An Empirical Study on Agripreneurial Characteristics of University Students

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Abstract
Purpose/Problem – The study explores the agripreneurial characteristics of agricultural sciences and business students in Indian universities. This manuscript investigates agripreneurship concerning innovation, opportunity-seeking abilities, risk-taking propensity, and decision-making abilities by comparing agripreneurially inclined and not-inclined students and considering their implications for agriculture development efforts in the Indian context.
Design/methodology/approach – A convenient sampling method was employed to collect data from university students using a seven-point Likert scale based on an 18-item self-administered questionnaire. For data collection, Google forms were sent through LinkedIn, WhatsApp, Instagram, Telegram and email. Students were asked, "Have you ever seriously considered becoming an agripreneurs" and "What career option will you choose after completing your degree?" to understand the agripreneurial inclination. Findings- Through the application of a t-test, it was found that agripreneurial characteristics are more prevalent among agripreneurially inclined students than non inclined ones. Thus, agripreneurially keen students have higher risk taking propensity, innovativeness, opportunity-seeking abilities, and decision-making abilities. Research limitations/implications – The study is bound to undergraduate and post-graduation students from agricultural backgrounds from Aligarh Muslim University; randomly selected university students were included in the pilot survey. The sample size is somewhat limited, making it challenging to comprehend the agripreneurial characteristics among students. Conclusion – The country's economic performance can be impacted by agripreneurship since the agricultural sector creates job opportunities for its workforce, which makes up roughly 60% of the total population. This study will contribute to the existing literature. It may help policymakers and universities to enhance the quality of agripreneurial education and training to cultivate the creativity of agripreneurs. Originality/value – The study offers to comprehend variations between agripreneurially inclined and non-inclined students. The manuscript includes four agripreneurial characteristics; risk-taking abilities and innovativeness are extensively used in the existing literature. On the other hand, opportunity-seeking and decision making abilities are scarcely ever used to describe the agripreneurial characteristics of university students

Keywords: Agripreneurship, Entrepreneurship, Agripreneurially inclined, agripreneurial characteristics, agricultural Students

Introduction

Entrepreneurship is widely viewed as a source of economic expansion and wealth generation (Wong et al., 2005). Due to its undeniable relevance in boosting the economy, offering job opportunities, and promoting product and

