Assessment of Personality Traits, Personality Model and University Systems to Enhance Entrepreneurial Intention in Ghana HEI Context

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The paper contributes to the existing literature in assessing the contributions of Personality Traits, Personality Models, and University Systems that enhance entrepreneurial intentions (EIs) in Higher Education to produce entrepreneurial mindset graduates.

Qualitative and Quantitative surveys conducted in 2018 and 2019 involved 568 and 400 students and faculty respectively from eight Ghanaian Universities. Face-to-face interviews and focused group discussions were employed. Data analysis was performed using Excel, Statistical Package for Social Sciences, and Smart Partial Least Square Structural Equation Model. The findings indicated that Locus of Control, Subjective Norms, and Need for Achievement sufficiently impacted EIs. University Culture, Leadership, and Institutional Structures also impacted EIs greatly. Time and resource constraints constituted a limitation of the study. Longitudinal research to ascertain graduates' preparedness to remain entrepreneurs and not job seekers after graduation is recommended.

Governments, Public Policymakers, and University leadership in higher education need to know the factors of personality traits, Personality Models, and University systems that enhance EIs in Universities for informed decisions to produce entrepreneurial mindset graduates.

Keywords: entrepreneurial intentions, higher education, personality traits, personality model, university system, assessment

INTRODUCTION

Morris & Jones (1999) described entrepreneurship as a means to create and realize an entrepreneur's value and its education provides inspiration and motivation to students to become entrepreneurs, particularly at the University level (Swurupa & Goyal, 2020).

Entrepreneurship Education and Entrepreneurial Intentions (EIs) studies have engaged the attention of Researchers, Educational Authorities, and Governments all over the world (Baluku et al., 2018) and (Odewale et al., 2019). Gelaidan & Abdullateef (2017); Nowiński & Haddoud (2019) and Gerba (2012) considered these as career alternatives and pathways for students and faculty members to create their businesses. Entrepreneurship has become an important source of improvement in economies (Mitchell, 2005; Morris etal. 1995; Swurupa & Goyal, 2020).

Kisubi et al., (2021) believe that the incorporation of entrepreneurship training into strategic plans and educational curricula will stimulate EIs which Bahadur (2015) supported and concluded that entrepreneurial knowledge, as well as skills, can be taught and learned. Patricia & Silangen (2016) affirmed the aim of Entrepreneurship Education as directing students to business as a career option. Scholars have reported both positive effects of entrepreneurship education on EIs (Ebewo et al., 2017) and negative effects (Michelle and Tendai, 2016) on the same without any consensus.

Governments have continued to support activities and promote entrepreneurship drives among University Graduates to create their businesses. The support for the drive of employment through entrepreneurship desirable outcomes, calls for the exploration of EIs and the factors that promote intentions.

EIs are derived from entrepreneurship and intention (Conner & Amitage 1998). The intention is described as a personal motivation to take action on a decision that has been made. Entrepreneurial Intentions influence the decisions of students and faculty members to become entrepreneurs (Gopi, J., 2021). Bird (1988) opined that entrepreneurial inclination is used by researchers as the expression of a personal desire to undertake the entrepreneurial activity. Wathanakom et al (2020) and Bazkiaei et al. (2021) affirmed that Governments encourage entrepreneurship because it is recognized as an important pathway to promote growth and change in society. The measurement of EIs among scholars is problematic. Chen et al., (1998) and VanGelderen et al.,(2008) believed in the use of single and multivariable methods to measure EIs. Matthew and Moser (1995) argued that more men tend to become entrepreneurs than women.

Thompson (2009) argued that there was no clear definition and a reliable instrument to measure intentions. Krueger et al., (2000) also said being an entrepreneur is a process and reasonably voluntary. Lee & Wong (2004) and Krueger et al., (2000) believed that the beginning of the process to create a new job is entrepreneurial inclination and EIs happen before entrepreneurial behavior.

Molaei et al., (2014) posited that EIs predict entrepreneurial behavior, therefore, any increase in EIs will increase entrepreneurial activities.

Fielden et al., (2003) confirmed the assertion and stated that females have low EIs because of low-self efficiency and do not have the capabilities to begin personal ventures.

Lee et al., (2011) further supported the assertion by saying that females have stereotypic images that their responsibility of supporting as well as raising the family and children affects EIs. Garzon (2010) identified individual competence (Knowledge and skills) as a critical element that supports individuals in the early stages of job creation.

Scherer et al., (1991) highlighted the influence of experience and education on intentions and attitudes. Other scholars hold the view that family background factors, particularly parents influence EIs but Dickson & Krueger (1993) hold a contrary view.

Some scholars (Boyd & Vozikis 1994; Lee & Wong 2004; Tubbs & Ekelberg 1991) believe that demographic or situational issues impact EIs. Other scholars (Langowtz & Minniti, 2007; Wilson et al, 2007) use the sex of survey participants as mediating effects in EIs research.

The aim of the paper, therefore, sought to investigate the Personality Traits, Personality Model, existing University System, Parent background, and Demographic factors that impact the EIs of students and faculty. Personality Traits, Personality Models, Family Background, and Demographic factors have been argued to Impact EIs.

To a large extent, scholars have used the dimensions of Psychological Make-Up, Family Background, and Social and Environmental factors, to determine an individual's entrepreneurial intentions. The literature argues that males have stronger inert to entrepreneurial intentions than Females (Matthew and Moser,

1995). Females have low entrepreneurial intentions as a result of Low-self efficiency and the lack of capabilities to start their businesses (Fielden et al., 2003).

Females have stereotypic images, for instance, their responsibility of supporting and raising the family and children affects entrepreneurial intentions (Wilson et al., 2011). Gartner (1985) posited that researchers use Personality Traits as important factors in analyzing entrepreneurial intentions. Shaver (1995) identified Personality Traits such as strong achievement orientation (Need for Achievement), strong individual control (Locus of control), Willingness to take the risk (Risk taking propensity) Endurance, and Intelligence, as a yardstick for measuring an individual's Entrepreneurial Intentions. Gartner (1995) further argued that Personality Traits alone is not sufficient enough to explain one's choice of starting his or her business (as an Entrepreneur).

