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Impact of Consumer's Education Level and Agricultural-Product Brand Leadership on Student's Decision Making

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	Abstract
<p>Article History</p> <p>Article Submission 17 November 2021</p> <p>Revised Submission 19 December 2021</p> <p>Article Accepted 22 February 2022</p>	<p>Consumer education level plays a significant role in the formation of brand image and its evaluation degree, which directly affects a brand's development. Decision-making also plays a significant role in the life of students to deal with uncertainty and complexity while choosing among competing brands. This novel study aims to evaluate the influence that a consumer's education level and perceived agricultural-product brand leadership has on students' decision-making. In addition, the moderating role of agricultural product brand loyalty and the mediating role of agriculture marketing were investigated within the framework of the suggested model. A questionnaire in the form of a self-administered survey was given out to a total of 367 Chinese students in the department of agriculture who had recently purchased agricultural products. In this particular investigation, a partial least squares structural equation modeling analysis was carried out with the assistance of the SmartPLS v3.0 software. The findings demonstrated that consumers' education level and perceived brand leadership play a favorable role in the student's decision-making. Additionally, agricultural marketing also has beneficial effects on the student's decision-making process. In addition, agricultural marketing partially mediates the relationship between perceived agricultural-product brand leadership and students' decision-making, whereas agricultural brand loyalty positively moderates this relationship. By specifically focusing on the decision-making process of students, this study makes an effort to apply the idea of brand leadership to the context of an educational setting. In addition, mediating and moderating variables shed light on particular consumption patterns and preferences of students.</p> <p>Keywords: Consumers Education Level; Agricultural-Product Brand Leadership; Student's Decision Making; Agriculture Marketing; Cognitive-Affective Processing System (CAPS)</p>

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Introduction

The decision-making of students have been extensively studied in the education literature of the present day. Wulandari et al. (2021) defined it as the process that begins when a student detects a need, looks for possibilities, analyzes alternatives, and ultimately chooses a particular product or service. Therefore, the purchasing behavior can be understood as a set of students' actions preceding the actual transaction. It consists of several factors, including what to purchase, when to purchase, from whom to purchase, which brand or model to purchase, which payment method will be utilized, and how much to spend. Students are inclined to base their purchase decisions on their impressions of a company's offerings and brand identity (Ali, 2021). Students' buying decisions are typically influenced by their prior experiences with a company's goods and the product's capacity to meet their specific requirements. In addition, education can encourage students' purchasing behavior by arranging seminars and discussion campaigns that elicit their responses (Gao et al., 2022). Multiple internet channels have evolved in recent years to educate the company's offerings and influence students' purchasing decisions on agricultural products. These channels have arisen due to the development of information and communication technologies (Omar & Atteya, 2020).

The information provided by customers helps make decisions that pertain to the optimization of the company, the identification of strengths and weaknesses, the definition of markets, and the identification of future customers. According to Las Casas (2006), "only through the comprehension of this process will it be feasible to produce products and services that meet exactly the wants and wishes of the consumers." Marketers that take an active role in consumer education programs have a real opportunity to apply the directives of the marketing idea as it relates to the aging demographic. According to the findings of Anspach and Kwon (1976), for customers to make efficient use of a service, they need to have know about the service, in addition to access to it and the intention to use it. The elderly can benefit from the education provided by marketers and directors of governmental agencies in these areas. A well-orchestrated consumer education initiative that is supported by concerned parties on both the micro and macro levels could potentially have a significant positive impact on the lives of elderly consumers (Tajurahim, Abu Bakar, Md Jusoh, Ahmad, & Muhammad Arif, 2020). At the macro level, the behaviors of government agencies and commercial consumer-oriented organizations are described, whereas, at the micro level, the focus is on the activities of individual companies.

Previous research has investigated a wide variety of aspects that can influence a student's decision-making process. Among these are things like a product's perceived value (Wang et al., 2021) its quality and usefulness (Sharma & Lijuan, 2015), its innovativeness (Ghazali et al., 2018), and its popularity (Hsiao et al., 2010). We investigated the students' views and attitudes toward various products based on the aforementioned considerations. On the other hand, there haven't been many attempts made to investigate the influence of perceived brand leadership on decision-making through the processes of teaching and identifying brands. These are the essential factors that have a substantial impact on the decision-making process (Mallapragada, Chandukala, & Liu, 2016).

According to the findings of the research, the extent to which students regard a product or service to be a market leader is likely to influence the decisions that they make (Wulandari et al., 2021). Students, for example, may like the dominant brand or service not only because it provides better quality or value than its competitors, but also because it matches their sense of who they are as individuals. Before making a purchase, students are now able to shop around and compare a number of different e-commerce platforms, thanks to the proliferation of e-commerce platforms in recent years. As a consequence of this, e-commerce websites that place a strong emphasis on a product's features may provide students with a "branded" shopping experience (Sharma & Lijuan, 2015). While this is going on, students are becoming more aware of the relevance of e-commerce websites and evaluating the numerous features and services that e-commerce websites have to offer (Mallapragada et al., 2016).

However, it is still unclear how much of an influence consumer education level and students' opinions of leadership have on the decisions they make on their own (Tajurahim et al., 2020). The major purpose of this research was to investigate how individuals' perceptions of a brand's

leadership influence their use of the Cognitive-Affective Processing System (CAPS) in their decision-making processes. In addition, it has been shown that educational opportunities and familiarity with brands can have an effect on decision-making (Chiu & Cho, 2019). The purpose of this research is to evaluate the moderating influence of brand loyalty as well as the mediating role that agriculture marketing plays in the relationships between perceived brand leadership and decision-making. It's possible that a greater knowledge of how decisions are made regarding agricultural products could be gained from the findings of this study.

Literature Review

Consumer's Education Level

The gathering of consumer information and the maintenance of consumer rights both contribute to the development of consumer education. The rise in consumer awareness that has taken place over the past decade has led to a heightened awareness of the need for consumer education (Simanjuntak & Mubarokah, 2021). On the contrary, when viewed through the lens of strategic marketing, consumer education may be interpreted as a form of competition that is exclusive to the company and the goods and services it provides (Zia & Alzahrani, 2022). Consumer education can be defined as the process of bringing an individual's knowledge up to date by involving them in the learning process. This involves teaching them the abilities, ideas, and comprehension that are necessary for day-to-day consumption and living, with the end goal of achieving maximum satisfaction and making the most efficient use of resources (Avotra, Chengang, Wei, Ming, & Marcelline, 2021). The education of consumers increases one's knowledge of various brands, products, and services, which in turn aids in the process of decision-making. Due to the increased familiarity of consumers with better-developed knowledge structures or "schema" about the product, the level of product knowledge has an effect on the pattern of information use. This is because the level of product knowledge influences the familiarity of consumers with the product (Simanjuntak & Mubarokah, 2021).

