Determinants of Generation Z's Agribusiness Entrepreneurship Intention: Insights from a Philippine Agricultural University

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Abstract

Using an integrated intentions model, this study aimed to find out the factors affecting the agribusiness entrepreneurship intention of Generation Z, those who were born between the years 1996 to 2012. Attitude, subjective norm, perceived behavioral control, perceived government support, and social valuation were identified as explanatory variables while perceived desirability and perceived feasibility were used as mediating variables. A Likert-type survey was administered to 141 first and last year students taking up either an agriculture-related or a non-agriculture course. Using partial least squares - structural equation modeling (PLS-SEM), relationships among the variables were determined. Findings showed that attitude towards agribusiness entrepreneurship exerted the greatest influence on perceived desirability and perceived feasibility, which, in turn, had a significant positive and direct influence agribusiness entrepreneurship intention. Perceived behavioral control and perceived government support had a substantial effect on perceived feasibility.

The results highlight the importance of positively influencing the attitude of the Filipino youth towards agribusiness entrepreneurship so that more will see it as desirable and feasible. The sole impact of perceived behavioral control and perceived government support on perceived feasibility indicate that even if young people may sense their capability to put up an agribusiness enterprise and could count on government help, they may not necessarily want to do so. Thus, it is important that interventions towards promoting agribusiness entrepreneurship should target first those who have the desire to go into agribusiness, as the possibility of actually putting up their own agribusiness is likely to be higher.

Key Words: agribusiness entrepreneurship intention; Generation Z; attitude; subjective norm; perceived behavioral control; perceived desirability; perceived feasibility

Introduction

According to FAO (2017), poverty, hunger and malnutrition are more effectively addressed though increased investment in the agricultural sector (rather than non-agricultural sector) where most of the world's poor live. Unfortunately, in the past decades, investment in the sector has remained the same (FAO, 2012). But with the new Agenda for Sustainable Development Goals, the top two of which are to end poverty and zero hunger, many countries are rethinking their

development strategies (FAO 2017). Due to the expected increase in population and the concern on food security, there has been a focus on agriculture in recent years (IFAD 2014).

More than 50% of the young people live in the rural areas (OECD, 2018). According to Brooks, Zorya, Gautam and Goyal (2013), although farming is commonly done by the older ones, young people are ideal for the agricultural profession because they have the energy, vitality and innovation needed for the sector's growth. However, for this to happen, it is important to address the concern about the youth's perceived lack of interest in agriculture (IFAD 2014). In a study made by Tadele and Gella (2012) among rural youth in Ethiopia, majority of the respondents, who have completed school are not inclined to work in agriculture. In the Philippines, Canlas and Pardalis (2009) noted a drop in Filipino youth participation in the agricultural workforce. Fuller (2012) reported that Thai rural youth are more attracted by the sophisticated lifestyle that can be found in the cities. This rural-urban migration among the youth has resulted in the aging of the rural population in many countries. Council (2014) reported that the average age of farmers in the United States and most of Africa is 60 years old.

Against the backdrop of aging farmers and youth rural-urban migration, attention has shifted to agricultural or agribusiness entrepreneurship as a strategy towards modernizing the agricultural sector (Yusoff, 2017). According to Bairwa, Lakra, Kushwaha, Meena and Kumar (2014), applying the principles of entrepreneurship to the agricultural sector can provide a host of benefits ranging from employment and income generation to creation of innovative products, to poverty reduction. The study of Mujuru (2014) found out that application of entrepreneurial skills helped farmers increase their farm productivity. According to Barau and Afrad (2017), agricultural entrepreneurship can open up opportunities especially for young people owing to the various agriculture-related business ventures that could be put up.

There is a need to involve the young people, particularly the Generation Z, those born from 1996 to 2012. They are still of school age, some will be joining the workforce in a couple of years and can still be influenced in their career choice. Promoting agribusiness entrepreneurship among the youth might encourage them to get involved in the agricultural sector and contribute to rural development. But interventions along this area would require some knowledge of the factors that influence the youth to go into agribusiness entrepreneurship. It is also important to find out the perception of young people regarding the desirability and feasibility of agribusiness entrepreneurship. The study of Njeru (2017) revealed that there is a significant relationship between the youth's perception and participation in agriculture. Since these young people are still in school, it will not be possible to measure their entrepreneurial behavior i.e. actually putting up their agribusiness. According to Bagozzi, Baumgartner and Yi (1989) intention is the best predictor of any planned behavior. Thus, it can be used as a proxy for entrepreneurial behavior.

In the Philippines, there is a dearth of studies that examine these factors especially in the context of agricultural or agribusiness entrepreneurship. As such, this study aims to find out the factors that influence young people's intention to go into agri-related entrepreneurship and to determine whether perceptions of desirability and feasibility affect the relationship between the identified factors and intention to go into agribusiness entrepreneurship.