Ajzen (1991) pointed out individual Attitudes as constituting important factors that influence entrepreneurial intentions. Attitude towards a Behaviour is described as the degree to which the individual holds a positive or negative personal valuation about being an entrepreneur. (Ajzen 2002, Kolvereid, 1996).It includes both affective and evaluative considerations. Krueger (1993) also added Subjective norms as an important factor influencing an individual's EIs. Subjective Norm (SN) measures the perceived social pressure to carry out entrepreneurial behavior or not. It refers to the perception that reference people would approve of the decision to become an entrepreneur or not (Ajzen, 2001). The SN is measured by the perceived expectation level of people who are key to the individual in question, such as friends, relatives, parents, and colleagues. Locus of Control defines the perception of the easiness or difficulty in the fulfillment of the behavior of interest (Bandura, 1997). It is similar to perceived self-efficacy and feasibility. (Shapero and Sokole, 1982). The three connote the sense of capacity regarding the fulfillment of a firm creation behavior (Ajzen, 2001). It is not only about the feeling but about behavior controllability which describes the extent to which performing it or not depends upon the person. The three elements are adopted as a model to study the intention to start a venture: (Krueger, 1993; Krueger et al 2000 Kolvereid, 1996). The impact of self-efficacy or locus of control on entrepreneurial intentions is verified by researchers (Chen, Greene, and Crick -1998, Krueger & Brazeal 1994). Boyd & Vozikis (1994) argued that self-efficacy or Locus of control not only influences individuals' entrepreneurial intentions but also the possibility of creating a firm in the future.

Individual competence (Knowledge and skills) is also identified as an important factor in the early stages of starting a business (Garzon, 2010). McClelland (1961) posited that adult entrepreneurial intentions are predicted by entrepreneurial competence in their childhood. Competencies in recognizing opportunities, relationship competencies, conceptual competencies, organizing competencies, and strategic and commitment competencies are cited as factors that determine entrepreneurial intentions (Man, 2000). Krueger (1993) also argued that prior entrepreneurial experience may have an impact on individual entrepreneurial intentions. Davidson (1995), however, opined that prior entrepreneurial experiences have slight influences on individuals' knowledge of entrepreneurship and have no significant impact on their entrepreneurial attitudes. Experience and Education are widely highlighted to provide increased knowledge to influence intentions and attitudes; subjective norms, and locus of control (Scherer et al., 1991). Entrepreneurial knowledge has a distinct and significant effect on intention.

Big Five Personality research on entrepreneurial inclinations is carried out by various scholars (Brandstatter, 2013; Luthje and Franke, 2003, Zhao and Seibert, 2006). It was established by Zhao and Seibert (2009) that all the big five personality traits extraversion, openness conscientiousness, neuroticism, and agreeableness are associated with entrepreneurial intentions with exception of agreeableness. Liuthje and Franke (2003) re-echoed the same assertion that the Big Five personality Model has a strong impact on entrepreneurship and entrepreneurial intentions.

As happens in Srilanka, fresh University graduates who pass out of University prefer to search for salaried employment rather than exploring opportunities for an entrepreneurial career (Ranwala and Dissanayake, 2016). The local Universities in Srilanka produce less than 5% of the Srilankan Entrepreneurs (Perera, 2012). While some scholars have opined that family background factors, particularly parents have an impact on an individual's entrepreneurial intentions, others like Churchill et al. (1987), and Krueger and

Dickson (1993) hold a contrary view, saying Entrepreneurs' children do not proportionally become Entrepreneurs.

Demographic or situational factors such as ethnicity, age, and sex influence intentions. (Boyd et Vozikis, 1994; Lee et Wong, 2004; Tubbs et Ekelberg, 1991).

Research Hypotheses

The hypothesis is described as individual conjectures based on literature, while theory is defined as multiple hypotheses that are logically linked together and can be tested empirically. Scholars have propounded various Entrepreneurial intentions theories that are empirically tested by Ajen's Theory of Planned Behaviour (1982), Sokol, (1975)

Based on the conceptual framework and the research objective we decided to test four main hypotheses under Personality Traits as well as behavior and the Big Five Personality Model, coupled with the occupational and educational background of students and faculty. The moderated effect of the socioeconomic background of students was also determined.

The detailed hypotheses included:

***H_1**: Personality Traits impact students' entrepreneurial intentions through knowledge and skills acquisition*

***H_{1a}**: The Attitude of students and faculty impact entrepreneurial intentions*

***H_{1b}**: The Need for Achievement by students and faculty impact entrepreneurial intentions*

***H_{1c}**: The Locus of control of students and faculty impact entrepreneurial intentions*

***H_{1d}**: The Subjective Norm of Society impacts the entrepreneurial intentions of students and faculty*

***H_{1e}**: The Risk taking propensity of students and faculty impact entrepreneurial intentions*

***H_2**: The Big 5 personality model impacts Entrepreneurial intentions through knowledge and skills acquisition by students and faculty*

***H_{2a}**: Entrepreneurial intentions vary among high and low categories of Extraversion*

***H_{2b}**: Entrepreneurial intentions vary among high and low categories of Agreeableness*

***H_{2c}**: Entrepreneurial intentions vary among high and low categories of Neuroticism*

***H_{2d}**: Entrepreneurial intentions vary among high and low categories of Openness to Experience*

***H_{2e}**: Entrepreneurial intentions vary among high and low categories of Conscientiousness*

***H_3**: The Education and occupational background of parents impact the entrepreneurial intentions of students and faculty through knowledge and skills acquisition*

***H_4**: The Relationships between personality Traits, Personality Models, Parent Background, and Entrepreneurial Intentions through knowledge and skills acquisition are moderated by the socioeconomic background (ethnicity, sex, age) of students and faculty.*

The majority of the hypotheses impacted the EIs of Students and Faculty members as discussed in the results section. Notable among them were personality traits and the big five personality model, University

Leadership, and institutional structures. Parents' backgrounds, however, failed the test of significance to impact the EIs of students and faculty.

METHODS

The paper looks into the assessment of Personality Traits, Personality Models, and University systems in Ghanaian Higher Education Institutions to enhance EIs. Qualitative and Quantitative surveys were carried out in 2018 among students as well as faculty members at selected Universities in Ghana.

The research domains included Personality Traits, the Big Five Personality model, existing University Systems (climate), Parents' background, external capital to the university, and the socioeconomic background of students and faculty. Some of the questionnaires designed by scholars such as Kristiansen (2003), Bager (2011), and Ollila and Middleton (2013) were adapted for use. Demographic and 5-points Likert scale type of questions were largely employed.

Face-to-face personal interviews and Online Questionnaires in Google forms were instruments used to collect primary data from eight participating Universities in Ghana. Lecturers, Student Class Representatives, Faculty Officers, and Friends assisted in the information gathering by supplying the contact email addresses and WhatsApp telephone numbers of students, faculty members, and University staff.

With face-to-face interviews, printed questionnaires were physically distributed to participants to fill anonymously and assisted by the research Assistants. A questionnaire took an average of 10-13 minutes to fill.

Before the actual surveys, a few participants and colleagues interested in our field of study were made to answer the questions and submit comments to serve as a pilot survey to fine-tune the entire questionnaire. Surveys responses were sought among University Students, Faculty Members, University Management, Industrialists, and Educationists.