It is reasonable to assume that a customer with substantially higher education will have a greater understanding of brands, products, and services; as a result, he or she will also be able to produce novel and differentiated insights to support their intentions to make a purchase (Lyon, Kinney, & Colquhoun, 2002). The education of customers and their ability to read and comprehend product labels are factors that influence their decision-making process and their desire to make purchases. In both the pre-and post-purchase phases, as well as in the process of confirming consumers' purchasing decisions, the most important factor is knowledge (Merwe et al., 2014). The amount of consumer education is the most important component to consider when evaluating the service quality provided and the way it was provided (functional service quality). Education of the consumer is also favorably correlated with the consumer's level of competence regarding the products and services that are meant to be acquired. Where there has been a substantial amount of research on customer knowledge and expertise, it has been noticed that there is relatively little understanding of how the convergence of their knowledge with the quality of services influences the perceived value and pleasure (Zia & Alzahrani, 2022). There is a considerable association between service quality and consumer satisfaction, which exists despite growing worries regarding the education of consumers and the quality of services. As a result, businesses that provide services are becoming increasingly knowledgeable in order to produce greater benefits for their customers (McGregor, 2005). Consumers who receive education about their rights as consumers save more money overall and have a better understanding of the range of prices and services available to them (Minguzzi & Passaro, 2001). When there is a great deal of competition in a market, businesses typically develop consumer-oriented strategies and strive to remain compatible with the knowledge held by customers. Consumer orientation, competitor orientation, inter-functional orientation, performance orientation, long-term orientation, and employee orientation are the six components that make up the service-driven market orientation strategy. All of these components have a significantly strong and positive relationship with service quality. The relationship between a company's performance and its service-dominant orientation is totally mediated by the skills of the company's marketing and technological departments (Anspach & Kwon, 1976). Significant benefits, such as the identification of market information,

complaint and consumer redress procedures, and a better awareness of a consumer environment that is more technology-based, can be gained via consumer education programs (Tajurrahim et al., 2020). Consumer education programs in the services business are beneficial to customers because they help consumers achieve higher levels of service quality and satisfaction, as well as perceive a higher level of knowledge, reduce cultural distance, and lower interaction comfort (Lyon et al., 2002).

Student's Decision-Making Process

In previous studies, the term "buy choice" referred to a student's decision to purchase a newly released good or service from a particular company rather than one offered by one of its rivals (Chiu & Cho, 2019). Both internal and external educational influences can have an effect on the choices that students make while making purchases. A person's views and attitudes, knowledge, personality, perception, way of life, roles, and status are all examples of internal aspects. On the other side, cultural factors, membership in organizations, and socioeconomic standing are examples of external influences. Because students are now exposed to a variety of product or service offerings and different alternatives, the Teacher has realized that it is extremely difficult to develop and maintain strong connections with students in order to guarantee their ongoing development and presence at the Institute. This is because students are now exposed to a variety of product or service offerings and different alternatives (Wulandari et al., 2021). The vast majority of service providers created their own social media pages in order to interact with customers online and build powerful brand images (Kusumawati, 2019). When students become more familiar with a company and the products it sells, they will often look for additional information about the company online and evaluate the benefits offered by the company in comparison to those offered by its rivals before making a purchase choice (Hung & Yen, 2020). In light of this, social media websites have lately emerged as a method of connecting and interacting online with customers that is both cost-effective and convenient. By utilizing social media networks, businesses have the ability to raise the level of student participation, quickly reach their target market, and rapidly convey important marketing messages (Gao et al., 2022). As a direct result of their experiences, students will have the opportunity to sway the opinions of others and spread their ideas through online reviews, comments, and word-of-mouth communication (Hung & Yen, 2020).

H1: There is a significant relationship between consumer education level and decision-making.

Perceived Agricultural-Product Brand Leadership

The Cognitive and Behavioral Analysis System (CAPS) provides an overview of the cognitive-affective process and explains how cognitive and affective factors influence the decisions and actions of humans (Chiu & Cho, 2019). In addition, Mischel and Shoda (1995) emphasized the significance of the situational environment as a vital component in the process of explaining the consistency and inconsistency of human behavior. Therefore, the key to achieving behavioral consistency is to constantly expose individuals to similar situational elements while maintaining the same environmental context. According to Lei, Cui, and Chiu (2018), positive product evaluations are more likely to occur when positive emotions are elicited by the circumstances surrounding the purchase. On the other hand, evaluations of objects are more likely to be negative if they are situated in contexts that bring about unfavorable emotions. It provided evidence that both cognitive and affective processes are mediated by a dual framework, which is then ultimately translated into behavior (Chiu et al., 2018).

The mental analysis and emotional state of students who take classes online regarding their perceptions of brand leadership (Kumar & Jayasimha, 2019). In other words, students who take classes online evaluate a product while having an emotional investment in the product and its brand. Aaker (1996) was the first person to create the idea of brand leadership, which means that a brand is always trying to get better (Chiu & Cho, 2019). It has been brought to people's attention as a significant association of brand traits due to the fact that not only does it produce assets, but it is also essential to the success of a brand (Chang, Ko, & Leite, 2016). In addition to this, it illustrates the competitive advantages that a company has over other brands operating within the same industry. Brand leaders in a particular industry may have a significant influence on other brands, both visibly (for example, through the product's qualities) and invisibly (for example, through the company's vision and aims) (Chang & Ko, 2014). Companies routinely introduce new

handsets that are equipped with innovative features and capabilities to compete with one another for the title of "market leader." Smartphones produced by a single firm that has an advantage over those created by other companies in terms of features and functionality may cause the value of the brand equity of the latter to drop. Students may feel more loyal to a company that has demonstrated leadership in their eyes.

