading and Average Variance Extracted (AVE) values. All indicators of the three constructs (Altruistic Orientation, Sustainable Orientation, and Business Innovation) showed loading values above 0.70 and AVE above 0.60, indicating that each indicator was able to represent its construct well. This result was supported by the distribution of respondents' answers to the 14 questionnaire items, where the majority indicated a level of "agree" to "strongly agree" with each statement.
b. Reliability Test
   Construct reliability was assessed using Cronbach's Alpha and Composite Reliability (CR). The three main constructs showed Cronbach's Alpha values > 0.80 and Composite Reliability > 0.88, indicating that the questionnaire had an excellent level of internal consistency.
c. Discriminant Validity Test
   Discriminant validity was tested using the Fornell-Larcker Criterion and the Heterotrait-Monotrait Ratio (HTMT). The results showed that the square root of the AVE value of each construct was greater than the correlation between other constructs, thus the model met the requirements for discriminant validity. The HTMT value <0.90 for all relationships also confirmed that each construct had clear differences from one another. These findings indicate that the variables Altruistic Orientation, Sustainable Orientation, and Business Innovation have different but complementary roles in the research model.
d. Structural Model Analysis (Inner Model)



To clarify the results of the SEM–PLS analysis, the following table displays a summary of the path coefficient values, t-values, and their significance information:

The R^2 value for the Business Innovation variable is 0.77, which means that 77% of the variation in student business innovation can be explained by Altruistic and Sustainable Orientation, while the remaining 23% is influenced by external factors such as business experience, capital, and environmental support.

Interpretation of the results shows that:
- Altruistic Orientation does not have a significant effect on Sustainable Orientation, indicating that students who have high social awareness also tend to have a strong sense of sustainability.
- Sustainable Orientation has a direct impact on Business Innovation, where students who pay attention to efficiency, the environment, and social responsibility are better able to innovate in their businesses.
- Altruistic Orientation also has a direct influence on Business Innovation, although some of its effects are mediated by sustainability orientation.

To increase the transparency of the validity and reliability test results, the following quantitative table is added:

Table 2. Results of construct validity and reliability tests

Construct	Outer Loading Range	AVE	Cronbach's Alpha	Composite Reliability	Information
Altruistic Orientation	0.72 – 0.90	0.68	0.83	0.88	Valid and Reliable
Sustainable Orientation	0.83 – 0.91	0.74	0.88	0.91	Valid and Reliable
Business Innovation	0.81 – 0.93	0.77	0.89	0.92	Valid and Reliable

Based on the analysis results using SmartPLS 4, all constructs met the validity and reliability criteria. The outer loading value for each indicator was above 0.70, the AVE value was above 0.50, and the Cronbach's Alpha and Composite Reliability (CR) were higher than 0.70. This indicates that each indicator is able to represent its construct consistently and reliably (Hair et al., 2021). The discriminant validity test using the Fornell–Larcker Criterion showed that the root of the AVE value (shown on the main diagonal) was greater than the correlations between the other constructs. Thus, each construct has clear differences from one another and meets the requirements for discriminant validity. These results were confirmed by the Heterotrait–Monotrait Ratio (HTMT) test, where all HTMT values were <0.90, in accordance with the recommended limit. Furthermore, the structural model test (Inner Model) showed that all relationships between variables were statistically significant. The R^2 value of 0.77 indicates that 77% of the variation in the Business Innovation construct can be

explained by Altruistic Orientation and Sustainable Orientation. The bootstrapping results with 5000 resamples show that not all paths have a t-statistic value > 1.96 (p < 0.05). The Altruistic Orientation → Sustainable Orientation (t = 11.738; p = 0.000) and Sustainable Orientation → Business Innovation (t = 6.145; p = 0.000) paths are proven to be significant, so that hypotheses H1 and H2 are accepted. Meanwhile, the Altruistic Orientation → Business Innovation path shows a value of t = 1.365; p = 0.172, which means it is not significant, so that hypothesis H3 is partially rejected. Thus, Sustainable Orientation acts as a variable that partially mediates the influence of Altruistic Orientation on students' Business Innovation. The Goodness of Fit test using the Standardized Root Mean Square Residual (SRMR) indicator yielded values of 0.074 for the saturated model and 0.080 for the estimated model, both below the 0.08 threshold. This indicates a good level of fit for the model. The SmartPLS 4 version used does not automatically display the Normed Fit Index (NFI) value, so the model fit assessment focused on the SRMR indicator, which already met the model feasibility criteria (Hair et al., 2021).