The selection of the eight Universities that participated in the survey was purposively done to ensure the inclusion of Government Universities, Private University Colleges, and Technical Universities where most students and faculty members received their professional training.

Universities selected from the greater Kumasi area included KNUST and Kumasi Technical University. In the Greater Accra region, the University of Ghana, University of Professional Studies-UPSA, Accra Technical University, and Ghana Communication Technology University was selected while the University of Cape and University of Education were selected from the Cape coast and Winneba area respectively.

Probability and non-probability sampling methods were used to select interviewees to fill out the questionnaires. A simple random technique was used by compiling telephone numbers and email addresses of students and faculty members at the university. The telephone numbers and email addresses were randomly selected for the interview. Stratified, cluster, purposive, accidental, convenience, and quota sampling techniques were also employed due to the differences in the population of the Universities.

Cochran formula (Cochran. W.G 1977) was again used as a guide for the sample size selection.

The Statistical Package for Social Sciences (SPSS), Excel, and Smart PLS-SEM3 were the analytical Software used for the data analysis Uncompleted and half-filled responses were deleted from the analysis. All the returned questionnaires, filled were coded and information was entered into SPSS, Excel, and Smart PLS-SEM3. Computations and calculations of Cronbach Alpha values, and p-values for a significant test at two-tailed, Mean, Median, Frequency, and Percentages were determined.

To ensure data quality, reliability, and validity of the questionnaire, a test of Cronbach Alpha values were used. Composite Reliability was determined to ensure internal consistency and reliability of all the constructs of the reflective Measurement models designed with the Smart PLS-SEM 3 and SPSS Software.

Cronbach Alpha assumes that all indicators in a model are equally reliable but Smart PLS-SEM 3 prioritize the indicators according to their reliability. As Cronbach Alpha is sensitive to the number of items in the scale and generally tends to underestimate the internal consistency reliability. This limitation of Cronbach Alpha was overcome using the composite reliability in Smart PLS-SEM 3 which takes into

account the different outer loadings of the indicator variables. Generally, a composite reliability value of 0.60 to 0.90 is regarded as satisfactory (Nun ally & Bernstein, 1994)

A composite reliability value below 0.60 indicates a lack of internal consistency reliability.

The Cronbach Alpha values measured the internal consistency reliability of the un- observed variables of the questionnaires. A desired threshold or reliability for Cronbach Alpha is 0.70 or higher was normally required for a pilot survey.

The average Cronbach Alpha value of 0.958 obtained on the constructs of the research domains (available in the results section) signified that the data was highly consistent, reliable, and can be validated.

RESULTS

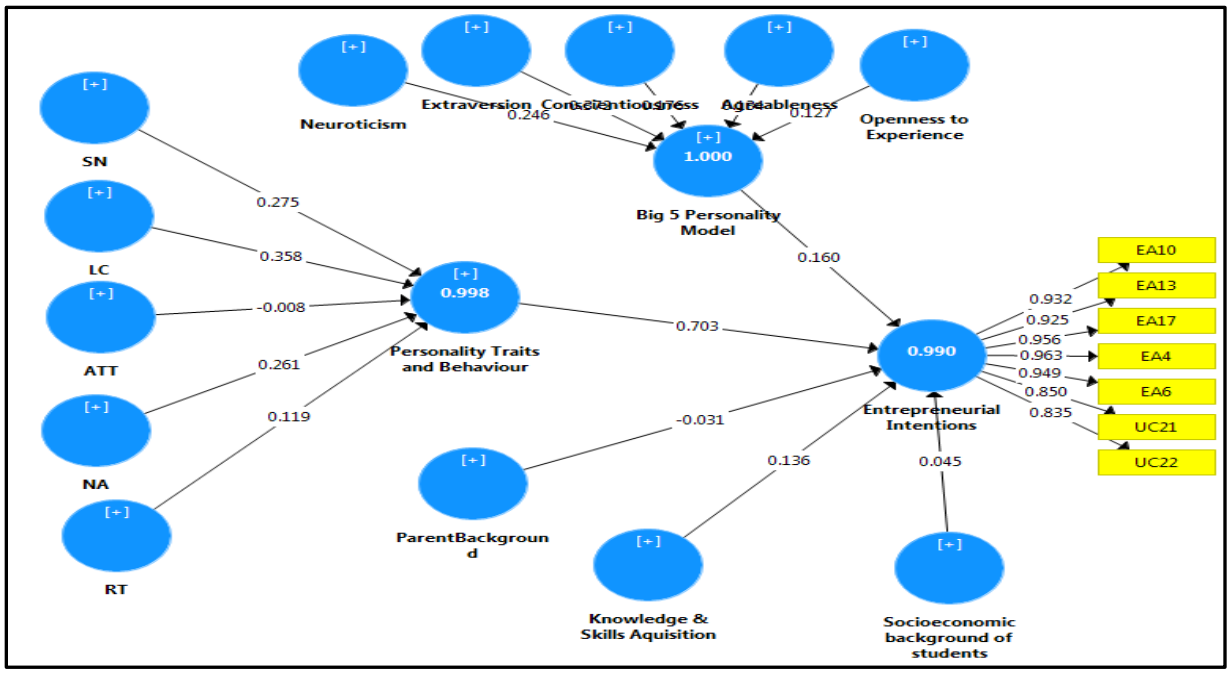
The Partial Least Square Structural Equation Model was used to calculate the significance of the research hypotheses. These are described in the results sections below.

The PLS-SEM3 software was used to design the measurement models showing their constructs and relationships. The PLS path modeling method developed by Wold (1982) was used to calculate the PLS Algorithm at maximum iterations of 300 and stop criterion at 7. The path coefficients of the independent variables and the coefficient of Determination ($\mathbf{R^2}$) of the dependent variable were estimated to conform to the descriptions of the stages using PLS-SEM 3 Algorithm by Henseler et al. (2012).

Bootstrapping was used at sub-samples of 1000 to ensure the stability of results and at a significance level of 0.05 ($p<0.05$), two-tailed.