Accordingly, Chang and Ko (2014) provided an explanation of the notion of brand leadership as "students' views of a product's fairly unique ability to frequently execute excellence through plenty of combinations of pioneering and branding strategies within an industry segment. It's important to note that the idea of brand leadership comes from how students see the brand, which also shows the brand's value from the student's point of view. It is also important to note that the idea of brand leadership comes from what students think about the brand (Keller, 1992). In the context of this particular investigation, brand leadership is not evaluated using a range of brand performance measures such as price premium, price elasticity, market share, and profitability (Gao et al., 2022). On the other hand, the key focus of this particular research attempt was the student conduct that was influenced by their perception of the brand. However, the focus of this study was on how the student's perception of the brand influenced their behavior. Although a brand's performance may antecedently influence students' perception, the focus of this study was on students' conduct that was influenced by their perception of the brand (i.e., brand leadership).

H2: There is a significant relationship between perceived brand leadership and student decision-making.

Agriculture Marketing

Online marketing, internet marketing, and online marketing are frequent synonyms for digital marketing. Various terminologies are employed to address the topic at hand. Digital marketing involves the improvement of goods or services using digital technology, most typically the Internet, but also display ads, cell phones, or any sort of digital medium. This form of marketing is referred to as "digital marketing", which is an umbrella term (Kusumawati, 2019). According to Omar and Atteya (2020), Digital marketing helps develop student demand by using the potential of the interlinked and interactive web, or in other words, by leveraging the ability of the Internet, and it satisfies this need in novel and creative ways. Using the power of the Internet, digital marketing also helps to generate student demand, which is then met in novel ways. In other words, digital marketing contributes to the growth of the demand for students. It makes the exchange of monetary worth conceivable, but more crucially, it allows the exchange of one's attention for anything of value possible. In addition to this, it will be the marketer's responsibility to communicate the proper message at each level of the sales funnel. The basis for long-term success has not changed despite the fact that Forbes has identified important digital marketing trends that should be prepared for in 2017 and 2018, all of which are revolutionizing the profession. Human marketers still need to be adaptable. The rapid expansion of web platforms has encouraged behavioral shifts in relation to activities, habitats, and interactions, as stated by (Ghazali et al., 2018). According to Ceyhan (2019), human interactions have changed dramatically as a result of human participation in social networks. Alterations in the behaviors of students make it necessary for firms to change their approaches to digital marketing. In addition to these procedures, companies need to be aware of how the views, values, and attitudes of students can affect their digital marketing campaigns (Kusumawati, 2019). This demonstrates that an organization's interactive marketing needs to be supported by a combination of business intelligence and the insights of its students. According to Mogaji, Soetan, and Kieu (2021), The purpose of digital marketing applications or content can be to inform, educate, entertain, or provide brand-related insights to the student at any time and place. This can be done for the purpose of informing, educating, or entertaining the student. It is no longer limited to looking up information for amusement or recreation; rather, it has developed into an essential resource for determining significant career paths. The most recent tendencies in technological advancement have caused shifts in marketing channels as well as student behaviors, which in turn have had an impact on the purchasing choices made by students. Because of the changed relationship that students have with various brands, businesses are required to modify their marketing strategies in order to communicate effectively with students.

H3: There is a significant relationship between consumer education level and agriculture

marketing.

H4: There is a significant relationship between perceived brand leadership and agriculture marketing.

In prior studies, scientists examined the effects of a variety of social media marketing aspects on the purchasing decisions of customers who utilized a wide array of social media platforms (Deb, Nafi, & Valeri, 2022). In contrast, the current study focuses on four unique aspects of social media marketing in order to examine the direct and indirect effects that these aspects have on purchase decisions via trust in a company. These aspects include: Perceived relevancy, interaction, interesting information, and instructive content are only a few of the components and features. The proliferation of internet platforms has accelerated the behavioral changes that are related to activities, habitats, and interactions among humans, which has resulted in substantial changes to the ways in which humans engage with one another. The use of social networks has had a profound impact on human interactions, which have been dramatically transformed as a result. Because of shifts in the behaviors of students, businesses now need to rethink how they approach marketing in the digital sphere in order to remain competitive (Omar & Atteya, 2020). Companies, on the other hand, need to be conscious of the fact that marketing via digital and social media has an effect on the decisions that customers make when it comes to making purchases. As a direct result of the explosion of social media, marketing departments now have access to a plethora of branding possibilities for the product for which they are responsible. Some of these choices include advertising, material from recognizable brand-name businesses, participation in social networks, and expanding opportunities for students to interact with the brand (Kusumawati, 2019). Apps and other content that are created for digital marketing are almost always designed to allow for communication with the user at any time and any location, with the goal of either enlightening, engaging, or amusing the user, or receiving feedback on the product itself. This feedback could be in the form of ratings and reviews (Saura, 2021).

Students make judgments about what to buy on a daily basis, and there are a wide variety of considerations that go into each and every one of these choices. Numerous users from all over the world now complete some portion of their day-to-day activities by using at least one of the many programs that are available on the internet, social networks, smartphone apps, or other digital communication tools. These programs can be found online, on social networks, in other digital communication tools, or on smartphones themselves. The balance of power has shifted away from the producer and into the hands of the consumer as a result of an increase in student participation in the production of the goods and services that the students buy. Users of the Internet are increasing significantly as a direct result of greater access to mobile devices, which are now consuming the vast majority of their time (Saura, Ribeiro-Soriano, & Palacios-Marqués, 2021).

H5: Agriculture marketing has a significant impact on students' decision-making.

H6: Agriculture marketing mediates the relationship between consumer education level and students' decision-making.

H7: Agriculture marketing mediates the relationship between perceived brand leadership and students' decision-making.