Literature review

Models of entrepreneurial intention

There are two more commonly used intention models. The first is the entrepreneurial event (EE) model of Shapero and Sokol (1982), which made use of perceived desirability and perceived feasibility as predictors of entrepreneurial intention. The second is Ajzen's (1991) theory of planned behavior (TPB) which used attitude, subjective norm and perceived behavioral control as antecedents of intention. Krueger, Reilly and Carsrud (2000) compared the two models and found out that the EE model could explain better the variations in entrepreneurial intention of final year business students. More recently, Davids (2017) made a similar comparison among commerce and engineering students in South Africa. The TPB model performed better than the EE model. Schlaegel and Köenig (2014) did a meta-analytic examination of 98 studies and came to the conclusion that there is yet little conclusive evidence for the theoretical coherence of the two models. Their findings suggest that an integrated model could provide a better explanatory power and better understanding of how entrepreneurial intentions develop.

The first attempt to integrate the two models was made by Iakovleva and Kolvereid (2009) with positive results. They hypothesized that perceived desirability and perceived feasibility mediates the effect of attitude, subjective norm and perceived behavioral control on intention. The regression results showed that based on the adjusted R^2 only 0.184 was explained by the TPB model while the integrated model, using perceived desirability and perceived feasibility a mediating variables, had higher explanatory power with an $R^2 = 0.653$. In 2017, Yussof integrated and expanded the two models and found out that the combined model, together with the addition of some other factors, could explain around 50% of the variation in agricultural entrepreneurship intention.

Empirical studies related to agricultural or agribusiness entrepreneurship intention

While numerous studies have been done on the factors affecting entrepreneurial intention in general, only very few have been made on agri-related entrepreneurship intention. One of the earliest studies on the factors affecting the youths' inclination towards agricultural entrepreneurship was conducted by Abdullah and Samah (2013). They used Ajzen's TPB model but included social valuation as an additional explanatory variable. They take off from the study of Liñán, Urbano and Guerrero (2011), who found out that valuation of entrepreneurship explained the differences in the entrepreneurial intention in various Spanish regions. "Social valuation of entrepreneurship refers to shared values among individuals in a particular society regarding entrepreneurship, which determine to a large extent how an individual perceives entrepreneurship as a career" (Malebana, Zindiye and Macutwana, 2017 p.187). The study of Abdullah and Samah (2013) found out that the factor that most affected Malaysian students' inclination towards agricultural entrepreneurship is social valuation, followed by subjective norm, then attitude, and finally perceived behavioral control. Malebana et al. (2017) did a similar study and found out that social valuation and entrepreneurial intention had a positive and significant relationship. Another study that tried to find out the determinants of entrepreneurship intention using the TPB model was conducted by Ridha and Wahyu (2016). Using structural equation modeling, they found out that attitude and perceived behavioral control were positively and significantly related to

entrepreneurial intention among the youth in the agricultural sector of Indonesia. However, they did not find a significant relationship between subjective norm and entrepreneurial intention. Aman, Rahim, Kushairi and Fansuri (2018) found out that job security and perceived behavioral control had a positive and significant influence on agribusiness entrepreneurial intention among the Generation Y.

Yusoff (2017) examined the antecedents of agricultural entrepreneurship intention using an integrated TPB and EE models with some additional independent variables such as perceived importance of social networking, perceived government support, perceived university support, agricultural entrepreneurship curriculum and content, experiential learning related to agricultural entrepreneurship and entrepreneurial orientation. These antecedents of agricultural entrepreneurship intention are mediated by what she termed entrepreneurial drive (following the definition of Florin, Karri, & Rossiter, 2007), which is actually the combination of perceived desirability and perceived feasibility in the EE model. Using structural equation modeling, the results for the relationships of the various antecedents and agricultural entrepreneurship intention through the mediation of entrepreneurial drive (i.e. combined perceive desirability and perceived feasibility) showed that only the variables belonging to entrepreneurial orientation and perceived university support were not significantly related to entrepreneurial drive. Entrepreneurial drive and agricultural entrepreneurship intention were found to be positively and significantly related. Among the variables that were added, perceived availability of government support yielded the highest significant and positive path coefficient (0.71) which means it can influence perceived desirability and perceived feasibility of agricultural entrepreneurship.

Generation Z and entrepreneurship

While agribusiness entrepreneurship has been identified as strategy to modernize the agricultural sector and increase farmers income (Yusoff, 2017; Mujuru, 2014), McElwee (2006), observed that the agricultural sector faced a great challenge of developing entrepreneurial skills among the traditional farmers. Majority of the farmers belong to the generation of Baby Boomers (Berkup, 2014), who were born between 1946 and 1964 and who, at the time of this study, would be between 55 to 73 years old. According to Morris, Henley and Dowell (2017), older farmers are more resistant to change and are less likely to adopt new technology.

In contrast, young people, particularly Generation Z, those who were born between 1996-2012, are said to be more entrepreneurial and technology savvy (Schwieger & Ladwig, 2018). In a global survey conducted by Millenial Branding in cooperation with Randstand US, 17% of Gen Zs indicated that they want to start a business and hire others as compared to only 11% of the Gen Ys (Schawbel, 2014). At the time of the study, this generation are still of school age, the oldest of whom are still in their last year of college and could still be influenced in their career choice through both formal and informal education. It is for this reason that they were identified to be the respondents for this agribusiness entrepreneurship study.

