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Full Length Research Paper

# Gender as a moderator between entrepreneurship intention and its predictors among university graduates in Nigeria and India

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The main emphasis of this study is to examine the role of gender as a moderator between entrepreneurship intention and its predictors among university graduates in Nigeria and India. The data were gathered from 130 postgraduate students from two universities in Abuja and a southern region of India. A structured questionnaire was administered on-line via Google document. Confirmatory Factor Analysis of Structural Equation Modelling (SEM) was used to determine the relationship between the independent and dependent variables. The study shows that gender has a moderating effect on entrepreneurship intentions due to subjective norms, perceived behavioural control and attitude towards the behaviour. The study recommends total annihilation of gender differences in building entrepreneurship process and to nurture both genders in the same way to build strong personalities.

**Key words:** Attitude towards behaviour, entrepreneurial intention, gender, perceived behavioural control, and subjective norms.

## INTRODUCTION

Entrepreneurship is a key driving force behind any country's economic growth and social development. It also acts as a catalyst in creating and achieving job opportunities among the people in the developing society (Audretsch, 2012). Entrepreneurship is seen as a panacea to lack of economic improvement and unemployment. Many graduates are unemployed in many countries due to lack of job opportunities (Karimi et al., 2010). Entrepreneurial intentions are a deliberate awareness of an individual to create something different from other businesses (Bird and Thompson, 2009). In a situation where the intention is positive towards

entrepreneurship, the tendency usually leads to innovation and creativity. However, some factors like attitudes towards entrepreneurship, subjective norms and perceived behavioural control most times do not lead to the expected entrepreneurial intention due to gender issues.

The main objective of the study was to determine the role of gender as a moderator between entrepreneurship intention and its predictors among university graduates in Nigeria and India. The specific objectives are to assess the relationship between the determinants of entrepreneurship and entrepreneurial intention and

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highlight the moderating effect of gender on Entrepreneurial Intention. In line with the objective research questions were raised, thus; to what extent has the determinants of entrepreneurship affected entrepreneurial intention? And what is the moderating effect of gender on entrepreneurial intentions of graduates in Nigeria and India?

This paper has policy implications, especially for those providing assistance to entrepreneurs and small business owners in both countries.

#### LITERATURE REVIEW

Global entrepreneurial index, (2018) score for India is 26% and ranked 69th out of 137 while Nigeria is 19.7% and ranked 101 out of 137 countries globally. The report disclosed 14 pillar performance of entrepreneurship which Nigeria and India need to explore further: especially in the areas of innovation, creativity, Information Technology, Big data analysis, family support, affirmative action, training and skill acquisition, However, the governments of both countries are putting enough efforts to promote entrepreneurship at early stages by offering financial assistance, training and skill acquisition programmes. Empowerment programmes and workshops are also some of the recent initiatives taken by the government of both countries to enhance entrepreneurship intentions of graduates. These movements have got wide appreciation from the educational communities of all streams.

Opportunities over threats could be stressed through the entrepreneurial process (Ali et al., 2011). Entrepreneurship could be seen as introducing a new business idea by an individual (Bruyat and Julien, 2001). Barringer and Ireland (2010) cite Gelderen et al. (2008) who say that recent career concepts such as the boundary less career, post-corporate career, and employability are certainly relevant to entrepreneurship (Figure 1).

# **Entrepreneurial intention**

An individual's effort to build and act upon a conscious plan is an intention (Conner and Armitage, 1998). The individual intention could be seen as the willingness of one to behave in one's desired way (Ajzen, 1991). One's way of thinking towards innovation and creativity is seen as an entrepreneurial intension (Bird, 1988).

This study supports the studies carried out by Bird (1988) and Ajzen (1991). There is an urgent need for graduates to see entrepreneurship as a rewarding career that could help them to be self- reliance. They could be encouraged to express their intentions to pursue their career path by the guidance and counselling department even before they graduate from the universities. Attitude towards behaviour model could be used to dictate those

students who are innovative and creative.