Agricultural Brand Loyalty as Moderator

How much a brand affects a buyer's decision to buy depends on how well they know the brand, how much they like the brand, how loyal they are to the brand, and how much respect they have for the brand. The brand may show how valuable the product or the company is. When a brand is the best indicator of the value of a good product or service, the buyer becomes loyal to that brand. This is because the brand not only meets the buyer's needs, wants, and expectations, but also makes buying and using the product or service as easy as searching for that brand. In other words, a buyer will stick with a brand if it is the best way to tell how much a good product or service is worth (Kaur, Paruthi, Islam, & Hollebeek, 2020). An earlier body of research defined brand loyalty as the extent to which students were willing to rely on a particular brand to fulfill the explicit or implicit promises made by the brand (Ebrahim, 2019). As a consequence of this, it takes place as a result of the kindness shown by a company in looking out for the welfare of the students in order to foster productive ties with those pupils. According to Ceyhan (2019), brand loyalty exists when students have faith in the dependability and honesty of the service provider. Loyalty to a brand

and familiarity with that brand both have a role in how students react to the numerous brand interactions that take place in the virtual world. According to Akoglu and Özbek (2021), interactions on social media are essential in the process of constructing brand loyalty. According to the authors, these interactions can be developed through either the content generated by a company itself or through online comments and data collected from social media platforms. Corporations will find it easier to deliver their focused marketing messages and generate positive opinions of their brands in the minds of students as brand loyalty grows among students who make up the target market (Mostafa & Kasamani, 2021). According to Nyamekye et al. (2021), students' devotion to brands is a significant factor in shaping their behavior. Additionally, Hwang et al. (2021) showed that brand loyalty had a favorable influence on purchasing decisions.

H8: Brand Loyalty moderated the relationship between consumer education level and students' decision making

H9: Brand Loyalty moderated the relationship between perceived brand leadership and students' decision making

Figure 1 illustrate the conceptual framework of the research.

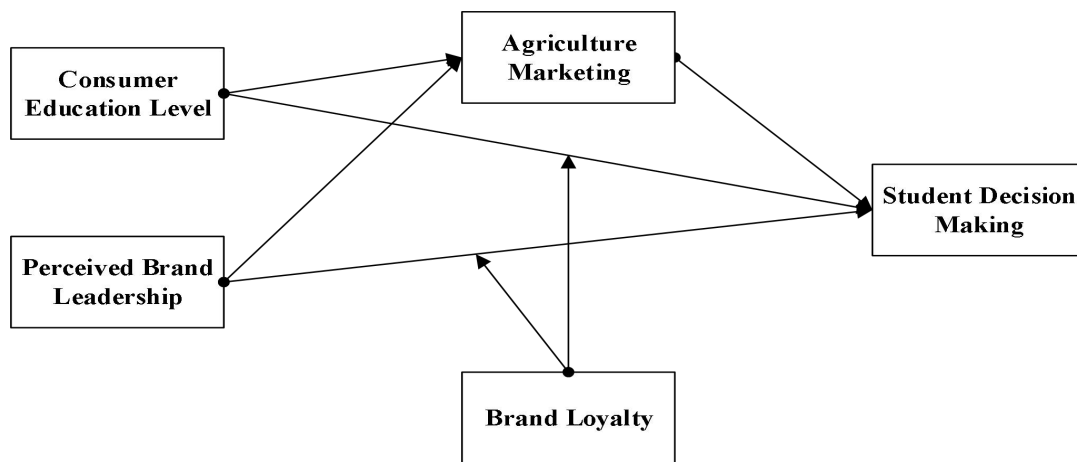


Figure 1. Conceptual Framework

Methodology

The main goal of this study was to look at the direct and indirect effects that students' perceptions of consumer education level and brand leadership have on how they make decisions, as well as the role that agriculture marketing plays in influencing these effects. Because of this, a survey is a method that is used to gather information. There were 358 people at the event who worked for the agriculture department. So that the expected number of responses can be gathered, survey research needs to use the right sample techniques when collecting data. Convenience sampling was used because it was the easiest method. This is because it is often thought to be the best way to collect data from respondents at a lower cost, especially when the sample frame is not available. One of the main reasons why this is the case is because of this. Researchers also find it easier to talk to respondents and give them questionnaires when they use convenience sampling. This sampling method has also been used in a number of other studies to get information from students doing a wide range of activities (Çalli, & International, 2021; Liu et al., 2021; Shahzad, Qu, Zafar, Rehman, & Islam, 2020). Additionally, the data for this work were gathered in a manner that was compliant with the ethical rules and principles, and prior to beginning the process of data collection, agreement from the individuals who were going to be participating in this research was obtained.

Measures

The construct measurement items were adopted from previous studies when constructing the survey for data-gathering purposes. Section A of the survey concentrated on respondents' personal information (e.g., gender, age, education, experience with agricultural products, etc.), whereas

Section B focused on the measuring items. First, perceived brand leadership was assessed using 11 items from Chiu and Cho (2019). Furthermore, agriculture marketing was assessed using 6 items adapted from Hanaysha (2022). In addition to this, the student's decision-making aspects in this study were measured using 5 items adapted from Hung and Yen (2020). Consumer education level was measured using 4 items adapted from Suhel al. (2015). Finally, brand loyalty is tested using three items adapted from Kaur et al. (2020). Across all measurement items, a Likert scale ranging from strongly disagree (1) to strongly agree (5) was applied.

Results

Data Analysis Technique

As was said earlier, just 367 individuals responded to the survey and sent it back. It was discovered that 358 of those responses were considered to be valid and eligible for data analysis. The information that was acquired was first coded and then analyzed to look for any missing values; these were then filled in after the next step in the process, which was the actual data analysis. In order to get an accurate estimation of the measurement and structural models, the Smart-PLS program was utilized in this experiment. For the purpose of establishing the dependability and validity of measurement scales, a measurement model was explicitly applied. For the purpose of quantifying reliability, Cronbach's alpha and composite reliability were utilized, whereas, for the purpose of determining instrument validity, convergent validity and discriminant validity were applied. In order to validate the hypothesis about the future, the definitive structural model was constructed after attaining acceptable values for all of its components.

Analysis of Results

In the research process, a total of 358 appropriate replies from participants were amassed and determined to be suitable for statistical examination. The demographic information indicates that there are (46%) of men and (54%) females of them altogether. In terms of the age profile, the statistics showed that those who were 19-21 years old made up (20%), those who were 22-24 years old made up (19%), those who were 25-27 years old made up (29%), and those who were older than 27 years old made up just (33%). In addition, according to the demographic facts presented in this poll, one-third of the respondents hold a bachelor's degree, (41%) hold a master's or master of philosophy degree, and (25%) hold a doctoral degree. Agriculture products are purchased by (13%) of respondents on a frequent basis, (46%) of respondents on a frequent basis, and (41%) of respondents constantly. Table 1 presents the demographic profile of the respondents for your perusal.