Gen Ys, on the other hand, are those born from 1980-1994 ((Berkup, 2014). While Gen Y's are still relatively young, they are all of working age already and may have chosen a profession already. According to Sox, Kline and Crews (2014), as cited in Yusoff (2017), Gen Ys consider entrepreneurship as an attractive life path.

Conceptual framework

The TPB and EE models separately are the most widely used and accepted intentions models based on the review of literature. However, more recent studies by Iakovleva and Kolvereid (2009) and Yusoff (2017) who integrated the two models provided more robust results. Thus, this study used the combined TPB and EE models with agribusiness entrepreneurship intention as the dependent variable and attitude towards agribusiness entrepreneurship, subjective norm, perceived behavioral control, perceived government support as the independent variables. The first three independent variables were adopted from the TPB model while the last two were added in order to explore their influence on agribusiness entrepreneurship intention since they were found to be most significant in the studies of Abdullah and Samah (2013) and Yusoff (2017). The mediating variables, taken from the EE model, are perceived desirability and perceived feasibility. The conceptual framework is shown in Figure 1.

Figure 1
Conceptual framework
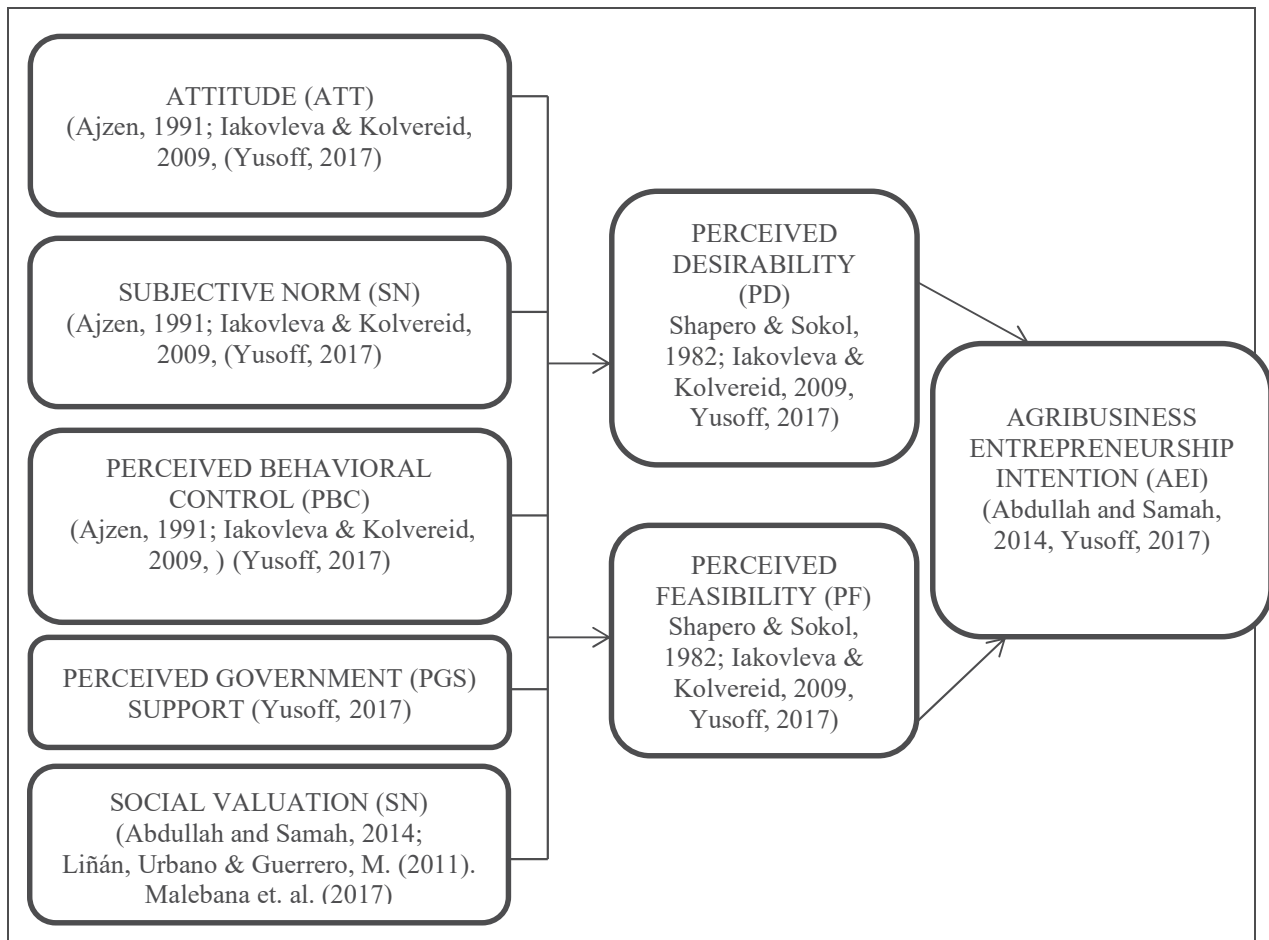
Hypotheses of the study

Attitude towards agribusiness entrepreneurship. As defined by Ajzen (1991), attitude "refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (p.188). According to Bagozzi (1992), positive attitudes could lead to desires which in turn can lead to positive intentions towards the specific behavior. This is supported empirically by the works of Iaklova and Kolvereid (2009) and Yusoff (2017). Using the combined model of TPB and EEM, it is hypothesized that:

H1a: Attitude towards agribusiness entrepreneurship positively influences perceived desirability.
H1b: Attitude towards agribusiness entrepreneurship positively influences perceived feasibility.