# Attitude toward behaviour (ATB)

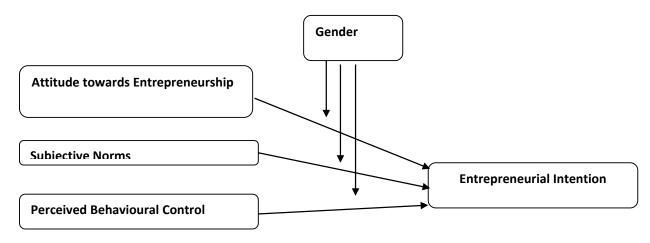
The rate at which one has either favourable or unfavourable views to one's way of behaviour could be seen as an attitude (Ajzen, 1991). Attitudes are assessed by the total set of accessible behavioural beliefs that results in various outcomes. In general, attitude depends on expectations and beliefs about the outcomes resulting from the behaviour (Krueger et al., 2000; Fishbein, 1967). Armitage and Conner (2001) are of the view that attitude towards the behaviour mirrors the person's holistic evaluations of performing a particular task. There is a nexus between attitude towards behaviour and intention. The greater attitude one has towards behaviour the more one's intention to perform the set task and vice versa. Nigerian and Indian government have developed programmes to attract graduates to be self-reliance. These have been inspiring the youth's attitude towards innovation and creativity; however, there is still room for a stronger attitude toward entrepreneurship among the students. Professional's attitudes towards ethical issues usually influence intentions (Howard, 2005). Those students that did entrepreneur courses in the University tend to have entrepreneurship intention than those who did not. The study supports the findings of Howard (2005).

In the study of Howard (2005), he used an extension of the theory of planned behaviour (Ajzen, 1991, Action Control-From Cognition to Behaviour), the model used in his research highlights the effect of personal, social and organizational factors on ethical intentions. Professionals from five accounting firms completed a survey that measured responses to ethical dilemmas related to the public accounting domain

The survey instrument was administered in two phases to avoid ethical bias. The study revealed strong support for a direct relationship between attitudes and ethical intentions. The proposed direct effect of subjective norms was not supported. However, a significant relationship between norms and attitudes was found. There is a difference in the finding of the study and this study because subjective norms have a significant effect on entrepreneurial intentions.

# Subjective norms (SNS)

Individual's view of general social pressure to act, or not to act in a certain way is known as the subjective norm (Armitage and Conner, 2001). It has two elements known as the normative beliefs and motivation (Ajzen and Fishbein, 1980). Normative beliefs are slanted by the strength of the motivation (Krueger et al., 2000). They further stress that the subjective norms include graduates' family acceptance of his/her interest in being



**Figure 1**. Conceptual Framework Source: Authors'Design (2019).

an entrepreneur. Parents, partners, and peers views may influence a graduate career path. This is because the student may be confused in choosing a career path suitable for him/her (Gelderen et al., 2008). Therefore, in this research, the model of attitude towards the behaviour of the subjective norms may include role model and family background.

It is assumed that for an individual to have the desire to be an entrepreneur, either one of the parents or one among friends, might positively affect the formation of his/her intention (Ebrahim and Schøtt, 2014). An individual's role model is a person he wants to act or behave like (Gibson and Barron, 2003). People pay attention to role models because such observation can help them perform new tasks, learn new skills, acquire norms and make sense in the environment (Bandura, 1986). Wood and Bandura (1989) observe role models as the self-beliefs of abilities; therefore finding out the impact of a role model in the entrepreneurial intention is essential.

Many at times people learn and act by example, especially young adults who try to emulate their parents. Wang and Wong ((2004) assert that persons with self-employed parents are more likely to start their own business following the footstep of their parents. Minniti and Nardone (2007) say that entrepreneurial role models provide information which can minimize the confusion associated with starting a business.

# Perceived Behavioural Control (PBC)

Ajzen (1991) sees the desired ability to perform a set goal as perceived behavioural control. As mentioned earlier; the construct of perceived behavioural control is added based on the extension of the theory of reasoned action. Perceived Behavioural Control should help in the

implementation of behavioural intentions into action, and directly predict behaviour (Armitage and Conner, 2001; Kirkwood, 2007). In line with their study, entrepreneurial alertness and self-efficacy have been added to the measure of PBC. Entrepreneurial self-efficacy talks about the strength of a person's belief that he or she can successfully perform the various roles and tasks of entrepreneurship (Ali et al., 2011). Bandura (1986) says that; "Self-efficacy is linked to initiating and persisting at behaviour under uncertainty, to setting higher goals, and reducing threat-rigidity and learned helplessness". Thus, entrepreneurial self-efficacy is included in the measure of perceived behavioural control.

Discovering business opportunities is a pre-condition for entrepreneurship and this might be overlooked by the students. This is said to be lack of entrepreneurial alertness (Kirzner, 1973). In the context of self-employment, the entrepreneurial alertness indicates that having an idea for setting up a business has motivating properties (Gelderen et al., 2008). The extent of students' awareness of business opportunities available to them can be measured through entrepreneurial alertness. Hence, this variable has been added to the measure of perceived behavioural control.