Table 1. Demographic Profile of the Respondents

Demographic item		Frequency	%age
Gender	Male	163	46%
	Female	195	54%
Age	19-21 years	70	20%
	22-24 years	67	19%
	25-27 years	104	29%
	More than 27 years	117	33%
Level of Education	Bachelors	123	34%
	MS/M.Phil.	145	41%
	Ph.D.	90	25%
Buy Agriculture Products	Often	48	13%
	Frequently	165	46%
	Always	145	41%

Measurement Model Assessment

To evaluate the reflective measurement model (Figure 2), it was necessary to investigate the indicator accuracy of the constructs, the internal consistency of the constructs (average variance extracted, AVE), the content validity reliability of the constructs (i.e., composite reliability, CR, and Cronbach's coefficients in Table 2), and the discriminant validity of the constructs. This was accomplished in a manner that was compliant with the recommendations made by (Hair et al., 2017). According to the data that are shown in (Table 2), the factor loadings of the measurements were extremely significant, ranging from (0.685) to (0.896), and the AVE values were all bigger than 0.50, providing evidence in support of convergent validity. In addition to this, the constructs showed great reliability since Cronbach's coefficients of all concepts were properly high, exceeding 0.70. This was the case because all of the constructs were appropriately similar. (Nunnally, 1978), and the values of CR were above the criterion (0.70), as stated by (Hair et al., 2017).

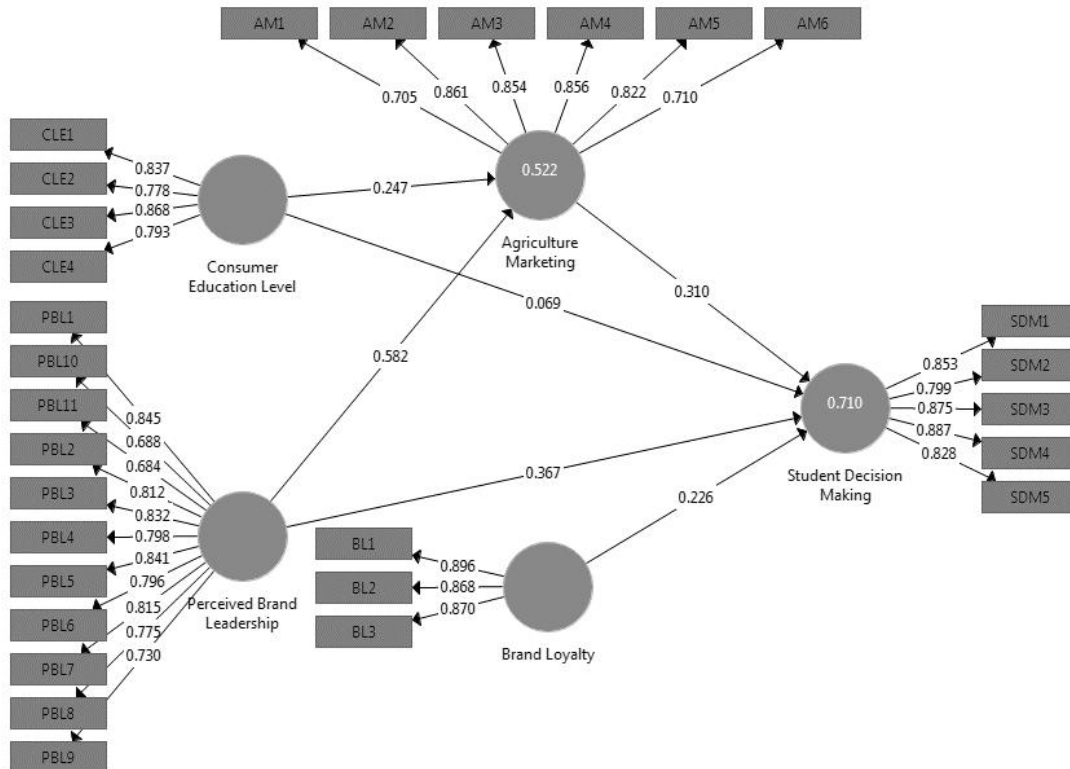


Figure 2. Measurement model

In this study, The Variable Inflation Factor was used to examine whether there were any problems with cointegration among the constructs contained in the proposed model (VIF). According to a previous study, this indicator is commonly employed in quantitative research to investigate collinearity along with correlations between construct scale items using the measurement model. This was proved by the fact that this research was conducted. According to (Hair et al. 2017), the multicollinearity problem does not exist if the sum of the VIF values for all of the elements does not exceed 5. The results presented in Table 2 demonstrate that all VIF values for the selected metrics fall within the permissible range (5), hence demonstrating that the data collected are appropriate for use in subsequent research.

Table 2. Construct Reliability and Validity

	Items	Outer Loading	VIF	Cronbach's Alpha	CR	AVE
Agriculture Marketing	AM1	0.709	1.779	0.889	0.916	0.647
	AM2	0.863	2.865			
	AM3	0.856	2.938			

	Items	Outer Loading	VIF	Cronbach's Alpha	CR	AVE
	AM4	0.856	2.714			
	AM5	0.820	2.384			
	AM6	0.705	1.584			
Brand Loyalty	BL1	0.896	2.415	0.852	0.910	0.771
	BL2	0.868	1.863			
	BL3	0.870	2.195			
Perceived Brand Leadership	PBL1	0.845	3.196	0.938	0.946	0.617
	PBL2	0.812	1.887			
	PBL3	0.832	1.865			
	PBL4	0.798	2.605			
	PBL5	0.841	3.141			
	PBL6	0.796	2.705			
	PBL7	0.815	3.455			
	PBL8	0.775	3.284			
	PBL9	0.730	3.333			
	PBL10	0.688	2.679			
	PBL11	0.685	2.286			
Student Decision Making	SDM1	0.853	2.432	0.903	0.928	0.721
	SDM2	0.798	2.180			
	SDM3	0.875	2.831			
	SDM4	0.888	3.161			
	SDM5	0.828	2.075			
Consumer Education Level	CEL1	0.837	2.991	0.837	0.891	0.672
	CEL2	0.778	1.523			
	CEL3	0.868	3.228			
	CEL4	0.793	1.650			

In order to carry out an examination of the discriminant validity of the test, the Fornell-Larcker criterion methodology was applied. By comparing the two values, this technique establishes whether each construct's highest correlation with any other construct is less than the square root of the AVE of all other constructs. Table 3 demonstrates that the measures can be compared and contrasted with one another.