Subjective norm. Subjective norm is defined as "the perceived social pressure to perform or not to perform the behavior" (Ajzen, 1991 p.188). This social pressure may come from family members, friends or significant others. Depending on the expectations of these people, an individual may perceive agricultural entrepreneurship as desirable or not. Studies made by Iaklova and Kolvereid (2009), Schlaegel and Köenig (2014) and Yusoff (2017) empirically support this theory. Therefore it is hypothesized that:

H2a: Subjective norm positively influences perceived desirability
H2b: Subjective norm positively influences perceived feasibility

Perceived behavioral control. Ajzen (1991) referred to perceived behavioral control as "the perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles" (p.188). If a person believes that he has the ability and the resources to go into agricultural entrepreneurship, he is likely to perceive it as feasible. Iaklova and Kolvereid (2009), Schlaegel and Köenig (2014) and Yusoff (2017) have shown empirical support for this relationship. It is hypothesized that:

H3a: Perceived behavioral control positively influences perceived desirability
H3b: Perceived behavioral control positively influences perceived feasibility

Perceived availability of government support. Yusoff (2017) added this variable to her expanded TPB framework and it got the highest positive and significant path coefficient. This may be indicative of the impact of perceived availability of government support on perceptions of desirability and feasibility. She defined perceived availability of government support as an individual's "belief concerning the availability of governments' support mechanisms in helping them to perform the agropreneurial activities successfully" (p.36). This study hypothesizes that:

H4a: Perceived availability of government support positively influences perceived desirability
H4b: Perceived availability of government support positively influences perceived feasibility

Social valuation of agricultural entrepreneurship. Liñán et. al. (2011) found out that social valuation of entrepreneurship was higher in some regions of Spain which explained the greater availability of potential entrepreneurs in these areas. Taking off from this study, Abdullah and Samah (2013) added this factor to the TPB model and found out that among the agricultural

students this variable got the highest mean score in terms of their inclination towards agricultural entrepreneurship. Malebana et. al. (2017) defined social valuation as the "shared values among individuals in a particular society regarding entrepreneurship, which determine to a large extent how an individual perceives entrepreneurship as a career" (p.187). In their study, they found out that social valuation of entrepreneur had a direct positive and significant relationship with entrepreneurial intention. It is therefore hypothesized that:

H5a: Social valuation of agricultural entrepreneurship positively influences perceived desirability
H5b: Social valuation of agricultural entrepreneurship positively influences perceived feasibility.

Perceived desirability. Shapero and Sokol (1982) referred to perceived desirability as the personal attractiveness of putting up one's own business. Depending on a person's perception of desirability of entrepreneurship, he may form a positive entrepreneurial intention. Krueger et. al. (2000) tested this theory and found that there is a significant relationship between perceived desirability and intention. The theory is also empirically supported by the studies of Schlaegel and Köenig (2014) and Davids (2017). It is therefore hypothesized that:

H6: Perceived desirability is positively related to agricultural entrepreneurship intention

Perceived feasibility. Perceived feasibility is referred to as an individual's belief that he is capable of starting a business (Shapero & Sokol, 1982). According to them, the greater the perceived feasibility the greater the entrepreneurial intention. The studies of Krueger et. al (2000), Schlaegel and Köenig (2014) and Davids (2017) provide evidence for this theory. It is therefore hypothesized that:

H7: Perceived feasibility is positively related to agricultural entrepreneurship intention

Agribusiness entrepreneurship intention. Entrepreneurship intention is defined as the "percentage of population (individuals involved in any stage of entrepreneurial activity excluded) who intend to start a business within three years" (Velasco, et al. 2014, p. 9). Yusoff (2017) defined agricultural entrepreneurship intention, the dependent variable in this study, as a person's "readiness to be self-employed by creating a new business venture to seek wealth and thus generate business opportunities for others within the agriculture industry" (p.33). Davis and Goldberg (1957) as cited in Zylbersztajn (2017) referred to agribusiness as "The sum of all operations involved in manufacture and distribution of farm supplies, production operations on the farm, and the storage, processing, and distribution of farm commodities" (p.115) while Shane and Venkataraman (2000) claimed that "entrepreneurship is concerned with the discovery and exploitation of profitable opportunities" (p. 217). From these ideas, this study proposes to define agribusiness entrepreneurship intention as a person's intention to create his own business venture within the next few years by discovering and exploiting profitable opportunities in the agricultural sector.