Researchers have suggested a rule of thumb that for sample sizes of up to 1000 observations, path coefficients with standardized values of 0.2 are considered significant but values below 0.1 are usually not significant. Nitze et al. (2016) also explained that relationships between independent and dependent variables are considered significant if their t-statistic is at least **t >1.96.** Critical decisions to either accept or reject assumptions are determined by the P-values ($p<0.05$ or $P>0.05$)

FIGURE 1
PERSONALITY TRAITS AND BIG FIVE PERSONALITY MODELS IMPACTED ENTREPRENEURIAL INTENTIONS

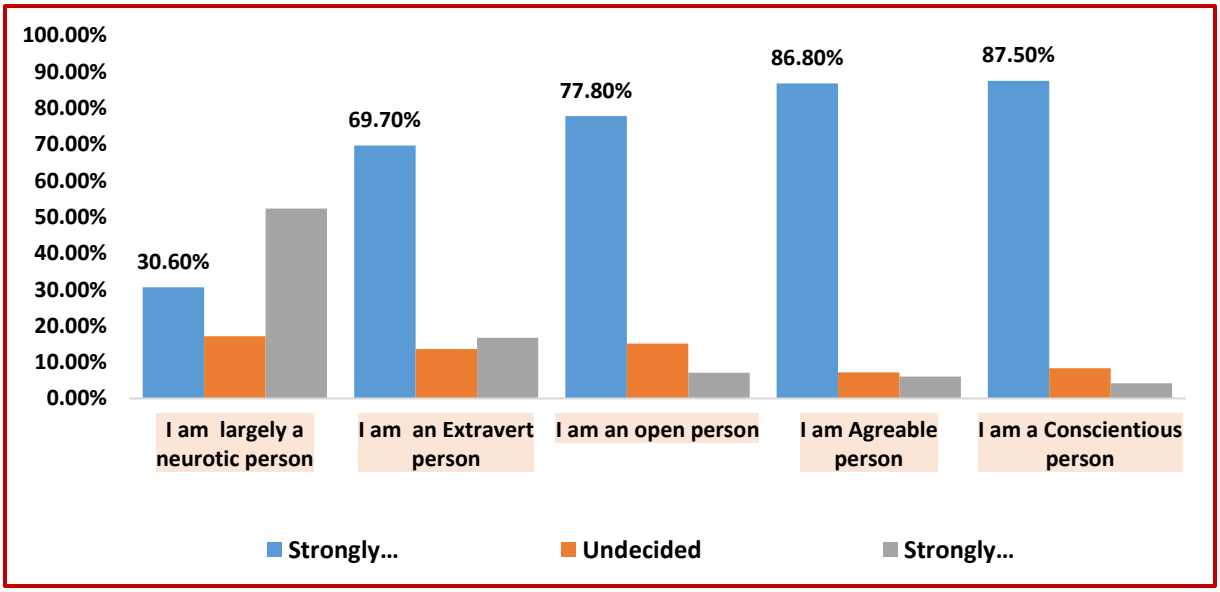


(Field Work, 2018)

The impact of Personality Traits/Big five Personality Models, Parent background, Knowledge, and skills acquisition on EIs of Students and Faculty described in Figure 1 and Table 1 are summarized as follows.

1. Personality Traits and Behaviour impacted heavily (70%) Entrepreneurial Intentions. The P-value of 0.000 Bootstrapping at 0.05% confidence level indicated that Personality Traits and Behaviour significantly impact Entrepreneurial Intentions. The null hypothesis (H_o) is therefore Accepted and the Alternative hypothesis (H_1) is rejected.
2. The Need for Achievement, Locus of Control, Subjective Norm, and Risk Taking were all found to positively impact students' entrepreneurial intentions with P-values of 0.000. The results on the Need for Achievement, Locus of Control, Subjective Norm, and Risk Taking confirmed the assertions of the literature and add to the body of knowledge. This called for acceptance of the null hypotheses and rejection of the Alternative hypotheses as found in Table 1.
3. Striking was the Attitude to intention construct which was found to have a negative relationship with Personality Trait (-0.008) with a non-significant (P-value of 0.790), contradicting views of scholars in literature and theory postulate.
4. The Big 5 Personality Model displayed in figure1 relatively impacted Entrepreneurial Intentions by 16.0%. Its t-statistic was 5.577 and a significant p-value of 0.000. This implied that its impact on EIs is significant. The null hypothesis was accepted and the alternative hypothesis (H_1) was rejected. All aspects of the Big 5 personality model including extraversion, agreeableness, neuroticism, openness to experience, and conscientiousness positively impacted on EIs with p-values of 0.000 as indicated in Figure 3 and Table 1. Figure 2 describes the Big 5 Personality Model among Students and Faculty Members. The students and faculty members selected their Big five Personality Traits. The majority (87.50%) strongly agreed as being conscientious persons, followed by 86.80% as Agreeable persons, 77.85% as Openness to experience, 69.70% as Extravert persons, and 30.60% as Neurotic persons. These categories of persons have implications that impact their EIs.

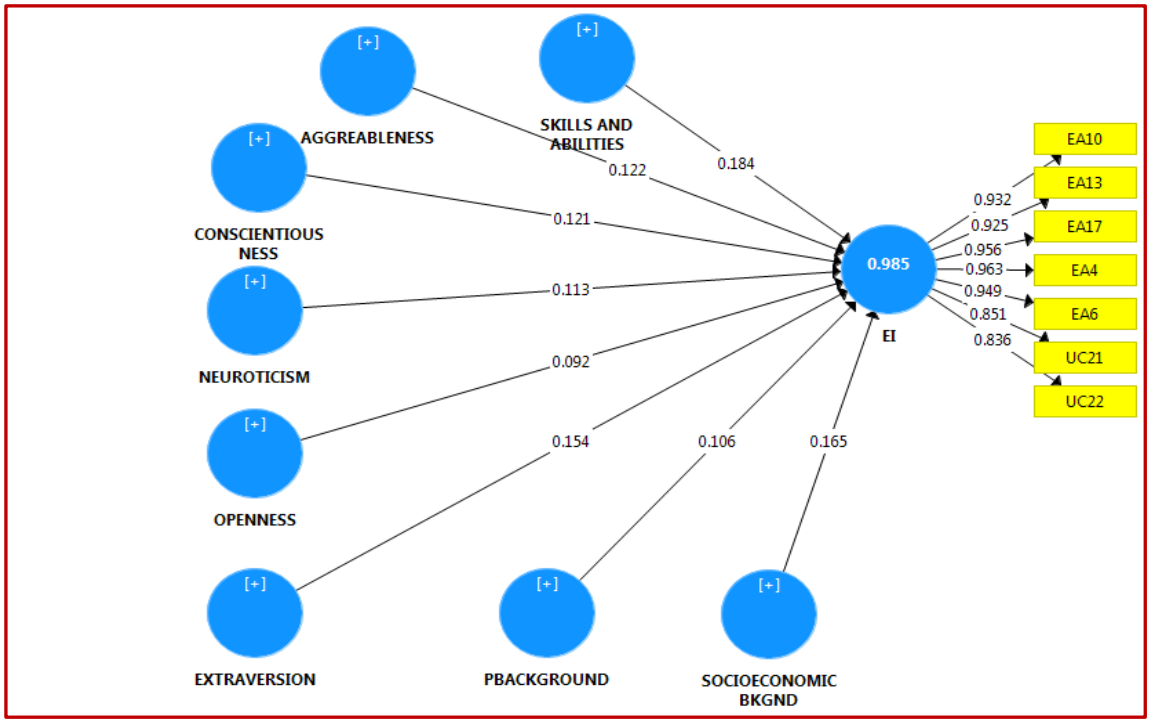
FIGURE 2
BIG FIVE PERSONALITY MODELS OF STUDENTS AND FACULTY WHICH IMPACTED ENTREPRENEURIAL INTENTIONS