Table 3. Discriminant Validity

	AM	BL	CEL	PBL	SD M
Agriculture Marketing	0.804				
Brand Loyalty	0.780	0.878			
Consumer Education Level	0.494	0.334	0.820		
Perceived Brand Leadership	0.686	0.638	0.424	0.785	
Student Decision Making	0.771	0.724	0.452	0.753	0.849

Structural Model Assessment

The tools of the PLS algorithm were then utilized in order to investigate the structural model associations (the path coefficients), as well as assess the hypothesized connections that exist between the constructs. In order to investigate the significance of relationships, a bootstrapping methodology was utilized (using 5,000 resample). In Figure 3, For each path, we tell you the path coefficient, the standard deviation, and the t-value.

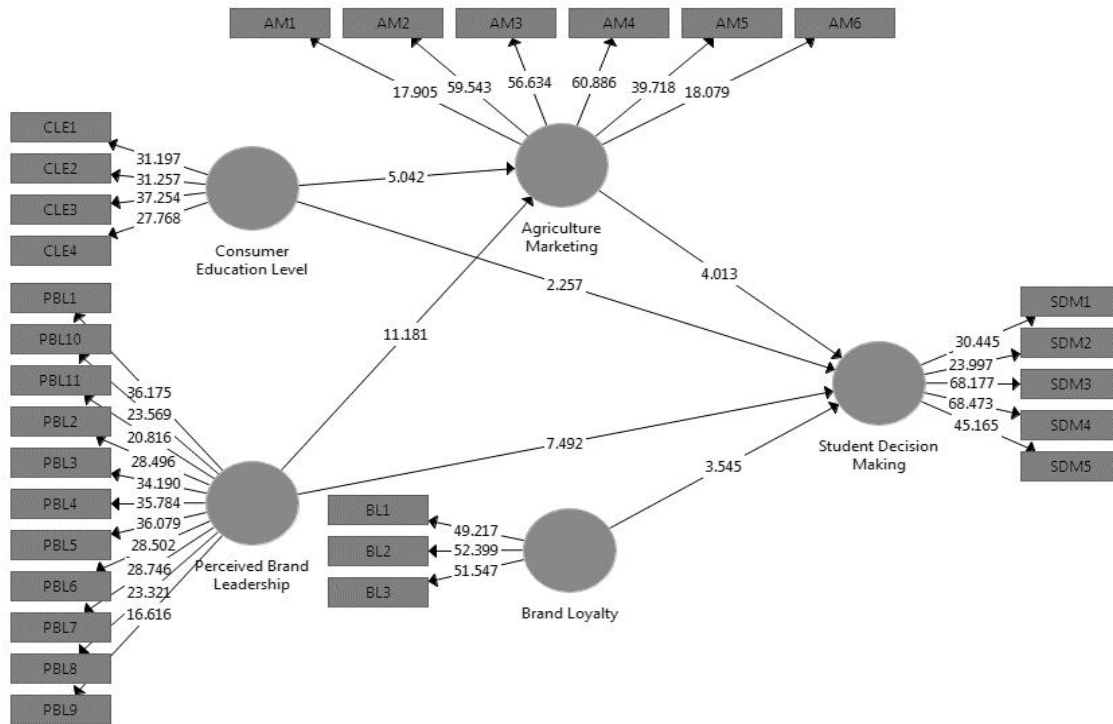


Figure 3. Structural Model

According to Table 4, the correlations between consumer education level and student decision-making were important ($\beta = 0.069$ $t=2.257$ $p= 0.012$), supporting H1. The correlations between perceived brand leadership and student decision-making were important ($\beta = 0.367$; $t=7.492$; $p= 0.0001$), supporting H2. Similarly, the links between consumer education level and agriculture marketing and perceived brand leadership and agriculture marketing were also significant ($\beta = 0.247$; $t=5.042$; $p=0.0001$) and ($\beta = 0.582$ $t=11.181$ $p= 0.0001$), supporting H3 and H4. Moreover, agriculture marketing has significant influences on decision-making ($\beta =0.310$; $t=4.013$; $p=0.0001$), supporting H5.

Table 4. Summary of the Structural Model

Constructs	Path coefficient	t-statistics	p-values
Consumer Education Level -> Student Decision Making	0.069	2.257	0.012
Perceived Brand Leadership -> Student Decision Making	0.367	7.492	0.0001
Consumer Education Level -> Agriculture Marketing	0.247	5.042	0.0001
Perceived Brand Leadership -> Agriculture Marketing	0.582	11.181	0.0001
Agriculture Marketing -> Student Decision Making	0.310	4.013	0.0001

Mediation Analysis

Table 5 illustrates how agriculture marketing mediates the relationship between consumer

education level, perceived brand leadership, and student decisions. Agriculture marketing was found to partially mediate the relationship between consumer education level, perceived brand leadership, and student decision-making ($\beta= 0.077$; $t = 3.302$; $p = 0.0001$) and ($\beta= 0.180$; $t = 3.524$; $p = 0.0001$). Consequently, H6 and H7 are approved.

Table 5. Mediation Analysis

	Original Sample	t-statistics	p-values	VAF	Type of Mediation
CEL -> AM -> SDM	0.077	3.302	0.0001	57%	Partial
PBL -> AM -> SDM	0.180	3.524	0.0001	48%	Partial

Moderation Analysis

Figures 4 and Figure 5 depict the study of how brand loyalty affects the link between consumer education level, perceived brand leadership and decision-making. Brand loyalty has a significant effect on the link between consumer education level, perceived brand leadership, and how students make decisions ($\beta= 0.070$; $t = 2.574$; $p = 0.000$) and ($\beta= 0.062$; $t = 2.157$; $p = 0.016$).