Methodology

This quantitative study made use of a descriptive and explanatory research design. Participants were asked to fill-out a self-administered questionnaire that contained the indicators for the eight latent constructs. To get a profile of the respondents, information on the year level, course (agriculture related or non-agriculture) and sex were also asked. Using the PLS algorithm and bootstrapping techniques of the SmartPLS 3.0 program, the relationships between the independent, dependent and intervening variables were determined.

Sampling design and data collection

The main objective of the study was to determine the factors affecting agribusiness entrepreneurship intention of Generation Z in a leading Philippine agricultural university. This university takes in about 2,500 students per academic year. But because of the Philippine transition in 2016 to the K-12 program, which extended high school for another two years, those who were enrolled in the university during the survey period were mostly the new batch of freshmen (who just graduated from senior high school) and those who are in their last year (those who were sophomores in 2016). Together, they are roughly around 5,000 students. Based on an online sample size calculator (www.raosoft.com) with a 95% confidence level and 5% margin of error, the ideal sample size should be 357. However in recent years, with the advent of structural equation modeling, smaller samples could be used. *Cohen (1992),* as cited in Hair, Hult, Ringle, and Sarstedt (2014), provided a table of sample sizes for PLS-SEM with an 80% statistical power and a choice of significance level, R-square and the level of complexity in the path model i.e. the maximum number of arrows pointing at a construct. Following the table, the minimum sample size would be 80 respondents for an R-square of 0.25 for a 5% level of significance.

Due to the data privacy act, I could not get the list of students for my sampling frame. Thus, to do a random sampling was not feasible. Convenience sampling had to be resorted to. To get samples among the freshmen, I had to negotiate with a professor handling a large introductory entrepreneurship class of around 115 freshmen students if I could administer the questionnaire to them ten minutes before the end of the class. For the senior students, I approached three professors handling thesis subjects if I could send them the online survey, which I created using Google forms, so they can in turn forward it to their students. The online method was used for seniors since they are already in their data gathering or writing stage and do not regularly meet with the thesis coordinators. In total, the three professors handling thesis students had 64 students. Fortunately, all four professors accommodated my request.

Construction and validation of research instrument

The items in the survey questionnaire was adapted from previous studies with some modification in order to adjust it to the Filipino way of thinking. Items for agribusiness entrepreneurship, perceived desirability, perceived feasibility, attitude, subjective norm, perceived behavioral control, perceived government support were adapted from Yussof (2017). All constructs were tested for convergent validity using the program SmartPLS3. Loading and average variance extracted (AVE) were all above the acceptable standard of 0.50 (Hair et. al. (2014). The

composite reliability scores (a similar measure to Cronbach's alpha) were all above the acceptable standard of .070 (Hair et. al., 2014).

The measurement scales for the social valuation construct were adapted from Liñán, Urbano and Guerrero (2011), adjusting the wordings slightly to refer specifically to the Philippine context. These measures were subjected to reliability tests which yielded factor loadings higher than 0.50 for the two indicators and a Cronbach's alpha of 0.624. Although the Cronbach's alpha is lower than the more acceptable standards of 0.70, Liñan, et. al. (2011) still included it in their structural equation modeling but with some caution. The result of the structural equation modeling in the study of Liñan, et. al. (2011) indicated that social valuation had a positive influence on subjective norm and perceived behavioral control.

The draft survey questionnaire was also subjected to content validity. Two professors teaching agribusiness and entrepreneurship were asked to comment on the measurement scales. Their only major comment was the use of the term agricultural entrepreneurship which is what I initially used. According to them, agribusiness entrepreneurship is the more appropriate term, if I want to include the whole agricultural value chain. One professor added that, in the Philippines, agricultural entrepreneurship is usually associated only with agricultural production or farming. Thus, agricultural entrepreneurship was replaced with agribusiness entrepreneurship to make it more encompassing.

The survey questionnaire had three sections. The first section contained some details about the research, its main objective, their voluntary participation, their expressed agreement by filling up the questionnaire and my email address should they have any question. The second section is the survey proper which begins with the respondent's socio-demographic profile consisting of four items. The name was made optional for those who preferred to remain anonymous. This was followed by the 23-item Likert scale which measured the different constructs in the framework. There were three items each for all the constructs except for social valuation, which has only two items.

Data analysis

PLS-SEM using the program SmartPLS 3.0 (Ringle, Wende and Becker, 2015) was used to determine the relationships between the independent, dependent variables and intervening variables. It was deemed to be the most appropriate statistical tool for this research due to the following reasons: (a) It is a non-parametric statistical technique which does not assume normality of distribution and works well for small sample sizes (sampling size < 200) which is the case for this research; (b) The presence of two mediating variables makes the framework a bit more complex. PLS-SEM is suitable because it is capable of simultaneously analyzing a series of dependence variables. (Hair, Black, Babin and Anderson, 2014); (c) PLS-SEM can incorporate latent (unobservable) variables into the analysis. (Hair, et. al. 2014). In the model, all eight variables were latent. Thus, multiple item scales were used to represent the unobservable construct.