# Gender

The way Nigerian and Indians see male and female have a strong effect on entrepreneurial intention of graduates in both countries (Karimi et al., 2014; Thomas and Mueller, 2000) say that," gender is a fundamental dimension of the socio-cultural environment and can, therefore, be a possible determinant of Entrepreneurial intention". Some schools of thought like Grilo and Irigoyen (2006), Blanchflower et al. (2001), Crant (1996), Minniti and Nardone (2007), and Grant (1991) are of the

view that males are generally more interested in an entrepreneurial career than females. And those males also have a higher desire and intention to start their businesses than females. Their arguments of these researchers support this study which investigates the moderating role of gender on the relationship of attitude towards behaviour, subjective norms, and perceived behavioural control on entrepreneurial intention.

# **Entrepreneurial Intention (EI)**

Entrepreneurial intention decisions are determined by certain factors that are planned. Krueger et al. (2000) and Thompson, (2009) are of the view that entrepreneurial activity is intentionally a planned behaviour. Even though that entrepreneurship has been seen as an important tool for economic and social growth, little attention has been given by the past studies in finding the influential factors of entrepreneurial intention among graduate students. Therefore, stressing entrepreneurial intention is very crucial. There are many intentional models available in the literature to study entrepreneurial intention. However, Ajzen's Theory of planned behaviour is the widely studied model to measure the intentional aspects of the subjects.

# Theoretical background

Theory of Planned Behaviour (TPB) model supports the Theory of Reasoned Action by Fishbein and Ajzen (1975). The components of the theory of reasoned action include attitude toward behaviour and subjective norms. Ajzen (1991) extended the theory by including the measures of control belief and perceived behavioural control. The intention was found to be the direct antecedent of behaviour, guiding the behaviour in a controlled manner (Ajzen, 1991). The components of the Theory of planned behaviour are Attitude towards behaviour, subjective norms and perceived behavioural control on intentions.

The more favourable the attitude towards entrepreneurial intension is the less influence of subjective norms and stronger the perceived behavioural control towards entrepreneurship intention (Karimi et al., 2014). The TPB has been used to predict the EI of students and confirmed the critical roles of attitudes towards entrepreneurship, Subjective Norms and Perceived Behavioural Control in the prediction of these intentions (Karimi et al., 2013; Krueger et al., 2000; Carsrud and Johnson 1989).

The TPB assumes that intention is the basic determinant of behaviour which is affected by attitudes towards behaviour, subjective norms (SNs) and perceived behavioural control (PBC) (Karimi et al., 2014). The theory offers a coherent and generally applicable theoretical framework, which enables us to understand and predict entrepreneurial intention by taking into cognizance not only personal but also social factors

(Krueger et al., 2000). Therefore, the current study considers all the core dimensions of the TPB model and tests the entrepreneurial intention.

The study supports the Ajzen Theory of ATB and others and it seeks to investigate the entrepreneurial intention by the use of theory of planned behaviour, originally given by Ajzen (1991). Hence, this research studies the relationship of attitude toward the behaviour, subjective norm, and perceived behavioural control on entrepreneurial intention among graduating students. It also investigates the moderating effect gender has on entrepreneurial intention of graduate students in both countries.

#### **METHODOLOGY**

This paper used the primary source in data collection; structured questionnaires were administered to 365 postgraduate students in Nigeria and India online through Google document. Only 130 students responded from both countries. The proxies were; Attitude towards behaviour, Entrepreneurial intention, Gender, perceived behavioural control, and Subjective norms.

According to Krejcie and Morgan (1970), the sample size for the study which is 130 respondents is sufficient.

Cronbach's Alpha Test of Reliability was used to prove the reliability of the model used. Applying this test specified whether the items about each dimension are internally consistent and whether they can be used to measure the same construct or dimension of entrepreneurial traits that lead to entrepreneurial intention among the graduate students in both counties. According to Nunnally (1978), Cronbach's alpha should be 0.7 or above. However, for preliminary research, coefficient alpha in the range from 0.5 to 0.6 is still at the minimum acceptable level of reliability (Nunnally, 1978).

# **Confirmatory Factor Analysis (CFA)**

The determinants of entrepreneurial intention comprise of three sub-dimensions such as attitude towards entrepreneurship, subjective norms and perceived behavioural control comprising of six-item scale, 5 item scale respectively.