Table 6. Moderation Analysis

	Original Sample	t-statistics	p-values
BL x CEL -> Student Decision Making	0.070	2.574	0.0001
BL x PBL -> Student Decision Making	0.062	2.157	0.016

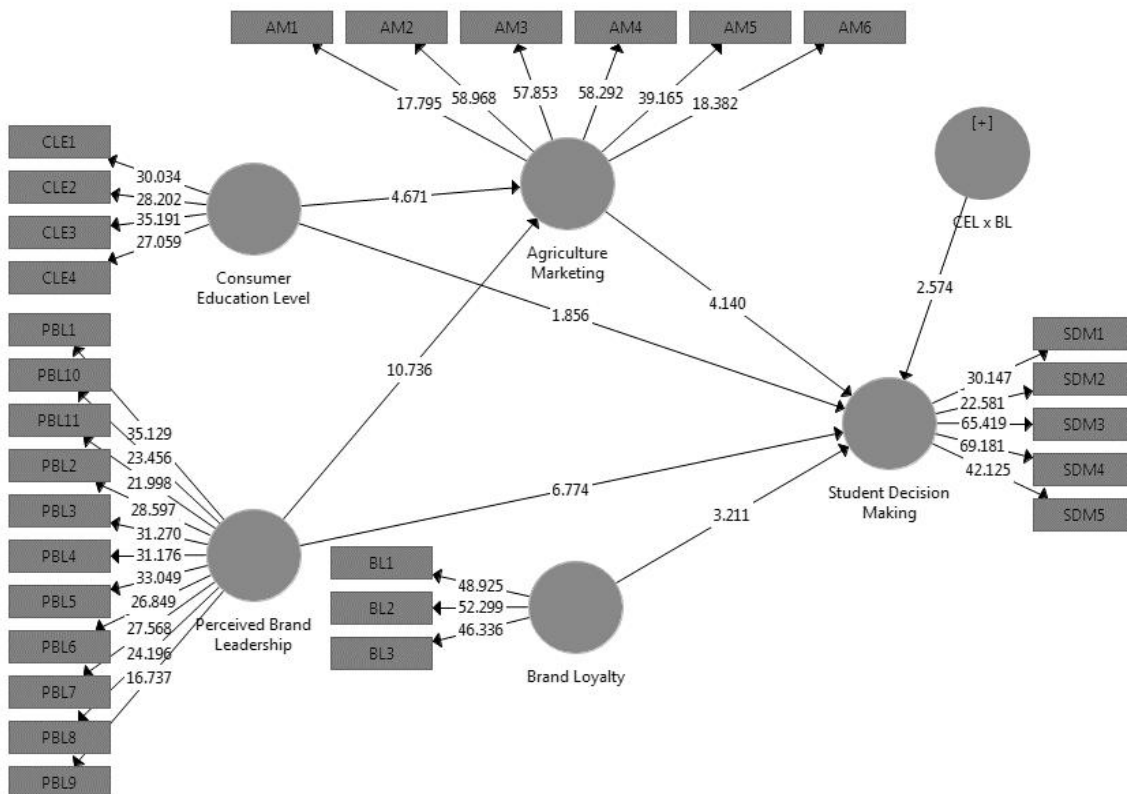


Figure 4. Consumer Education Level as a moderator between perceived brand leadership and student decision making

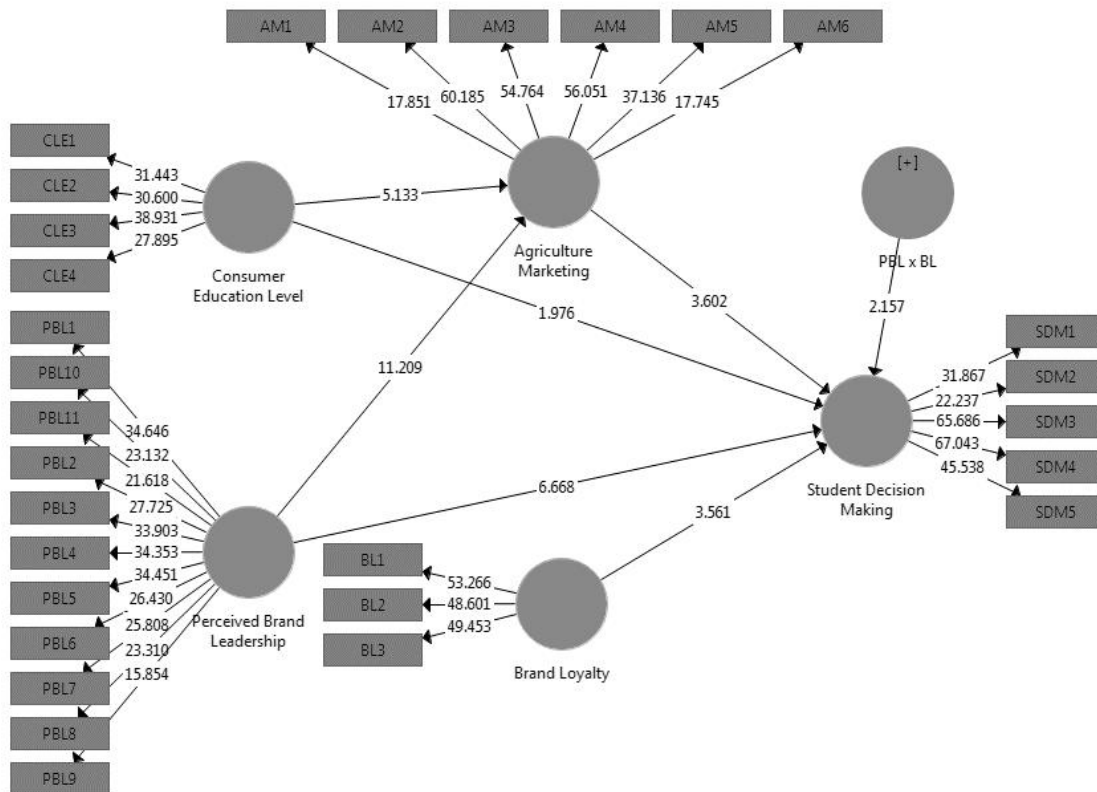


Figure 5. Brand Loyalty as a moderator between perceived brand leadership and student decision-making

Discussion

The first goal of the study was to find out what effect consumer education level has on how students make decisions. According to the results, there is a strong and positive link between the education level of consumer and their decision-making. So, the first thing that was looked at and tested was the direct link between consumer education level and decision-making. This finding is consistent with a large body of previous research, such as Zia and Alzahrani (2022) discovered that the education level of consumers has a positive effect on both creative activity and readiness to take risks. These are the traits that characterize student decision-making

The second goal of the study was to find out what effect perceived brand leadership has on how students make decisions. According to the results, there is a strong and positive link between how students see a brand's leadership and how they make decisions. So, the first thing that was looked at and tested was the direct link between how students saw a brand's leadership and how they made decisions. As a result of perceived brand leadership, student decision-making varied by 67.7 percent (shown in figure 2). This finding is consistent with a large body of previous research, such as Chang, Ko, and Leite (2016), Chiu and Cho (2019), and Kumar and Jayasimha (2019) discovered that perceived brand leadership has a positive effect on both creative activity and readiness to take risks. These are the traits that characterize student decision-making.