market innovation, researchers have developed a vast art of studying the phenomena of entrepreneurship around the globe(Jack & Anderson, 1999; Thomas & Mueller, 2000). Agripreneurship is a synonym for agricultural entrepreneurship(Bairwa et al., 2014; Mukembo & Edwards, 2015).The competence and willingness to identify potential opportunities in the agricultural sector, assemble the necessary resources and build to run the ensuing business successfully in this sector is another definition of agripreneurship. Therefore, agripreneurship development can be understood as the process by which individuals are taught the agripreneurial knowledge, skills, and competence necessary to successfully and effectively operate an agribusiness(Arafat et al., 2020; Otache, 2017; Pindado & Sánchez, 2017). Like entrepreneurs, agripreneurs are self-confident, innovative, proactive, self-reliant, focused and diligent.(Alsos et al., 2011; Bairwa et al., 2014); stated that communities and countries whose primary means of subsistence are agriculture can be assisted in developing by transfiguring the agriculture sector to adapt agricultural entrepreneurship and provide assistance for prospective agricultural entrepreneurs. Agripreneurship, or youth entrepreneurs in agriculture, may hold the key to resolving the issue of poverty and lack of jobs among youth, especially in developing nations. Additionally, fostering agricultural entrepreneurship, particularly adding the value of agricultural goods by young entrepreneurs, can ease the hardships endured by many youths, enhance their quality of life, and advance food security(Mutimba and Khaila, 2011; International Youth Foundation, 2014; Mukembo and Edwards, 2015). Agriculture is an indicator of economic growth worldwide, particularly in developing countries. It generated employment opportunities for the general public, raw materials for manufacturers, income for farmers, and government taxes(Bairwa et al., 2014; Otache, 2017). Despite the significant transformation, the agriculture industry remains one of the most important internationally(Fitz-Koch *et al.*, 2017). Therefore, researchers and policymakers consider that a greater understanding of the agribusiness start-up process will aid in promoting entrepreneurial activities in the agriculture sector and rural communities. Additionally, the economic climate has changed, making agriculture increasingly focused on the market. Given that it accounts for roughly 17% of the country's GDP and employs 60-65 per cent of the people, agriculture is a significant component of the Indian economy(Iffat, 2022). During 2020–21, India's agricultural and related industries had positive development at a pace of 3.6%. Besides, recent GEM reports (2017) demonstrate a fall in agriculture start-ups in factor and innovation-driven economies. According to the CMIF report, there has been a 7.8% rise in the unemployment rate in June 2022, with a loss of 13 million jobs, mostly in the agriculture sector. The Atma Nirbhar Bharat (ANB) Abhiyan, a timely initiative, promotes Agri partnership compander growth-promoting themes. To train and create opportunities for current and potential agripreneurs who can implement today's agricultural methods, which demand a tremendous level of innovation, to transform the agricultural sector completely, the government need to set up well-equipped development centres for agripreneurs and hold regular agripreneurs programs. (Arafat et al., 2020; Otache, 2017; Pindado & Sánchez, 2017) have suggested studying entrepreneurship in certain sectors to understand the phenomenon better. Proceeding further, we concentrate on early-stage entrepreneurial activity in the agriculture industry. Total early-stage entrepreneurial activity (TEA) in India increased from 5.3% in 2020 to 14.4% in 2021, while established business ownership(EBO) increased from 5.9% in 2020 to 8.5% in 2021.(GEM, 2022). In addition, India's EBO rate remained relatively stable. In the disciples of entrepreneurship and agriculture, agripreneurship is comparatively new. Thus, this study bridge the gap in the existing literature and specifically identifies the differences in agripreneurial characteristics between agripreneurially inclined students and those who are not. The personal attributes of an agri-entrepreneur have a significant impact on agribusiness. Because of its unique characteristics, the agriculture sector is intriguing to explore. The existing literature also reveals that limited studies had been done in India to test the agripreneurial characteristics and attempted to distinguish between those who are inclined or those who are not. This paper's main objective is to evaluate the agripreneurial characteristics of students and contrast them with those of students who lack agripreneurial characteristics. To investigate agripreneurship, we must first determine the factors that influence agripreneurial behaviour that could be related to individuals (i.e. farmers and agripreneurs), society, or the environment. while comparing agricultural entrepreneurship to other industries, it is essential to remember that the agricultural sector has unique environmental and economic characteristics. (Pindado & Sánchez, 2017). Previous research has utilized the characteristic model to examine fundamental questions such as who becomes an entrepreneur and what attributes victorious entrepreneurs

have(Bygrave & Hofer, 2017; Littunen, 2000). The manuscript exhibit agripreneurs unique traits and possesses the direction and values that incentivise them, thereby distinguishing them from others (Chye Koh, 1996).

2. Review of literature and hypotheses development

This research assessed the levels of agripreneurial characteristics based on four personality traits of agricultural university students: risk-taking propensity, innovativeness, opportunity-seeking ability, and decision; decision-making characteristics were selected based on Agripreneurship and the belief of numerous authors that they accurately depict the agripreneurial behaviour of an individual. These two characteristics (risk-taking and innovativeness) were selected based on how frequently they were cited in research. Two characteristics (decision-making abilities and opportunity-seeking abilities) were scarcely used. According to (Lans, Seuneke and Klerkx, 2013), Agripreneurship includes many characteristics of "generic" entrepreneurship; it also has unique components owing to the unique setting of the agriculture sector. However, It is important to emphasize that the overall conclusions of the studies conducted on these characteristics have not been reached. Agripreneurship and entrepreneurship are similar in exploring opportunities, motivation, risk-taking abilities, and the desire to succeed(Bannor et al., 2021; Lans et al., 2017; Pindado & Sánchez, 2017). The current literature supports and contradicts the interdependence of the traits listed below.(Lachman, 2017) proposed that individuals who exhibit similar characteristics as entrepreneurs have a greater inclination (or propensity) to engage in agripreneurial activities than those who do not.