(Field Work, 2018)

5. Knowledge and Skills Acquisition of students and faculty impacted Entrepreneurial Intentions positively by 13.6% with P-values of 0.000 after bootstrapping at 1000 sub-samples. The t-statistics for Knowledge and Skills Acquisition which impacted EIs was 6.146 with a sample mean of 0.167, and a standard deviation of 0.028. The Null hypothesis (H_0) is accepted, and the Alternative hypothesis (A_1) is rejected.
6. Socio-Economic of Parent Backgrounds do not impact Entrepreneurial Intentions. The Parent background of students showed a negative impact of -3.1% in Table 1. Societies believe that the background of parents and socio-economic status impact the EIs of children. The research results of this study, however, disapproved of this known fact and revealed that the parent backgrounds of Students and Faculty did not impact EIs. The t-statistics of the socioeconomic background of Parents was 1.661 and a p-value of 0.097. Since the significant p-values are greater than ($p<0.05$), the Null hypothesis is rejected and the Alternative hypothesis is accepted. It stands to reason that the higher and better the educational level and occupation of parents, the higher the impact on students and faculty on entrepreneurial intentions and vice versa.
7. The socioeconomic background of students and faculty impacted EIs with a t-statistic value of 4.275 and a significant p-value of 0.000 indicating significant impacts in Table 1. The null hypothesis is accepted and the alternative hypothesis is rejected. The socio-economic background of Students and Faculty and their psychological upbringing are influenced and reshaped through learning to be susceptible to EIs**.**

FIGURE 3
BIG FIVE PERSONALITY MODEL, SOCIOECONOMIC AND DEMOGRAPHIC FACTORS IMPACTED ENTREPRENEURIAL INTENTIONS



(Field Work, 2018)

Table 1 describes the mean, standard deviations, t-statistics, significant values, and decision criteria on the research hypotheses that were tested. Significant values of results of $p<0.05$ are accepted and values of $p>0.05$ are rejected and the Alternative hypothesis is accepted after bootstrapping at 0.05% confidence level, two-tailed.

TABLE 1
PERSONALITY TRAITS & BIG FIVE PERSONALITY MODEL IMPACTED EIS.

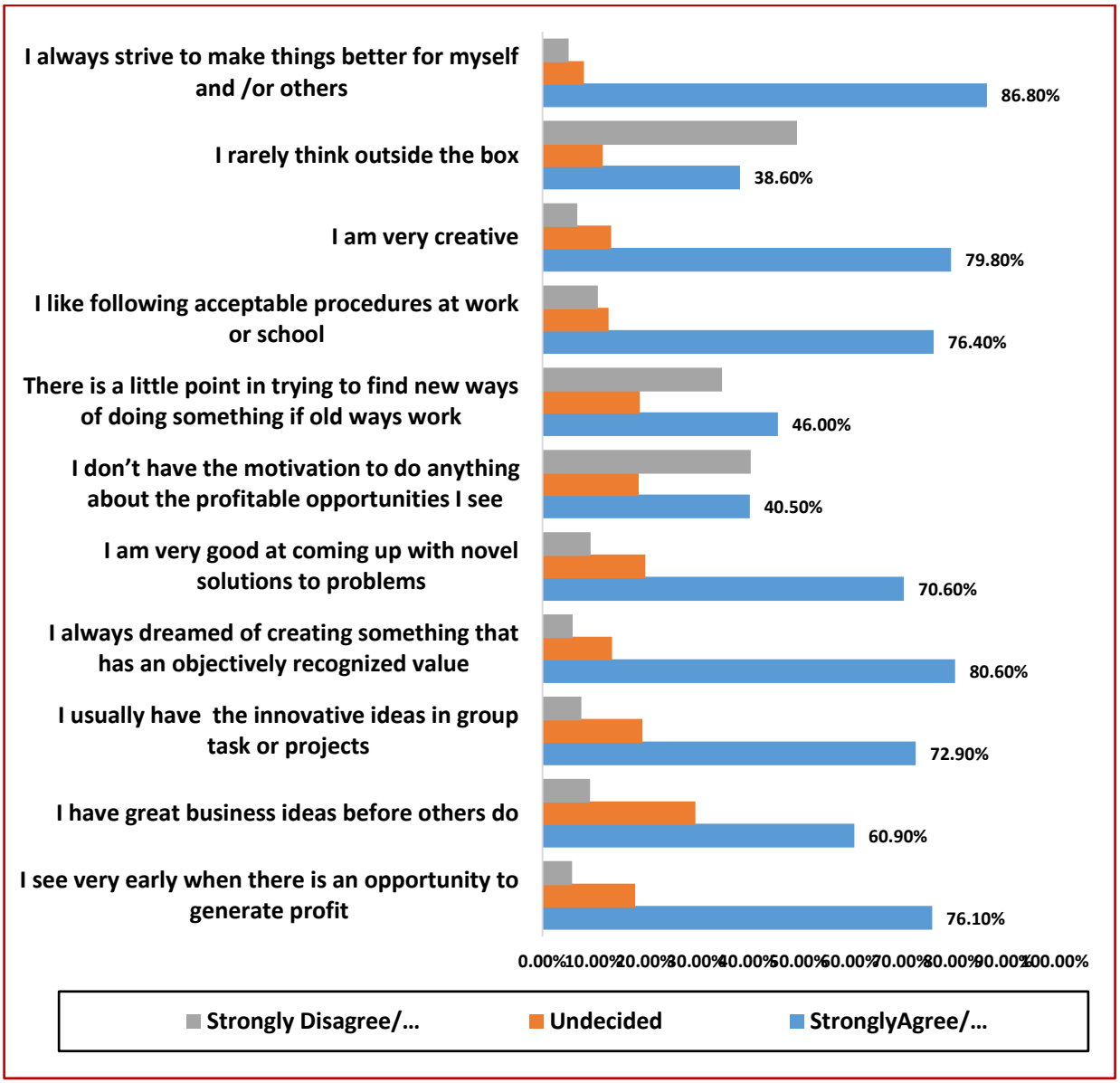
The impact of Personality Traits/Big Five Personality Model, Parent Background, Knowledge, and Skills on EIs of Students and Faculty	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t Statistics (|O/STDEV|)	P Values	Decision
Attitude Impacts Personality Traits and Behavior	-0.008	-0.004	0.030	0.266	0.790	Reject H_0
Agreeableness Impacts Big 5 Personality Model	0.134	0.135	0.032	4.157	0.000	Accept H_0
Big 5 Personality Model Impacts Entrepreneurial Intentions	0.160	0.156	0.029	5.577	0.000	Accept H_0
Conscientiousness Impacts the Big 5 Personality Model	0.176	0.175	0.026	6.647	0.000	Accept H_0
Extraversion Impacts Big 5 Personality Model	0.372	0.372	0.017	21.538	0.000	Accept H_0
Knowledge & Skills Acquisition Impacts Entrepreneurial Intentions	0.136	0.135	0.008	18.137	0.000	Accept H_0
Locus of Control Impacts Personality Traits and Behavior	0.358	0.359	0.030	11.825	0.000	Accept H_0
Need for Achievement Impacts Personality Traits and Behavior	0.261	0.258	0.051	5.080	0.000	Accept H_0
Neuroticism Impacts the Big 5 Personality Model	0.246	0.248	0.013	18.374	0.000	Accept H_0
Openness to Experience Impacts Big 5 Personality Model	0.127	0.125	0.026	4.797	0.000	Accept H_0
Parent Background Impacts Entrepreneurial Intentions	-0.031	-0.032	0.018	1.661	0.097	Reject H_0
Personality Traits and Behavior -> Entrepreneurial Intentions	0.703	0.710	0.038	18.733	0.000	Accept H_0
Risk-Taking Impacts Personality Traits and Behavior	0.119	0.120	0.044	2.711	0.007	Accept H_0
Subjective Norms Impacts Personality Traits and Behavior	0.275	0.272	0.033	8.334	0.000	Accept H_0
Socioeconomic background of student's Impact on Entrepreneurial Intentions	0.045	0.044	0.010	4.275	0.000	Accept H_0