Looking at each of the constructs individually in path diagram of attitude towards entrepreneurship developed using standardized co-efficient and squared multiple correlations, ATE 4 play a vital role (0.92) in determining the entrepreneurial intention followed by other variables. Looking at the subjective norm variable individually, SUN 4 plays a determining role in predicting entrepreneurial intention whose standardized co-efficient and squared multiple correlations are 0.89 and 0.61 respectively. On the other hand, perceived behavioural control variable has a greater impact on the entrepreneurial intention whose standardized co-efficient and squared multiple correlations is 0.82 and 0.61 respectively. This is due to the variable PBC 2 that plays as a strong player among other variables

Hair et al. (2010)'s summary of the CFA model exhibits that the standardized factor loadings should be 0.50 or higher. Therefore, no item in the factor loadings was dropped down as it is satisfying the best fitting measurement model. While combining the influential characters of three individual constructs in determining the entrepreneurial intention, the attitude towards entrepreneurship (0.86) followed by the perceived behavioural control (0.78) and subjective norms (0.73) has emerged as the key determinants, as per the overall results are shown in the path diagram (Figure 2).

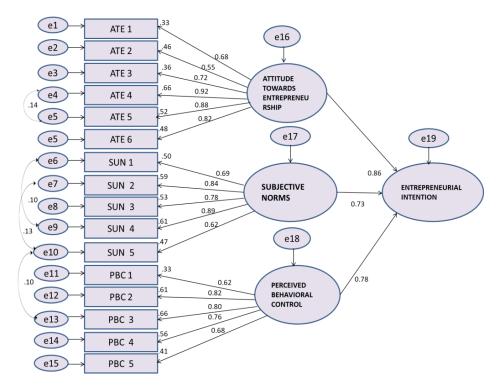


Figure 2. Path diagram.

Table 1. Model fit.

Model	CMIN	DF	CMIN/DF	GFI	AGFI	CFI	RMR	RMSEA	NFI
Index	158.610	51	3.110	0.801	0.921	0.911	0.030	0.066	0.854

Table 2. Model fit for structural model.

Madal Indiana	χ²	df	χ²/df	GFI	CFI	AGFI	RMR	RMSEA	NFI
Model Indices	3.250	1	3.250	0.910	0.914	0.976	0.409	0.077	0.921

The hypothesized measurement model provides a good fit to the data with the goodness of fit index being 3.110. Similarly, CFI is 0.911, suggesting a good model fit (Table 1). RMSEA is 0.066 and lower than the threshold value of 0.80, is generally considered necessary for a satisfactory model fit. The value of RMR is 0.030 which is also found to be within the suggested range.

The AGFI is found to be 0.921, which is greater than the recommended acceptance level of 0.90. The NFI value is 0.854, which again suggest a good fit. The value of NFI generally lies between 0 and 1; larger values indicate a higher level of goodness of fit.

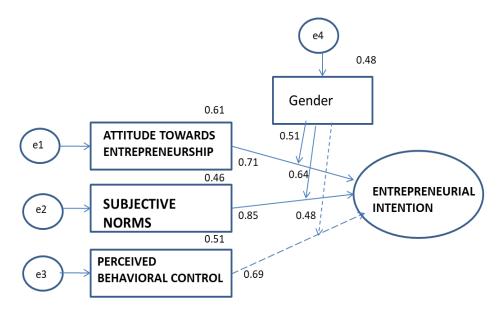
#### Structural equation modelling

The structural models are evaluated based on the path estimate and their significance along with the overall model fit. SEM is used to determine the existing causal relationship among a set of independent and dependent variable(s) (Figure 3 and Table 2).

#### DISCUSSION

The model shows the combined effect of all variables in influencing the entrepreneurial intention where the attitude towards entrepreneurship (0.51) as a standardized coefficient value and the regression value of 0.61. While subjective norms with the standardized coefficient value of 0.64 and the regression value of 0.46 and perceived behavioural intention with standardized coefficient value of 0.69 and a regression value of 0.51 that partly moderate the relationship. This is in line with the variable, that is, gender that acts as the moderator in this relationship.

The direct effect of three sub-dimensions such as attitude towards entrepreneurship, subjective norms and perceived behavioural control on entrepreneurial intention



**Figure 3.** Standardized structural model for the determinants of entrepreneurship intention.

through the moderator, that is gender are positive as well as significant and thus validating partial moderated mediation effect. The results confirm that gender has a great influence on the determinants of entrepreneurial attitude among graduate students from the selected Universities. The results revealed that gender has a strong positive effect on entrepreneurial intention.