2.1 Risk-taking propensity

The will to explore the unknown is a must to discover something unique. People with a strong drive for achievement prefer to undertake challenging and feasible tasks by employing their skills (McClelland, 1965). According to (Gürol & Atsan 2006), a person's tendency to take risks or avoid them is defined as risk taking propensity when faced with risky situations. Risk-taking is crucial entrepreneurial behaviour (Atherton, 2004) and is consistently related to entrepreneurs (Lumpkin & Dess, 1996). According to (Verheul, 2003), the risk-taking propensity is a willingness to accept risks when engaging in particular activities where the likelihood of success is less than 100%. The significant distinction between entrepreneurs from employed labour is the level of uncertainty and risk endured by the former (Entrialgo et al., 2010)(Thomas & Mueller, 2000). However, Entrepreneurs cannot always be categorised as risk-takers in every situation. In contrast, they are relatively risk-sensitive, manifesting in risk-taking or risk-avoidance behaviour, depending on particular reward circumstances(Holienka et al., 2015). But as a whole, entrepreneurs have an above-average propensity for risk-taking(Amit et al., 1993). (Anwar & Saleem, 2019; Ataei et al., 2021; Chye Koh, 1996; Gürol & Atsan, 2006; Salamzadeh et al., 2014; Zaman, 2013)found that risk taking tendency is higher in students who are agripreneurially inclined than those who are not. Hence, we propose our first hypothesis:

H1. Agripreneurially inclined students have higher risk taking propensity than agripreneurially, non-inclined.

2.2 Decision-making abilities

Decision making is called the cognitive process of selecting a belief for a course of action from a set of alternatives. Entrepreneurial decision making is a skill (Gustafsson, 2006). Knowledge of entrepreneur's decision-making process and why certain decisions thrive and others don't is imperative to the success of entrepreneurs. (De Winnaar & Scholtz, 2020).Through their long and varied experience, habitual entrepreneurs have become prowess as decision-makers, capable of matching their decision-making mode with contingency, unlike novice entrepreneurs. Expert entrepreneurs use expert judgement for opportunity creation; (Gustafsson, 2006).In addition, to have sound decision-making abilities, entrepreneurs must also have the quickness necessary to avoid missing chances. This necessitates immediate consideration of facts and then deciding. Also, failure being an inevitable part of entrepreneurship prompts both sense-making and negative emotions that affect motivation and decision-making (Shepherd et al., 2015). In their study, entrepreneurs tend to rely on heuristics (and have a bias) more than managers

of established companies. (Busenitz & Barney, 1997) .on the above mention literature, we can hypotheses our second variable as:

H2: Agripreneurially inclined students are more frequent in situational decision-making than non-agripreneurially inclined.

2.3 Opportunity-seeking abilities

Entrepreneurship is discovering an opportunity regardless of existing resources(Fuduric, 2008; H. Stevenson, H. Irving Grousbeck, 1989). (Uddin & Bose, 2012) defined as Entrepreneurship, discovering market opportunities before devoting actions and resources to capitalizing on such opportunities for long-term personal gain(Uddin & Bose, 2012). It is one of the central concepts that establish the limits and terms of interaction in the entrepreneurial field. (Eckhardt & Shane, 2003). The most important aspects of the entrepreneurial process were recognizing and exploiting opportunities(Shane and Venkataraman, 2000) and concentrating on how to identify, explore yourself, and take advantage of entrepreneurial opportunities. An individual who has the potential to become an entrepreneur may have extraordinary levels of creativity and diligence; yet, without the chance to use these characteristics to use, entrepreneurial activities cannot occur. (Short et al., 2010).As argumented by (Eckhardt & Shane, 2003). Opportunities exist before their discovery, and opportunities are discovered before exploitation. Entrepreneurs must pursue opportunities enthusiastically while understanding that environmental changes may leave these opportunities inconvenient or unpleasant despite the entrepreneur's endeavour (McMullen & Kier, 2016).

On the other hand, Agripreneurs recognized viable agricultural business opportunities, assembled resources, and established and manage the ensuing agricultural enterprise(Carr & Roulin, 2016). They have the "capacity and ability to take the initiative for exploiting opportunities (*FAO 2013*). If students strive to succeed as agripreneurs, they need "to be active, diligent, farsighted, communicative as well as persistent with strong management and organizational skills which can recognize suitable marketing opportunities" and manage resources efficiently (Tripathi & Agarwal, 2016)(Otache, 2017). Therefore, we can propose our third hypothesis as follows:

H3: Agripreneurially inclined students are more opportunistic than agripreneurially not inclined students.