Given that this is a descriptive-explanatory study, PLS-SEM is the best option because it provides higher statistical power i.e. it can detect significant relationships when in fact they are significant.

Results and discussion

Profile of respondents

There were a total of 144 students who participated in the survey. About two-thirds of these were in their first year, while the rest were in their last year of university. Their ages were not explicitly asked but the first years who just graduated from senior high school following the K-12 program can be assumed to be between 17 to 19 years old. On the other hand, the final year students who are still following the old curriculum can be assumed to be between 20 to 21 years old. By definition Generation Z are those who were born from 1996 to 2012. Thus, at the time of the study, their ages would range from 7 to 23.

There is some balance in the representation in terms of courses with just little more than half taking up agriculture-related courses while the rest were into non-agriculture courses. In terms of sex, females comprised a little less than two-thirds of the respondent and the rest were males. (See Table 1.)

Table 1
Profile of Respondents

		Frequency	Percentage
Year level in university (n=141)	First year	95	67.4
	Last year	46	32.6
Course (n=141)	Agriculture-related	76	53.9
	Non-Agriculture	65	46.1
Sex (n=141)	Female	88	62.4
	Male	53	37.6

Evaluation of the model

Table 2 shows the summary statistics for the evaluation of the model. To ensure that each construct actually represents what it should represent, the variables were also subjected to reliability and validity tests. As a measure of internal consistency both the Cronbach's alpha and the composite reliability were computed using SmartPLS 3.0. According to Hair, et. al. (2014), the more traditional measure is the Cronbach's alpha which "assumes that all indicators are equally reliable" and "tends to underestimate the internal consistency reliability". PLS-SEM, on the other hand, considers the "different other loadings of the indicator variables" (p. 101). Reliability values of 0.70 or higher are considered acceptable both for Cronbach's alpha and composite reliability. For Cronbach's alpha all variables had reliability scores higher than 0.70 except for PBC and SV whose scores are 0.633 and 0.603 respectively for the Cronbach's alpha. Nevertheless, since the composite reliability scores for these two variables were greater than .070, I decided to include them in the model.

Evaluation of construct validity can be broken down into convergent validity and discriminant validity. One of the common tests used for convergent validity is the Average

variance extracted (AVE). Looking at Table 2, the AVE scores of all the variables were greater than the minimum acceptable score of 0.50 which means that "the construct explains more than half of the variance of its indicators" (Hair, et. al. 2014, p. 103).

The Fornell-Larcker Criterion was used to examine discriminant validity. Hair et. al. (2014) defined discriminant validity as "the extent to which a construct is truly distinct from other constructs by empirical standards. Thus, establishing discriminant validity implies that a construct is unique, and captures phenomena not represented by other constructs in the model" (p. 104). According to this criterion, "the square root of the AVE of each construct should be higher than the construct's highest correlation with any other construct in the model" (Hair et. al. 2014, p. 111). Results of the Fornell-Lacrker criterion are shown in Panel B of Table 2. The square root of the AVE of each construct are the values on the highest diagonal, the correlations are the values below the AVE of each construct. It can be noticed from Table 3 that the correlation of ATT and PD (0.877) is higher than the square root of the AVE for ATT (0.860). This could suggest that ATT and PD might be similar constructs which could be lumped into one.

Table 2
Summary Table for the Evaluation of the Model
Panel A: Cronbach's Alpha, Composite Reliability and Average Variance Extracted

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
AEI	.845	.906	.763
PD	.916	.947	.856
PF	.840	.904	.759
ATT	.824	.895	.740
SN	.743	.852	.658
PBC	*.633*	.845	.732
PGS	.749	.854	.662
SV	*.603*	.832	.753

Panel B: Fornell-Larcker Criterion

	AEI	ATT	PBC	PD	PF	PGS	SN	SV
AEI	0.874							
ATT	0.796	0.860						
PBC	0.476	0.434	0.855					
PD	0.812	*0.877*	0.434	0.925				
PF	0.777	0.794	0.606	0.785	0.871			
PGS	0.286	0.174	0.440	0.208	0.340	0.813		
SN	0.608	0.715	0.378	0.647	0.605	0.196	0.811	
SV	0.217	0.258	0.318	0.264	0.289	0.433	0.284	0.844

Generally, all the constructs are reliable and valid, thus they were all included in the model. Hair et. al. (2014) cautioned researchers about removing variables that might improve reliability and validity but may have adverse effects on content validity. Before finally discussing the regression results, I would like to note that the collinearity assessment was not anymore reflected in this study since only reflective measures were used. As such, the items for a particular construct need not undergo collinearity assessment since they are expected to be somehow correlated. Only

formative measures require collinearity assessment. Nonetheless, I still did check of collinearity and the resulting variance inflation factor were all below the tolerance level of 5.0 (Hair et. al., 2014). The results, however, are not anymore shown here.