(Field Work, 2018)

Views Expressed by Students and Faculty on Their Personality Traits

The students and faculty strongly agreed with the descriptions of their attitudes, need for Achievement, and Entrepreneurial persons as described in Figure 4. The majority within 70-86% strongly agreed to their personality traits as always striving to make things better for themselves and others, being very creative, follows acceptable procedures at work and school. The others strongly agreed as being very good at coming up with novel solutions to problems and always dreaming to create something that has an objectively recognized value. The rest strongly agreed that they usually have innovative ideas in group tasks/projects, have great business ideas before others, and see very early when there is an opportunity to generate profit.

FIGURE 4
VIEWS EXPRESSED BY STUDENTS AND FACULTY ON THEIR PERSONALITY TRAITS



(Field Work, 2018)

The entrepreneurial intention of the students and faculty could be described as high as an average of about 80% responded, agreed, and strongly agreed to questions on entrepreneurship. For example, 86.30%

agreed and strongly agreed that given the opportunity and resources they would love to start a business; 81.0% strongly agreed to make every effort to start and run their businesses.

Some students and faculty members strongly agreed their colleagues (82.20%); immediate family (80.30%); friends (77.5%) would approve of their decision to start a business. Others (67.40%) strongly agreed to the readiness to do anything to become entrepreneurs. Only 16.50% indicated entrepreneurship career was unattractive to them.

The results are an indication of higher expression of the need for Achievement, Locus of Control, Entrepreneurial Attitude, and Risk Taking Propensity among the students and faculty who participated in the survey. An average of 93.70% strongly agreed to have learned lessons from failures and want to shoot for excellence in every venture.

An average of 84.90%, 88.20%, and 86.10% respectively responded that higher risks are worth taking for higher rewards. The outcome of their actions depended on their performance and preferred to be their bosses. Another average of 88.70% strongly agreed with the ability to work on projects successfully. About 88.60% agreed everything was possible with a can-do spirit. Only a few strongly disagreed with the statement that everything was possible with a can-do spirit.

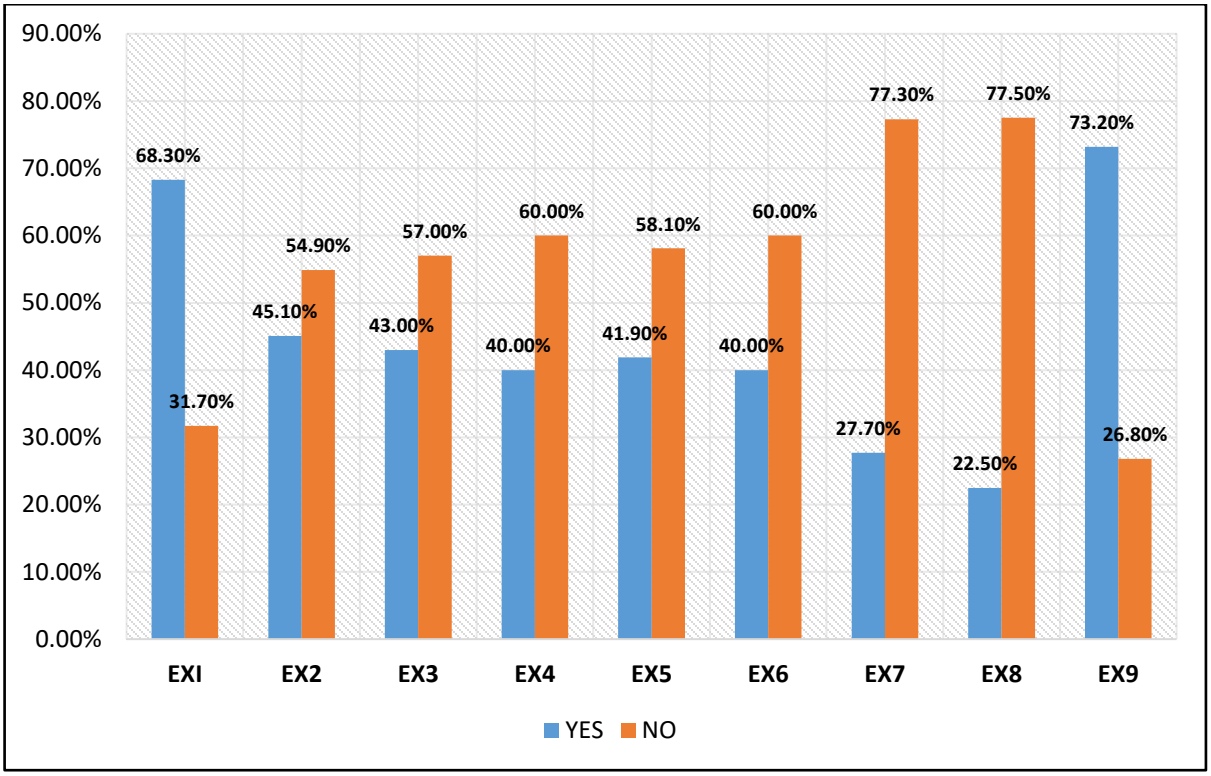
The majority (91.00%) of the survey participants strongly agreed to have a strong desire for progress; forward-looking (87.30%); highly future-oriented (85.90%); quick to spot profitable opportunities (82.30%). The others believe that people tend to think of them as highly innovative (71.30%); see profitable opportunities where others do not (73.10%). The rest (85.0%) strongly agreed that it was not enough to make money for themselves but wanted projects to be beneficial to others

Previous Business Experience of Students and Faculty

An average of 70% of the participants indicated having had previous business experience in sales and had attended formal classes or workshops on entrepreneurship. The majority (75%) had no experience working for business owners of medium size firms with less than 200 workers.