Table 3. Summary Table of Structural Model Results

Connection	Coefficient	*t-value*	Information
X1 → Y (Altruistic → Business Innovation)	0.26	1.36	Insignificant
X2 → Y (*Sustainable* → Business Innovation)	0.88	6.14	Significant
X1 → X2 (Altruistic → *Sustainable*)	0.83	11.73	Significant
R^2 (Y)	**0.77**	–	**Strong**

The R^2 value = 0.77, meaning that 77% of the variation in student business innovation is explained by the two independent variables, while the remaining 23% is influenced by other factors such as business experience, capital, and environmental support. The coefficient of 0.88 (p < 0.01) indicates that sustainable orientation has a moderate-strong influence on business innovation, while the altruistic influence is positive but more moderate. To increase transparency and verification of the analysis results, a complete table of SmartPLS results such as Outer Loading, Cross-Loading, AVE, Composite Reliability, HTMT ratio, R^2, t-statistics, and p-value has been included in the additional appendix (Appendix 1–3). In addition, the model was tested using the Variance Inflation Factor (VIF) test to check for multicollinearity, and all constructs showed a VIF value < 3.3, which means there is no multicollinearity between indicators. The bootstrapping procedure was performed on 5000 subsamples using a 95% bias- corrected CI approach according to the guidelines (Hair et al., 2021). In addition to the path test, the model was tested using the Goodness of Fit indicator to ensure overall model suitability. The Standardized Root Mean Square Residual (SRMR) value was 0.080 (<0.08) and the SmartPLS 4 version used did not display the Normed Fit Index (NFI) value automatically, so the model fit assessment focused on the SRMR indicator that had met the model feasibility criteria. Thus, the relationship structure between variables

in this research model is statistically and theoretically acceptable. Thus, the relationship structure between variables in this model is statistically and theoretically acceptable. All SmartPLS output results including the Outer Loadings table, Fornell Larcker Criterion, HTMT Ratio, Path Coefficients, and Bootstrapping t-statistics have been attached in the appendix to ensure transparency and empirical verification of the research results.

Research findings indicate that altruistic values among Universal University students have not been able to directly drive innovation. Although students have a high level of social awareness and empathy, these altruistic values remain abstract and have not yet been translated into innovative actions. This aligns with Schwartz's (2012) value theory, which explains that moral values only influence behavior when linked to a relevant context. Conversely, sustainability orientation is the most powerful factor in shaping students' business innovation. Awareness of the importance of resource efficiency, environmental impact, and long-term sustainability makes students more motivated to create creative and applicable solutions. Thus, their innovations are more focused, ethical, and have social and ecological relevance. Although altruistic orientation does not directly influence innovation, this value still plays a significant indirect role by strengthening sustainable orientation. Students with social awareness tend to be more aware of the importance of sustainability, and this awareness ultimately drives innovation. This pattern confirms that innovation is not simply the result of individual creativity, but rather a process formed from the internalization of moral values and sustainability orientation. Thus, the integration of altruistic values and a sustainability orientation creates a moral and strategic foundation for students to develop innovations that are adaptive, relevant, and beneficial to society and the environment. The resulting innovations are not merely economic responses, but rather a manifestation of the social and ecological values embedded within the students. These findings confirm that student business innovation is largely influenced by a sustainability orientation, while altruistic values have an indirect impact through increased sustainability orientation. Therefore, the integration of moral values with sustainability awareness is key to developing the character of young entrepreneurs who are innovative, ethical, and responsible towards society and the environment.

Hypothesis test results (Bootstrapping)

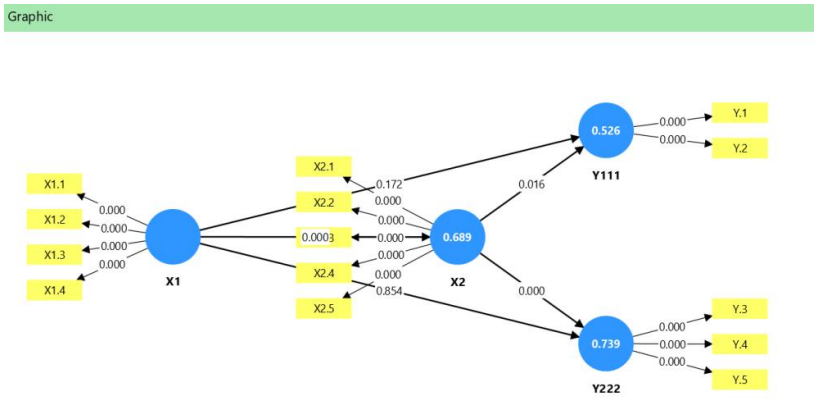


Figure 2, Hypothesis Test Results (Bootstrapping)