PLS-SEM algorithm and bootstrapping results

Table 3 and Figure 2 respectively show the summary statistics of the effects of each of the independent variables and their significant and non-significant pathways. Of the five explanatory variables, attitude (ATT) exerted the greatest positive and significant influence on perceived desirability (PD) and perceived feasibility (PF). Perceived behavioral control (PBC) and perceived government support (PGS), on the other hand, had a positive and significant impact on perceived feasibility (PF). Lastly, perceived desirability (PD) and perceived feasibility (PF) had significant positive effects on agribusiness entrepreneurship intention (AEI).

However, some of the hypotheses were not supported. Subjective norms (SN) and Social valuation (SV) did not have any significant effect on perceived desirability (PD) and perceived feasibility (PF). These imply that opinions of family members, friends and mentors do not influence these students' perception of the desirability and feasibility of agribusiness entrepreneurship. Neither did perceived behavioral control (PBC) nor perceived government support (PGS) have any significant impact on perceived desirability (PD). These imply that even if these young people perceive that they have the capacity to put up their own agribusiness or that they can expect government support for agribusiness, they will not necessarily want to go into agribusiness.

Table 3
Summary Statistics on the Relationships of Each Variables

Panel A: Results of PLS Algorithm and Bootstrapping (5000 subsamples)

		Path Coefficient	T-Test	P-Value	Hypothesis
H1a	ATT -> PD	.829	14.396	0.000**	Supported
H1b	ATT -> PF	.642	9.310	0.000**	Supported
H2a	SN -> PD	.027	0.388	0.698	Not Supported
H2b	SN -> PF	.026	0.430	0.668	Not Supported
H3a	PBC -> PD	.045	0.737	0.461	Not Supported
H3b	PBC -> PF	.275	4.358	0.000**	Supported
H4a	PGS -> PD	.033	0.692	0.489	Not Supported
H4b	PGS -> PF	.110	2.072	0.038*	Supported
H5a	SV -> PD	.014	0.259	0.795	Not Supported
H5b	SV -> PF	-.019	0.375	0.707	Not Supported
H6	PD -> AEI_	.562	5.610	0.000**	Supported
H7	PF -> AEI_	.365	3.906	0.000**	Supported

Panel B: Specific Indirect Effects

|	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
ATT -> PD -> AEI	0.436	0.437	0.085	5.114	0.000**
PBC -> PD -> AEI	0.024	0.022	0.033	0.718	0.473
PGS -> PD -> AEI	0.017	0.018	0.025	0.695	0.487
SN -> PD -> AEI	0.014	0.015	0.037	0.380	0.704
SV -> PD -> AEI	0.007	0.007	0.028	0.257	0.797

ATT_ -> PF -> AEI_	0.234	0.234	0.066	3.527	0.000**
PBC -> PF -> AEI_	0.100	0.100	0.035	2.857	0.004**
PGS -> PF -> AEI_	0.040	0.040	0.021	1.906	0.057
SN_ -> PF -> AEI_	0.010	0.009	0.023	0.411	0.681
SV -> PF -> AEI_	-0.007	-0.007	0.020	0.357	0.721