2.4 Innovativeness

Innovation is the foremost tool of entrepreneurship (Drucker, 1985). Innovativeness is a planning and goal-oriented behaviour (Utsch & Rauch, 2000). It is the ability to come up with or identify ideas that have the potential to be transformed into captivating goods and services and also to enter into a new market. (Salamzadeh et al., 2014).In the study by (Thomas & Mueller, 2000), innovativeness has been regarded as a significant characteristic in determining the entrepreneurship profile. It is not necessarily ingrained at birth or early age. It can be learned later from experiences in the workplace, education, exposure to role models, parents and social environment, which shape attitudes and beliefs. Entrepreneurs must employ innovativeness to identify solutions, tackle everyday issues, and develop new products or services (Melati et al., 2018; Ward, 2004). Compared to attitude toward entrepreneurship, innovativeness can more accurately predict entrepreneurial intention amongst undergraduate students(Wathanakom et al., 2020).In the previous study (Anwar & Saleem, 2019; Ataei et al., 2021; Chye Koh, 1996; Gürol & Atsan, 2006; Salamzadeh et al., 2014; Zaman, 2013), it has been found that Entrepreneurially inclined students exhibit significantly greater innovativeness. In summary, we can propose our fourth hypothesis:

H4. Agripreneurially inclined students will show more innovativeness than agripreneurially not inclined students.

3. Research design and methodology

In the study, based on the assumption that some characteristics encourage people to become agripreneurs, researchers have focused on analyzing the agripreneurial characteristics of undergraduate and postgraduate students of agriculture backgrounds, thereby identifying them as prospective agripreneur. For the study, a data sample of 211 students, with the target population consisting of undergraduate students of agricultural sciences and postgraduate of agricultural business management from Aligarh Muslim University, a central university in Uttar Pradesh where students came from overall India. Before conducting a final survey, we also conducted a pilot study of 50 students.

240 questionnaires were sent to students through Google forms in the university, as mentioned above, for the final survey among male and female students. The convenience sampling technique was used because it has been used widely in many entrepreneurial types of research.(Krueger et al., 2000; Liñán & Chen, 2009). About 240 students were contacted, and 219 respondents completed the questionnaire. After screening and cleaning the data, 211 responses were left in the final sample (Table 1).

Sample Profile

	Sample size	Male	Female
Aligarh Muslim University	211	130	81
Total	211	130	81

Table -1

3.1 Research instrument

To develop the survey instrument, the authors adopted the scales on the constructs from relevant agriprenurship literature to measure the risk-taking propensity borrowed from (Chye Koh, 1996). The authors adopted the scale for decision-making abilities from(Sarwar & Afaf, 2016). For innnovatiness and opportunity-seeking ability, used the scale from (Rosairo & Potts, 2016), which is considered significant for distinguishing between agripreneurially inclined and non-inclined. A self-designed questionnaire was developed using a Likert scale from 1 (lowest) to 7 (highest).There were two sections to the questionnaire, The primary section contains demographic information (age, gender, agripreneurial inclination, and parental occupation) and the next section has the questions associated with the 18 observed items related to the constructs. To know the agripreneurial inclination of the students, two questions were asked" Have you ever seriously considered becoming an agripreneur? Was posed as a dichotomous variable, and What career path do you intend to pursue after completing your degree? Three statements on career options followed the question: "I wish to pursue agripreneurship", "I wish to work as a salaried employee in the public sector", "I wish to work as a salaried employee in the private sector. The data screening procedure includes data cleansing and preparation for future statistical analysis. No missing value was detected since the data were collected using an online platform and every question was marked as required, no respondent could complete the survey without answering every question. However, it was discovered that eight respondents finished the survey without being engaged; hence, these replies were removed from the dataset. Furthermore, deleting unengaged and data outliers some responses were also re-removed. As previously stated, the ultimate sample size for the study was 211 responses. According to(*Kline, R. B. (1998)*)suggestion, at least 10 responses are required for each questionnaire item; therefore, at least 180 responses must be collected, given that the questionnaire contains 18 items. And, this research has a sample size of 211 that meets the criteria mentioned above.