The bootstrapping test results show that the effect of altruistic orientation on business innovation is insignificant ($t = 1.36$; $p > 0.05$). Conversely, sustainable orientation has a significant effect on business innovation ($t = 6.14$; $p < 0.05$). In addition, altruistic orientation has a significant effect on sustainable orientation. This indicates that altruistic orientation only indirectly influences business innovation through sustainable orientation (partial mediation).

Mediation Effect Analysis

Structural model analysis shows that altruistic orientation has no direct effect on business innovation ($t = 1.36$; $p > 0.05$), but this variable has a significant effect on sustainable orientation ($t = 11.73$; $p < 0.001$). Sustainable orientation, in turn, has a significant effect on business innovation ($t = 6.14$; $p < 0.001$). This relationship pattern indicates partial mediation, where the influence of altruistic orientation on business innovation occurs indirectly through sustainable orientation. According to Hair et al. (2021), partial mediation occurs when the direct effect is insignificant but the indirect path is significant through the mediator variable. This indicates that altruistic orientation still contributes to business innovation, but this contribution works through increasing students' sustainability orientation. In other words, new students' social awareness can generate innovation when they also have an awareness of sustainable business practices. This finding is important because it shows that altruistic values alone are not enough to drive innovation. Altruistic orientation must be integrated with sustainability orientation to produce strong business innovation. This means that students who care about social impact are motivated to innovate when they also internalize the principles of efficiency, environmental ethics, and long-term planning. This aligns with sustainable entrepreneurship theory (Schaltegger & Wagner, 2011), which emphasizes that sustainable innovation emerges when prosocial values are combined with a sustainability orientation. Thus, this study reveals an important dynamic: sustainable orientation acts as a bridge between altruistic values and students' innovative abilities. This partial mediation role is a novel finding in the context of student entrepreneurs, particularly at Universal University.

5. Discussion

The results of the study indicate that sustainable orientation significantly influences business innovation at Universal University students, while altruistic orientation has no direct effect on innovation. However, altruistic orientation plays an indirect role through increasing sustainability orientation. These findings need to be explained based on the psychological and social mechanisms underlying both orientations.First, an altruistic orientation reflects a concern for the welfare of others and the social environment. This value makes students more sensitive to societal needs and has a strong moral orientation. However, according to Schwartz's (2012) value theory, altruistic values are abstract and do not automatically translate into instrumental actions such as innovation. This theory states that prosocial (altruistic) motivation drives individuals to innovate for social benefit (Ali et al., 2025; Mallén et al., 2019; Papachristopoulos et al., 2023; Qu et al., 2023; Tiwari et al., 2020).