** Coefficient is significant at the 0.01 level (2-tailed)
 * Coefficient is significant at the 0.05 level (2-tailed)

Figure 2
Path Significance and R-square

Legend: ⟶ significant   ----➤ not significant
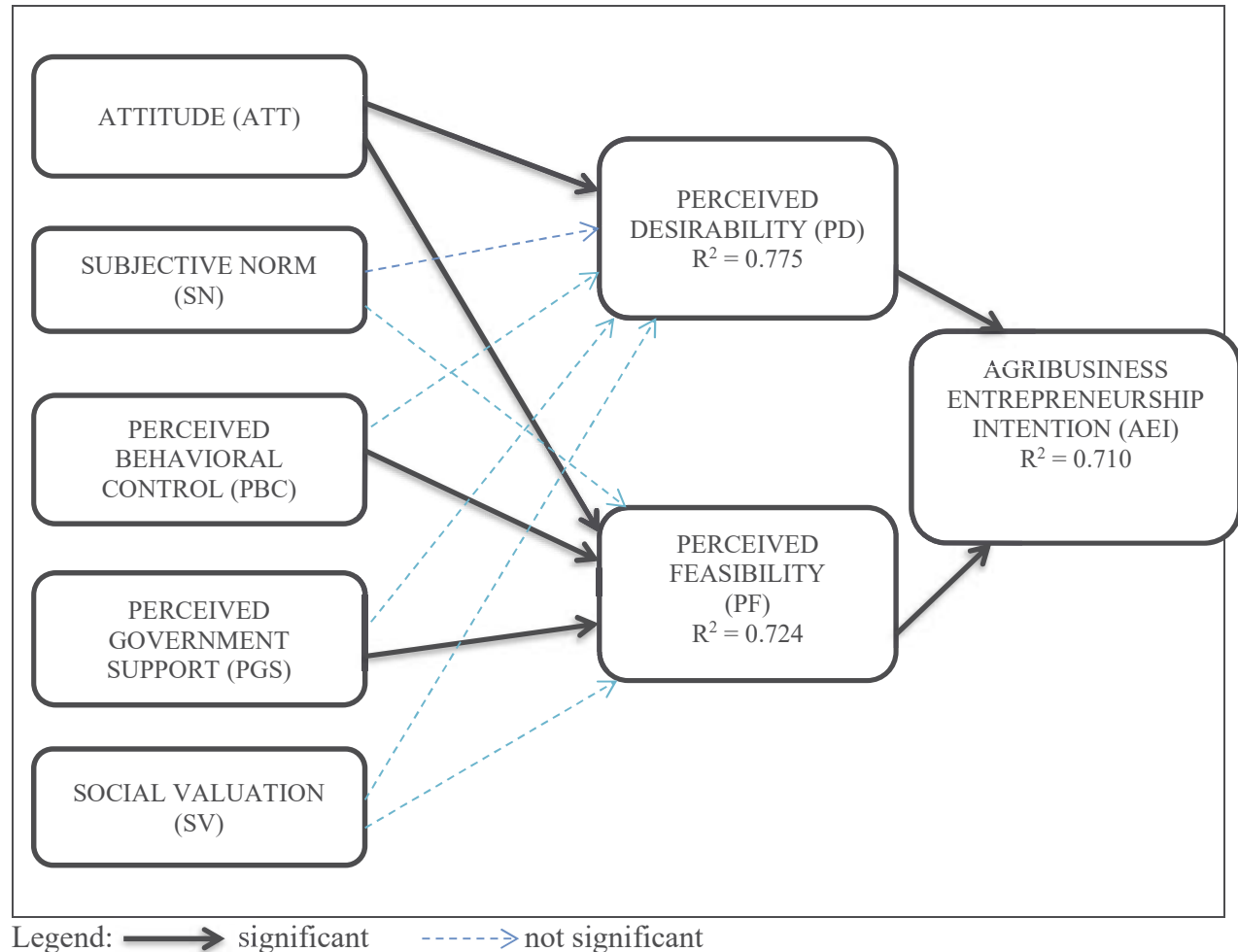
Even if there were some hypotheses that were not supported, overall, the model is acceptable as can be surmised from the coefficients of determination R^2. The explanatory variables can explain almost 77.5% of the variation in perceived desirability, but looking at the path coefficients, a bulk of the influence is coming from attitude toward agribusiness. The same explanatory variables can explain 72.4% in the variation of perceived feasibility. Although attitude still has the greatest influence, perceived behavioral control and perceived government support also had substantially effect on perceived feasibility. The mediating variables of perceived desirability and perceived feasibility can explain 71% of the variation in agribusiness entrepreneurship intention.

Finally, we see the mediation effects of perceived desirability (PD) and perceived feasibility (PF) on some of the independent variables. Looking at the specific indirect effects (See Panel B in Table 3), attitude is significantly mediated by perceived desirability and perceived feasibility while perceived behavioral control is mediated by perceived feasibility only. This means that attitude influences agribusiness entrepreneurship intention though its influence on perceptions of desirability and feasibility. This is partly consistent with what Bagozzi (1992) theorized: that attitudes are first translated into desires which in turn affects intentions that may lead to actions. Thus, in terms of influencing young people to go into agribusiness entrepreneurship, it is important that effective in-school and out-of-school programs be crafted in order to develop the right mindset that could influence their perception of the desirability and feasibility of going into agribusiness entrepreneurship.

Likewise, the belief that one has control over an action influences a person's perception that the action is feasible which affects his intention to take that action. In the context of promoting agribusiness entrepreneurship to young people, it is important to instill in them the knowledge and skills that will give them some certainty that undertaking entrepreneurial activities related to agribusiness is viable.

Conclusion and recommendation

Using an integrated and expanded model of the Theory of Planned Behavior and Entrepreneurial Event Model, this study aimed to determine the factors affecting agribusiness entrepreneurship intention among the Generation Z. Based on the few studies on Generation Z related to entrepreneurship it appears that they have some inclination to entrepreneurship. Whether this applies as well to agribusiness entrepreneurship is still unclear as the general responses on whether they have intentions to go into agribusiness hovered around neutrality but at least, the attitude of most respondents towards agribusiness entrepreneurship were positive.

What this study attempted to do is to find out the factors that could affect agribusiness entrepreneurship intention and whether these factors are mediated by perceived desirability and perceived feasibility. Among all the factors, it is attitude towards agribusiness entrepreneurship that heavily influenced both perceived desirability and perceived feasibility. Thus, efforts should be placed on finding out the factors that positively or negatively affect attitude towards agribusiness entrepreneurship, so that these can either be fostered or avoided as the case may be. Perceived behavioral control and perceived government support had significant positive influence only on perceived but not on perceived desirability. This means that even if the young people may perceive that they may have the ability to put up an agribusiness enterprise and could count on government help, they may not necessarily want to do so. Thus, it is important that interventions towards promoting agribusiness entrepreneurship should target first those who have the desire to go into agribusiness as the possibility of actually putting up their own agribusiness is likely to be higher. Equipping the youth, in general, through training and providing other means may just lead to failure and waste of time and resources.

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