An average of 40% indicated having had previous business experience in supervisory roles handling business accounts, running their own business and for other business owners (see Figure 5) The implication is that some students and faculty may have experience in venture creation and improve on them through knowledge and skills acquisition through learning

FIGURE 5
PREVIOUS BUSINESS EXPERIENCE OF STUDENTS AND FACULTY



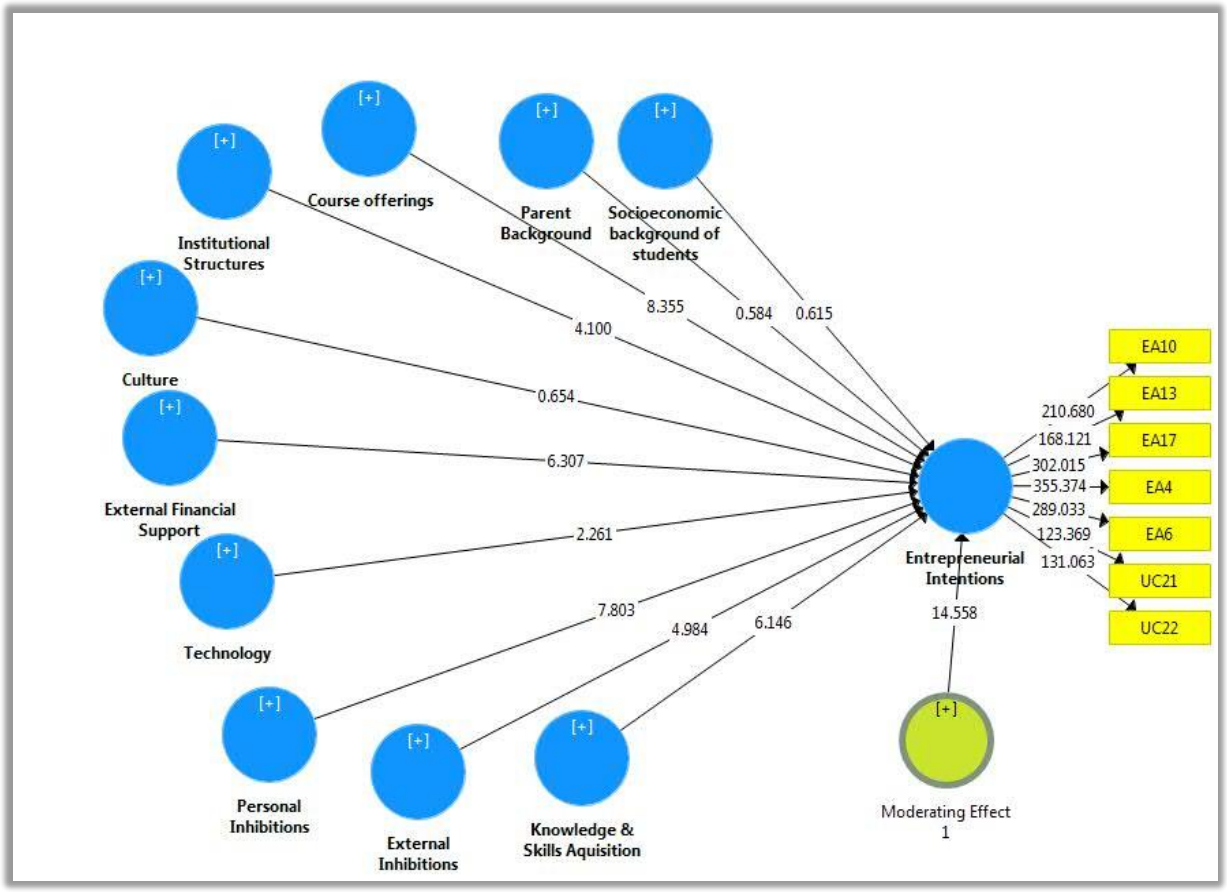
(Field Work, 2018)

University Systems Impacted EIs

The research results in Figure 6 indicate the following university systems' impact on the EIs of students and faculty.

1. University Institutional Structures with a significant p-value of 0.000 was the best predictor of EIs among students and faculty. The results suggested that a unit increase in University institutional structures could lead to a correspondent increase of 0.60 units in EIs. Theoretically, University institutional structures contribute immensely to EIs especially when staff, faculty, students, Management, and Technological systems of the University are entrepreneurially focused.
2. University Culture and Leadership of the study impacted EIs. A unit change in University leadership can lead to a decrease of 0.20 units in EIs. With a p-value of 0.007 suggests a significant impact, which is positively related to EIs (Figure 6). A unit change in University culture and leadership can reduce EIs by 0.07 units. The total effect (direct and indirect) on EIs when University culture and leadership are used as mediation is 1.003. Using University Culture and Leadership as a mediation on EIs has a weak relationship and is statistically insignificant. University Culture and Leadership, however, significantly and positively impacted EIs with p–values of 0.000
3. University Course offerings and the type of Technology used also impacted the EIs of students and faculty with p-values of 0.000 and 0.126 respectively.

FIGURE 6
IMPACT OF UNIVERSITY CULTURE, INSTITUTIONAL STRUCTURES, LEADERSHIP, TECHNOLOGY, AND COURSE OFFERINGS ON ENTREPRENEURIAL INTENTIONS



(Field Work, 2019)

DISCUSSIONS

The research sought to investigate the contributions of Personality Traits, University Systems socio-economic backgrounds of parents, students, and faculty that enhance EIs. Students and Faculty members with unique personality traits and competencies and learning within a specified University system with a common curriculum framework were differently impacted entrepreneurially.

Personality Traits and Behaviour Impacted Heavily on Entrepreneurial Intentions

Personality Traits of entrepreneurship are the attributes and characteristics of individuals that make them unique among colleagues and other people.