Variables and Questions

Constructs	Variables /Questions
Risk-taking propensity	1. I am willing to take higher risks for higher returns. 2. I care if the profit is small so long as it is assured and constant. 3. I never fear moving into a new undertaking I know nothing about. 4. I don't prefer to avoid any risky situation.
Decision-making abilities	1. I am satisfied with the way I make a decision. 2. My choices can mainly earn higher than average returns in the market. 3. I make all my decisions on my own. 4. I am confident about the accuracy of my decisions. 5. I consider all possible factors while making decisions
Opportunities seeking abilities	1. I always use market information for my critical decisions. 2. I am always looking for new market opportunities. 3. I always gather agribusiness information from various media sources. 4. I am always looking for development project opportunities.
Innovativeness	1. I often like to try new and innovative ideas. 2. I come up with creative solutions to problems. 3. I come up with new and practical ideas to improve performance. 4. I prefer to try my unique way when learning new things. 5. I like new ways to achieve goals and objectives.

Table-2

4-Results

4.1 EFA (Exploratory factor analysis) and KMO(Kaiser-Myer-Olkin) Bartlett's Test

EFA was employed to determine whether or not the variables' questions were loaded under their respective variables. The authors determined the factors using the principal component factor approach and the varimax rotation method. The EFA indicated loadings greater than 0.50 for all indicators related to each factor and loadings greater than 0.60 on average for each factor (Table 2). As indicated by(Chin et al., 1997), factor loading statistics between 0.62 to 0.80 satisfy the baseline criterion of 0.60. and Total variance explained is over 50%, and the KMO value greater than 0.50 with Bartlett test of sphericity (sig.<0.05). Furthermore, there is no cross-loading between items and structures (Hair et al., 2009)(Table 4).

Exploratory factor analysis (EFA) and Cronbach's alpha (α) reliability

Variables	Indicators	Loadings	alpAlpha
Risk-taking propensity(Four Items)	RTP_1	.813	.819
	RTP_2	.634	
	RTP_3	.823	
	RTP_4	.501	
Decision-making abilities(F4e Items)	DMA_1	.686	.875
	DMA_2	.640	
	DMA_3	.755	
	DMA_4	.772	
	DMA_5	.569	
Opportunities seeking abilities(Four Items)	OSA_1	.656	.847
	OSA_2	.788	
	OSA_3	.805	
	OSA_4	.733	
Innovativeness(Five Items)	Innova _1	.682	.926
	Innova _2	.677	
	Innova _3	.649	
	Innova _4	.793	
	Innova_5	.747	

Table -III

4.2 Reliability

Reliability of the subscales as well as internal consistency were evaluated using Cronbach's alpha(Cronbach, 1951). All subscale reliabilities were found to be more than 0.70, indicating that all subscales measure the same concept and have internal consistency (Table 3). According to (Hair et al.(1998), the range of Cronbach's alpha (α) values for all four constructs lies between 0.7 and 0.9 and satisfies the conditions.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.936
Bartlett's Test of Sphericity	Approx. Chi-Square	2565.188
	df	153
	Sig.	.000

Table -IV

4.3 Descriptive statistics

Of a total of 211 respondents, 154 (72.98%) exhibited "agripreneurial inclination," whereas the remaining 57 (27.01%) were "not inclined" toward Agripreneurship. Only 52 female students (64.19%) out of 81 female students showed inclination, whereas 102 male students (78.46%) affirmed they were agripreneurially inclined out of 130 male students. This concludes that male students are more inclined toward Agripreneurship, and In a holistic approach, most students tend to become agripreneur. Respondents' Parents' occupations were inquired about to determine whether or not parental discipline affects the student's predisposition. This has been found that there is no correlation between parental occupation and agripreneurial inclinations. This indicates that agripreneurial parents have a moderate to low effect on their children's agripreneurial inclinations in India.

4.4 Correlations

Correlation

Variables name	1	2	3	4
Risk-taking propensity	1			
Decision-making abilities	.650**	1		
Opportunities seeking abilities	.481**	.611**	1	
Innovativeness	.655**	.757**	.685**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Table -5

The correlation results are presented in Table 5. At the 0.01 level; all variables are moderate to highly linked. The highest correlation between decision making abilities and innovativeness was 0.757, while the lowest correlation between opportunities-seeking abilities and risk-taking tendency was 0.481 compared to other variables.