The third and fourth goals of the study were to find out how consumer education level and perceived brand leadership affect agricultural marketing in a direct way. It was discovered that both consumer education level and perceived brand leadership have a large and favorable impact on agricultural marketing. This finding is consistent with previous studies, which indicated that leadership had a major influence on market orientation. Chiu and Cho (2019) have demonstrated that a brand-oriented leader enables his followers to discriminate between brands and choose the best marketing techniques for selecting a product.

The fifth goal of the study was to find out how agriculture marketing affects how students decide what to do. Agriculture marketing and student decision-making were discovered to have a

strong and favorable association. This finding is consistent with previous research findings showing marketing has a major impact on decision-making (Kusumawati, 2019; Wulandari et al., 2021) have demonstrated that a company that uses social media to talk to and interact with a certain group of students is more likely to be at the top of the list and be one of the choices for customers.

The sixth and seventh goals of the study were to examine the function of agriculture marketing as a mediator between consumer education level, perceived brand leadership and how they decide what to buy. The study's findings indicate that agriculture marketing somewhat mediates the association between consumer education level, perceived brand leadership, and student decision-making. This outcome is consistent with earlier research indicating that brand leadership improves students' marketing tactics and that marketing strategies influence students' decision-making.

The eighth and ninth purposes of the study were to determine how brand loyalty moderates the relationship between consumer education level, perceived brand leadership, and student choice-making. This research demonstrated that brand loyalty functions as a moderator to strengthen the association between consumer education level, perceived brand leadership and student decision-making. This conclusion is similar to the findings of Kaur et al. (2020), Ebrahim (2019), and Kaur et al. (2020). In this study, as well as studies by Kaur et al. (2020) brand loyalty plays a role that has a favorable effect on decision-making. According to research, pupils with low brand loyalty are likely to make poor choices (Hung & Yen, 2020). Therefore, executives who are accountable for brand orientation play a crucial role in developing students' strategic marketing skills for effective decision-making.

Theoretical and Practical Implications

The results of this study provide recommendations that can help educators, students, educational institutions, and policymakers better understand how to improve the decision-making abilities of agriculture students. To begin, the results of our research indicate that perceived brand leadership is critical for the process of decision-making. This recommends that educational establishments cultivate leadership in the process of change. The leadership of a brand is absolutely necessary in order to cultivate interest in a brand among individuals and institutions. Second, the results of this study suggest that the perceived leadership of a brand and successful marketing of agricultural products are key factors in decision-making. Third, the data have provided support for the idea that brand loyalty is an important factor that might contribute to improvements in the decision-making processes of students. According to the cognitive-affective paradigm, the decision-making process of an individual can be influenced by both cognitive and affective elements. The ability of pupils to improve their decision-making should be a primary priority of educational institutions. In addition, marketers are strongly encouraged to place their primary emphasis on the creation of appealing advertisements that have the potential to stir the feelings of students towards the service provider. When developing content for social media platforms, marketing professionals ought to pay special attention to the characteristics and level of quality of the information they provide because this could lead to improved decision-making. Also, marketing professionals should know what kind of brand information students usually look for on social media platforms, and they should be able to figure out what kinds of content can help students connect with each other.

Limitations and Future Recommendations

It is vitally crucial that these findings be presented in a manner that is consistent with the constraints of the research, in addition to the meticulous results that were obtained from this study. To begin, the current investigation utilized a cross-approach because it was not possible to draw conclusions about the community based just on its surface characteristics. For this reason, potential researchers may suggest a longitudinal method in order to examine, over a more extended length of time, the theoretical body of buildings in order to validate the posited relations of the sample responsively. Second, the present investigation took into account participants' own reports of interventions. There is a possibility of social disability and/or a common approach as a result of these tests. This is due to the fact that such evaluations have the potential to influence the actions, feelings, and perspectives of the participants who were selected at random. Although the research has attempted to mitigate these issues by protecting participants' anonymity and

developing more accurate scale objects, these concerns are still likely to crop up at some point. As a result, potential scholars may continue to employ alternative methods in the evaluation of the relationship between perceived brand leadership and the decision-making processes of students. Third, because the scope of this survey was confined to students in agriculture departments in China, the findings of certain organizations and geographical contexts may have a limited ability to be dispersed. However, there have been attempts made to construct a model that is logically grounded, and as a result, the proposed relations would be consistent even in various types of scenarios. The meaning of "student decision-making" in the context of "agricultural products" can be further investigated by studies to come in the future. In conclusion, the research that was shown could have been used to test both the mediating effect of agricultural marketing and the moderating effect of brand loyalty on the relationship between students' perceptions of a brand's leadership and their decisions in China. These results can be contrasted with those of individualistic national cultures in prospective research to determine whether or not similar conclusions have been drawn. In addition to this, the complexity of the principles that are described makes methods of qualitative analysis more difficult.

Conclusion

The current study suggests that this link may be dependent on contextual circumstances, despite the fact that previous research has found a positive correlation between perceived brand leadership and decision-making. As a consequence of this, agriculture marketing advertisement mediators and brand loyalty as a barrier between perceived brand leadership and decision-making have been introduced and assessed in this study. Therefore, the primary contribution of this research is to have found that the interaction between perceived brand leadership and decision-making is mediated by agriculture marketing and moderated by brand loyalty. This finding is the primary contribution because it is the primary finding of this research. In addition, the findings of this study assisted in refocusing attention on the students of agriculture in China, a group that, despite the fact that the agricultural industry is vital to the growth of the economy, had been largely ignored in earlier research. In particular, the findings imply that superior decision-making among students is likely to be accomplished when perceived brand leadership, agriculture marketing, and brand loyalty interact together. This was found to be the case in the study.

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