Locus of Control or Self-Efficacy describes the easiness, or difficulty in the fulfillment of the behavior of interest (Bandura, 1997) and feasibility (Shapero and Sokol, 1982) to have a sense of capacity to fulfill a firm creation behavior (Ajzen, 1997). The three characteristics are said to not only influence an individual's intentions but ultimately led to venture creation in the long run.

Subjective Norm, measuring the perceived social pressure from friends, relatives, parents, and colleagues who matter (Krueger Jr. & Dickson,1993) to carry out entrepreneurial behavior or not was also found to have impacted significantly on the intentions of students and faculty Agyekum *et al*.(2020).

Need for Achievement, described as strong achievement orientation (Shaver, 1995), and Risk-taking propensity were all found to positively impact the intentions of students and faculty.

The Attitude (ATT) towards a behavior, described as the degree to which the individual holds a positive or negative personal valuation about being an entrepreneur, on the contrary, did not impact the intentions of Students and Faculty. Ajzen &Fishbein (1977), Ajzen (1991), and Kolvereid (1996) argued that attitude significantly influences intentions.

Big Five Personality Model

The big five Personality Model encompasses Extraversion, Conscientiousness, Agreeableness, Openness to experience, and Neuroticism impacted intentions of students and faculty.

Scholars like Brandstatter (2013); Luthje and Franke (2003); Zhao and Seibert (2006) have endorsed the personality model to influence entrepreneurial inclinations. Its impact on intentions (Zhao *et al.*, 2005) was confirmed by Luthje and Franke (2003).

University Culture and Leadership impacted Entrepreneurial Intentions

Some scholars had propounded that the Entrepreneurial Culture of Institutions impacts intentions to become entrepreneurs (Chukwuma-Nwuba, 2018; Fragoso et al., 2020; Sesen & Pruett, 2014); Mukhtar et al. (2021) but Bogatyreva et al. (2019) contradicted this fact. Even though it stands to reason that if the culture of a University system dispels entrepreneurship, the entire membership of the University community may not be entrepreneurially inclined and vice versa.

The implication is that existing University culture and leadership play a vital role in reshaping the mindset of Students and Faculty members entrepreneurially. University Culture and Leadership Impacted Entrepreneurial Intentions. There was a positive relationship between Culture as well as Leadership and EIs. The University Culture and Leadership together highly predicted EIs with a coefficient of determination (R2) of 0.816. This implied that 81.60% of the variance in EIs of Students and Faculty can be explained by the culture and leadership of the University.

University Institutional Structures, Course offerings, and Technology-Impacted EIs

University institutional structures with a significant p-value of 0.000 were the best predictor of EIs among students and faculty. The results suggested that a unit increase in University institutional structures can lead to a correspondent increase of 0.60 units in EIs. Theoretically, University institutional structures contribute immensely to EIs especially when staff, faculty, students, Management, and Technological systems of the University are entrepreneurially focused.

University Course offerings and the type of Technology used also impacted the EIs of students and faculty with p-values of 0.000 and 0.126 respectively (**figure 6**). Theoretically and empirically, Universities offering comprehensive and well-structured entrepreneurship courses and employing entrepreneurial-driven technologies are likely to impact Students and Faculty to become entrepreneurs. This implies that Governments, Development Policymakers, and leadership of higher educational institutions must pay particular attention to institutional structures, technology and courses offered to impact Students and faculty members entrepreneurially to achieve the desired objective.

Parents' Backgrounds Do Not Impact the EIs of Students and Faculty

The research finding affirmed the position of Churchill *et al.* (1987) and Krueger and Dickson (1993) that Entrepreneurs' children do not proportionally become Entrepreneurs. This position also contradicts Boyd & Vozikis (1994); Lee & Wong, (2004); Tubbs & Ekelberg (1991) who opined that the Demographic/Socioeconomic backgrounds of parents would influence intentions. Bahadur (2015) supported and concluded that entrepreneurial knowledge and skills can be taught and learned by anybody. Some aspects of the parent background analysis of the study showed that parents who had gone through undergraduate and higher studies were able to educate their children to that level and beyond. This meant that the higher the level of education of parents, the better their children's education, all things being equal

(ceteris paribus). However, it was also identified that a few parents with low-level education or no formal education were able to educate their children to the undergraduate and higher levels.

The implication is that a student can learn from school to become an entrepreneur even if their parents do not have any entrepreneurial background. Training the minds of Students and Faculty to be entrepreneurial in Universities/HEIs championed by Government, Policy Makers and University authorities are therefore in the right direction.

Knowledge and Skills Acquisition Impacted Entrepreneurial Intentions

Knowledge and Skills Acquisition significantly impacted the EIs of Students and Faculty which is confirmed. Garzon (2010), Looper (1985, 1993) and Scherer et al. (1991), Agyekum et al.,(2020) also have a strong belief that the Knowledge and skills of an individual are important factors to start a business.

Figure 4 captured the responses of respondents on Entrepreneurial individuals' Attitudes, need for Achievement, and Entrepreneurial persons. The results showed a high impact of subjective norms on entrepreneurship. An average of 73.90% of respondents strongly agreed that entrepreneurial activity is considered worthwhile in Ghana despite the risks; 59.20% strongly agreed that their immediate family and friends value entrepreneurial activity above other activities and careers; 44.20% see the culture in Ghana as highly favorable towards entrepreneurial activity.

CONCLUSIONS AND IMPLICATIONS

In conclusion, it is confirmed that many of the research domains have significantly predicted the EIs of Students and Faculty in Ghanaian Universities which has been a concern for the ruling Government, Policy Makers, and University leadership. All the key elements and factors in the research which impacted EIs can add to the body of knowledge.

This achievement had not been without research limitations such as time and resource constraints, difficulty in getting voluntary interviewees, and knowledge and skills to use comprehensive and sophisticated software for analysis. Over-emphasis on qualitative (exploratory) other than quantitative (experimental) in the analysis could also not be ignored./

Altogether, EIs have been impacted throughout the study, leaving a few, which failed the test of significance. Most significant was that the Parent's Background did not impact the EIs of Students and Faculty, contrary to experiential knowledge, theory, and literature.

We recommend a future study to have adequate time and relevant information to carry out a longitudinal study among alumni of Universities to document actual venture creation after students had graduated from the Universities and not end at only their declaration of intentions while in school. Only Faculty members who are engaged in entrepreneurship ventures must be included in a longitudinal study. The future study will help to identify more factors that enhance and inhibit EIs among Graduates and Faculty members in the entrepreneurship industry.

A closer look with some alterations in the questions that were asked, sample size and sampling technique may help to better understand the phenomenon in future studies.

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