It could be seen from the above table that the indirect effect of attitude on entrepreneurial intention through gender as a moderating variable was high. While subjective norm, on entrepreneurial intention through gender as a moderating variable was showcasing a medium positive effect on entrepreneurial intention. However, the path perceived behavioural intention on entrepreneurial intention through gender as a moderating variable was showcasing a low positive effect on entrepreneurial intention.

After the examination of the significance of parameter estimate and the resultant model fit, the indirect effects are cross-examined through this S.E.M with the parallel moderation effect. The bootstrapping results infer that demographic variable i.e., gender plays a very important role in entrepreneurial intention.

# Conclusion

1. The influential characters of three individual constructs in determining the entrepreneurial intention, the attitude towards entrepreneurship (0.86) followed by the perceived behavioural control (0.78) and subjective norms (0.73) have emerged as the key determinants, as per the overall results are shown in the path diagram. This shows that the three factors influence Entrepreneurial intention at a

different degree. This supports the study of Hair et al. (2010) who say that the CFA model exhibits that the standardized factor loadings should be 0.50 or higher.

- 2. The result also confirmed that gender has a great influence on the determinants of entrepreneurial. This is in line with the variable, the gender that acts as the moderator in this relationship. The model in Table 2 shows the combined effect of all variables in influencing the entrepreneurial intention where the attitude towards entrepreneurship (0.51) as a standardized coefficient value and the regression value of 0.61. While subjective norms with the standardized coefficient value of 0.64 and the regression value of 0.46 and perceived behavioural intention with standardized coefficient value of 0.69 and a regression value of 0.51 that partly moderate the relationship. The direct effect of three sub-dimensions such as attitude towards entrepreneurship, subjective norms behavioural and perceived control entrepreneurial intention through the moderator, that is, gender are positive as well as significant and thus validating partial moderated mediation effect. This is in support of the study of Karimi et al. (2014) who say that" gender is a fundamental dimension of the socio-cultural environment and can, therefore, be a possible determinant of Entrepreneurial intention". Some schools of thought like (Blanchflower et al., 2001; Crant, 1996; Minniti and Nardone, 2007) are of the view that males are generally more interested in an entrepreneurial career than females. And those males also have a higher desire and intention to start their businesses than females.
- 3. This study also revealed that Perceived Behavioural Control (PBC) has more influence on Entrepreneur Intention than Attitude towards Entrepreneurship (ATE) and Subjective Norms (SNs). This could be seen

in Figure 2, looking at each of the constructs individually in path diagram of attitude towards entrepreneurship developed using standardized co-efficient and squared multiple correlations, ATE 4 play a vital role (0.92) in determining the entrepreneurial intention followed by other variables. Looking at the subjective norm variable individually, SUN 4 plays a determining role in predicting entrepreneurial intention whose standardized co-efficient and squared multiple correlations are 0.89 and 0.61 respectively. On the other hand, perceived behavioural control variable has a greater impact on the entrepreneurial intention whose standardized co-efficient and squared multiple correlations is 0.82 and 0.61 respectively. This assertion is in line with the study of Bandura (1986) who says that; "Self-efficacy is linked to initiating and persisting at behaviour under uncertainty, to setting higher goals, and reducing threat-rigidity and learned helplessness". Thus, entrepreneurial self-efficacy is included in the measure of perceived behavioural control.

#### Recommendations

In line with the conclusions, this paper recommends the following;

- 1. That Nigerian and India schools should give their students from primary to tertiary institutions ample entrepreneurship orientation to enable them to develop the willingness towards entrepreneurship.
- 2. Government of both countries should make entrepreneurship studies compulsory in all their institution to enable those who do not offer the course to do so.
- 3. Gender bias should be discouraged in giving youth empowerment programmes in both countries. A child should be encouraged in any field of choice where she/he has an interest.

# Limitations and future indications

Male respondents were not appropriately represented because of their moderately less percentage in the study which was not representative of the general population. Therefore the findings of the study should be taken with precaution. As far as implications are concerned, it is necessary to mention some of its limitations. The current study conducted once over a period seek for more reliable results later on studies should focus on longitudinal data. A structured questionnaire was used and all variables incorporated at five-point Likert-scale which allows the respondents to tick the options.

Also, the study has focused only on the positive attitudes of the entrepreneurs. Another limitation to this research is the small size of the sample that did not permit generalization; the study was carried out in only

two cities in Nigeria and India respectively; Abuja and Chennai. Future research should focus on the unanswered questions in terms of what factors help in realizing the intention to do business. And others like other key moderators can bring out multiple dimensions to the existing study which will be considered in future research.

#### CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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