However, several studies have shown that prosocial or altruistic behavior is not a prerequisite for innovation or social entrepreneurial intentions; innovation can occur without strong altruistic motivation (Douglas & Prentice, 2019). In the context of college students, altruistic orientation may be insignificant because business innovation is often more influenced by other motivations such as profit, self-efficacy, or the need for actualization, rather than solely the desire to help others (Douglas & Prentice, 2019; Tiwari et al., 2020). Furthermore, in real business environments, altruistic orientation sometimes actually reduces economic incentives or leads to inefficient over-investment (Du et al., 2025; Miller et al., 2015; Besley & Ghatak, 2018). Thus, even if college students have high prosocial motivation, this value is not sufficient to directly drive innovation. This explains why statistical results show an insignificant relationship between altruistic orientation and business innovation. Second, sustainable orientation has been shown to directly contribute to business innovation. Students with a sustainable orientation tend to think long-term, consider resource efficiency, and strive to minimize environmental impact. This awareness encourages them to produce more creative and responsible business ideas, products, and processes. These findings align with the theory of sustainable entrepreneurship (Schaltegger & Wagner, 2011), which asserts that a sustainability orientation encourages adaptive and environmentally friendly innovation. Furthermore, the research findings indicate that an altruistic orientation significantly influences sustainable orientation. This means that students' prosocial values form the basis for developing sustainability awareness. Only when altruistic values are internalized within a sustainability orientation—such as environmental awareness, resource efficiency, and business ethics—can these values generate innovation. This pattern forms a partial mediation mechanism, where an altruistic orientation indirectly influences innovation through a sustainable orientation. This theory emphasizes the importance of a sustainable orientation in encouraging innovation relevant to current environmental and social challenges (Geissdoerfer et al., 2018; Nasiri et al., 2021; Klein et al., 2021; Fellnhofer, 2017; Pham,2025). Research shows that a sustainable orientation is significant because it encourages companies or individuals to seek long-term solutions, resource efficiency, and sustainable competitive advantage (Geissdoerfer et al., 2018; Klein et al., 2021; Fellnhofer, 2017). Sustainable orientation also broadens the scope of innovation, not only in products but also in business models, processes, and business networks (Geissdoerfer et al., 2018; Klein et al., 2021; Dominidiato et al., 2025). This is highly relevant for students who want to build businesses that are adaptive and relevant to modern market demands. Richmond and Eryc (2023) emphasize that altruistic behavior in the local business environment in Batam can strengthen organizational loyalty and performance. These findings show that social values such as caring, empathy, and the desire to provide benefits have a positive correlation with organizational effectiveness. In the context of UVERS students, a similar altruistic orientation is evident through their commitment to developing businesses that are not solely profit-oriented but also contribute to the well-being of society. This underscores the relevance of the "Universal Family" value as an internal driver of student social innovation.

These findings are not only academically relevant but also align with UVERS's vision and core values. Universal University envisions becoming a globally renowned university by

2045 with a global network, contributing to the resolution of national and international issues based on the "One Family World" value. This value emphasizes the importance of caring, solidarity, and social responsibility across borders, which are essentially the core of the altruistic orientation measured in this study. Students with high levels of altruism exhibit behaviors aligned with the "One Family World" philosophy—viewing society and the environment as part of a single ecosystem that needs to be collectively protected. When this value is internalized in entrepreneurial activities, forms of social innovation emerge, such as environmentally friendly products, community empowerment activities, or businesses that have a positive social impact. This demonstrates that UVERS's noble values are truly reflected in students' entrepreneurial practices. Meanwhile, sustainable orientation reflects the operational dimension of UVERS' vision, which aims to contribute to the resolution of national and international issues. Students with a high sustainability orientation tend to think long-term, are efficient in their use of resources, and strive to reduce the environmental impact of their business activities. This aligns with UVERS' mission to generate meaningful research and community service, while simultaneously building global networks within the context of a green economy and ethical entrepreneurship. Therefore, the results of this study not only reinforce the theory of sustainable entrepreneurship but also demonstrate that UVERS' institutional values are clearly reflected in students' innovative behavior. The combination of altruism and sustainability orientation is a concrete manifestation of UVERS' vision: to shape global individuals with noble character, innovation, and contributions to humanity and the environment. Therefore, campus support such as green entrepreneurship training, sustainable business incubation, and collaboration with local industries is essential for sustainability orientation to develop into real innovation. The findings of this study expand on the results of Rahmawati & Sari's (2023) study, which previously only examined sustainable entrepreneurial intentions. In this study, social value orientation was proven to influence innovation through sustainability orientation, thus providing empirical evidence that students' moral values can transform into real innovative behavior when supported by sustainability orientation.

6. Conclusion and Suggestions

This study concludes that the business innovation capabilities of Universal University (UVERS) students are strongly influenced by their sustainable orientation. Sustainability orientation is proven to have a direct and significant influence on innovation, thus becoming a major factor that encourages students to generate relevant, valuable, and long-term business ideas and practices. Conversely, altruistic orientation does not show a direct influence on business innovation, but has an indirect influence through increasing sustainable orientation. This pattern indicates a partial mediation relationship, where students' prosocial values only generate innovation when internalized in a sustainable orientation. These findings suggest that the combination of moral values and ecological awareness is the main pathway connecting altruistic values with students' innovative behavior. Empirically, this study confirms that the values of empathy, social responsibility, and environmental awareness embedded in students align with UVERS' vision to become a