Descriptive statistics

	Agripreneurially inclined N=134		Non-Agripreneurially inclined N=77	
VARIABLE NAME	Mean	SD	Mean	SD
Risk-taking propensity	5.4216	.92723	3.8289	1.23668
Decision-making abilities	5.7974	.88585	4.7298	1.31384
Opportunity seeking abilities	5.6487	.99192	4.5351	1.31902
Innovativeness	5.9163	.86195	4.7895	1.43647

Table -6

4.5 Hypotheses Testing

In this research, Independent samples t-tests were applied to evaluate the hypotheses, which examine mean differences in variables according to students' agripreneurial inclination and non-inclination. (Table 6).It was concluded that agripreneurial inclination is more likely to take risks than those with no inclination based on results acceptance of H1 (Table 7) as students with agripreneurial inclination are more likely to innovate than those without ones, acceptance of H2 results (Table 7).Agripreneurially inclined students were more opportunistic than their not inclined counterparts, contributing to their acceptance of H3. (Table 7).It was also revealed that students with an agripreneurial inclination had taken self-decisions more often when deciding on situations and events, which led to the acceptance of H4. (Table 7).

Independent t-test

Variables Name	N	t value	p-value
Risk-taking propensity	211	8.841	.000
Decision-making abilities	211	5.677	.000
Opportunities seeking abilities	211	5.793	.000
Innovativeness	211	5.561	.000

Table -7

5. Discussion

In this study, risk-taking propensity, innovativeness, opportunity-seeking abilities and decision-making behaviour are four agripreneurial characteristics examined using the agripreneurial trait model. Based on the hypothesis that potential agripreneurs possess these specific traits, this study sought to identify the students who exhibited a higher percentage of these traits than other students. Given that each of these characteristics is considered to be a unique

attribute of agripreneurs. And each assesses a different part of the agripreneurship phenomenon; there ought to be certain interrelatedness among all four characteristics. Compared to a study by (Anwar & Saleem, 2019; Ataei et al., 2021; Chye Koh, 1996; Gürol & Atsan, 2006; Salamzadeh et al., 2014; Zaman, 2013), the result of the correlation analysis revealed a somewhat higher correlation. The t-test was applied to differentiate between students who exhibited these characteristics to varying degrees. Hypotheses were developed by asking students questions about characteristics, and students were separated into two groups: those who are agripreneurially oriented and those who are not. Those who have responded positively to becoming agripreneurs have also opted for agripreneurship as a career choice. According to hypothesis testing, students with an agripreneurial inclination are more likely to take risks, be more innovative, and be more opportunist in situations with high decision-making abilities.New enterprise establishment is more likely among college graduates than among non-graduates. Entrepreneurial activity tends to increase with education level because those with greater education levels are more assured in their abilities to launch their ventures or have received the proper training to grab opportunities(GEM, 2022). A sample of 211 students revealed that 154 (72.98%) were agripreneurially inclined.Given that all the 211 students included in this study's sample have a background in agricultural sciences and business studies, a higher than average proportion of students, 154 (72.98%), showed a preference for Agripreneurship as a profession. The findings suggest that students of sciences and business exhibit no differences in the overall level of agripreneurial inclination. In this study, students from other streams would also exhibit higher agripreneurial characteristics than those studying business and science (Anwar & Saleem, 2019; Chye Koh, 1996; Gürol & Atsan, 2006). The authors believed that measuring the degree of specific agripreneurial characteristics among university students in India would provide policymakers with helpful information. Because of significant interest in supporting new businesses, the Indian government has established several training and assistance programs for eager and young agripreneurs. Students' field of study and Agripreneurship education must be balanced to foster entrepreneurial characteristics (Salamzadeh et al., 2014). It helps to infuse agripreneurial characteristics into students and to stimulate them to choose agribusiness as an occupation. Young people and recent graduates should be encouraged to pursue careers in agriculture. Agripreneurs must teach the modern agripreneurial capabilities and skills mandatory for a successful agricultural enterprise. When students are allowed to receive training and education in agricultural entrepreneurship, their potential will be strengthened, resulting in agricultural productivity. Food security is ensured for the country as a whole. Educators will benefit from the findings of this study because they will have more information on current course content that helps students develop their Agripreneurial qualities. This information will be helpful when creating educational programs to help students grow these characteristics. Apart from these four variables used in a study, other entrepreneurial characteristics are taken from previous studies(Anwar & Saleem, 2019; Ataei et al., 2021; Chye Koh, 1996; Gürol & Atsan, 2006; Salamzadeh et al., 2014; Zaman, 2013) can be taken into consideration.

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