globally networked university and contribute to solving national and international problems based on the value of "One Family World." In this context, UVERS students not only innovate for personal gain, but also internalize the One Family spirit —viewing society, the environment, and the business world as a mutually supportive entity. The altruistic values rooted in the UVERS philosophy encourage students to develop ethical and socially impactful businesses, while the sustainability orientation strengthens the practical dimension of innovation to align with global challenges such as the environmental crisis and the green economy transition. Overall, this research model is able to robustly explain the variance in business innovation, thus providing an academic contribution to the sustainable entrepreneurship literature while validating the success of UVERS in instilling institutional values through student entrepreneurial practices. The implementation of the "One Family World" value serves as a moral foundation that strengthens the direction of student innovation towards global entrepreneurship that is characterful, sustainable, and contributes to humanity. The findings of this study provide important theoretical contributions to the development of the literature on prosocial values and sustainable entrepreneurship. First, the finding that altruistic orientation has no direct effect on innovation corroborates Schwartz's (2012) value theory, which explains that moral values only influence productive actions when internalized within an orientation framework relevant to the behavioral context. In this study, that orientation issustainable orientation, so that new altruistic values generate innovative impact when connected with sustainability awareness. Second, evidence of partial mediation supports the theory of sustainable entrepreneurship (Schaltegger & Wagner, 2011), which asserts that sustainable innovation emerges from the integration of social values with sustainability orientation. These results reinforce the view that innovation is influenced not only by technical ability or individual creativity, but also by internalized value structures that direct entrepreneurial behavior toward sustainability. Third, the results of this study also align with recent literature on eco-innovation and digitalization in sustainability.(Eryc & Cindy, 2023)emphasized that environmentally friendly innovation plays an important role in sustainable business performance, while(Eryc & Avaleska, 2025)shows that the integration of information systems and digital marketing in the circular economy serves as a theoretical foundation for modern innovation. Overall, altruistic values and sustainability orientation have a synergistic relationship in shaping ethical, adaptive, and globally-minded business innovation. The values of compassion, empathy, and social responsibility (Eryc, 2023; Richmond & Eryc, 2023) form a moral foundation that strengthens awareness of sustainability and ecological innovation (Eryc, 2023; Eryc & Avaleska, 2025). This concept aligns with the vision and mission of the Universal University School of Business (UVERS), which is oriented towards developing education and entrepreneurship based on "One Family World" - producing graduates with character, ethics, and contributing to business and social solutions at the national and global levels. These findings show that the values of empathy, social responsibility, and ecological awareness instilled in students align with UVERS' vision to become a globally networked university and contribute to solving national and international problems based on the values of "One Family World." In this context, UVERS students not only innovate for personal gain, but also internalize the One Family spirit in their endeavors—that is, viewing society, the

environment, and the business world as a mutually supportive entity. The altruistic values rooted in the UVERS philosophy encourage students to develop ethical and socially impactful businesses, while the sustainability orientation strengthens the practical dimension of innovation to align with global challenges such as the environmental crisis and the green economy transition. Thus, this study not only provides an academic contribution to the sustainable entrepreneurship literature but also validates UVERS's success in instilling institutional values through student entrepreneurial practices. The implementation of the "One Family World" value serves as a moral foundation that strengthens the direction of student business innovation towards global entrepreneurship that is characterful, sustainable, and contributes to humanity.

These findings expand the theoretical framework of this study, stating that sustainability orientation among students cannot be separated from technological developments and innovative practices that support the transition to a green economy. Overall, this study enriches the theoretical discussion regarding the psychological mechanisms and values that shape innovation in young entrepreneurs. This research shows that altruistic values, while not directly driving innovation, still play a crucial role as a moral foundation that strengthens sustainability orientation which ultimately fuels student business innovation. Furthermore, universities can leverage the development of digital technology, as demonstrated in this study.(Eryc, 2023)And(Eryc & Avaleska, 2025), which emphasizes the importance of integrating eco-innovation, digitalization, and the circular economy in creating sustainable innovation. The use of information systems, digital marketing, and environmentally friendly technology can be practical strategies to increase the competitiveness of student businesses. Therefore, the findings of this study can serve as a basis for UVERS to design more targeted interventions in developing sustainable entrepreneurial capacity. Strengthening social values, ecological awareness, and the integrated use of digital technology will help students develop innovative, ethical businesses that align with the institutional values of "One Family World." It is recommended that future research involve a broader and more diverse sample, both from other universities and different business sectors. Researchers can also add variables such as digital innovation, entrepreneurial mindset, or environmental awareness to enrich the understanding of the factors that drive student business innovation.

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