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**MODERATING ROLE OF ENTREPRENEURIAL ALERTNESS ON THE RELATIONSHIP
 BETWEEN ATTITUDE, PERCEIVED BEHAVIORAL CONTROL, SUBJECTIVE NORM AND
 ENTREPRENEURIAL INTENTION OF FEMALE GRADUATES IN NORTH WEST NIGERIA.**

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Abstract

This study examines the factors influencing entrepreneurial intentions among female graduates in North-West Nigeria. Specifically, it explores the relationship between entrepreneurial attitude, perceived behavioural control, subjective norm, and entrepreneurial alertness. The study aims to analyse the impact of these characteristics on entrepreneurial intentions and investigate the moderating effect of entrepreneurial alertness based on the Theory of Planned Behaviour. The research sample consists of female youth corps members in Kaduna and Katsina states. Data was acquired through structured questionnaires from a sample size of 250 participants. Utilising Partial Least Squares Structural Equation Modelling (PLS-SEM) for analysis. The study demonstrates a notable and favourable correlation between an individual's entrepreneurial attitude and their perceived behavioural control, which in turn influences their intentions to engage in entrepreneurial activities. However, the subjective norm does not appear to be a major predictor. Entrepreneurial alertness plays a crucial role in influencing the links between attitude and intention, perceived behavioural control and intention, and subjective norm and intention. Suggestions encompass the incorporation of pragmatic entrepreneurial abilities in school, questioning societal preconceptions, and establishing a nurturing environment for female entrepreneurs in the area.

Keywords: Entrepreneurial Alertness, Entrepreneurial Attitude, Perceived Behavioural Control, Subjective Norm, Entrepreneurial Intention.

1. Introduction

Currently, there is a significant global concern about the increasing levels of unemployment and poverty in developing countries. Governments around have responded to this urgent matter by creating laws designed to encourage and incentivize young individuals to adopt entrepreneurship as a way to contribute to the economy. The importance of entrepreneurial endeavours in a developing nation like Nigeria cannot be emphasised enough. These endeavours have the potential to create positive effects that spread throughout the entire economy by creating jobs, improving skills and knowledge, raising living standards, and stimulating economic growth (Ademilua et al., 2020). Kozlinska et al. (2020) assert that entrepreneurs are knowledgeable and skilled professionals in their respective domains, whereas Okolie et al. (2020) emphasise the difficulty

encountered by numerous Nigerian university graduates in obtaining employment due to the curriculum's emphasis on white-collar occupations, which are frequently limited in availability. This situation presents substantial economic and social challenges for the country. Tan et al. (2019) suggest that redirecting the entrepreneurship system could foster a mind-set of entrepreneurial intention, which is increasingly agreed upon. Entrepreneurial intentions, as described by Hueso et al. (2020), typically involve individual resolve, aspiration, and a longing for independence.

The intention has a vital role in determining behaviours and actions, acting as a fundamental connection between considering participation in entrepreneurship and actually being involved in entrepreneurial activities, particularly among students (Bazan et al., 2020). Elnadi and Gheith (2021) defined

intention as a driving force that motivates individuals to engage with their surroundings, indicating a natural inclination to explore, examine, or participate in activities that capture their interest. Therefore, displaying a passion for entrepreneurship is apparent by showing a willingness to invest effort and commitment to advance one's business, being prepared to take on the risks involved, being open to exploring new strategies and methods, having a dedication to living frugally, and having a strong desire for ongoing learning (Hassan et al., 2021).

The study deliberately targeted aspiring female entrepreneurs, motivated by the widely held belief that business is primarily dominated by men. According to Diale and Carrim (2022), previous patterns have shown that entrepreneurship has been predominantly dominated by men, which has discouraged women from participating in the area. The study conducted by Adom and Anambane (2019) emphasises the worldwide shortage of female entrepreneurs, emphasising their untapped capacity for generating employment, fostering innovation, and driving economic expansion. In addition, Gupta et al. (2009) highlighted that women frequently view entrepreneurship as a predominantly male activity, and cultural norms, particularly those concerning parenthood, discourage many women from contemplating entrepreneurial pursuits. Xie and Wu (2021) argue that greater female participation in business has the potential to bring about economic self-sufficiency, which in turn can contribute to geopolitical stability and global concord. Rashid and Ratten (2020) argue that the slow progress of a nation's development is strongly connected to the inadequate focus on women's entrepreneurship.

The research conducted by Diale and Carrim (2022) reveals that women have remarkable entrepreneurial aptitude when they participate in entrepreneurship. The primary issue, as highlighted by Diale and Carrim (2022), is not the ability of women to function as entrepreneurs, but rather the lack of women in entrepreneurial positions. The widespread recognition of the intricate connection between economic development and the active participation of women in all aspects of life has led to a strong need for increasing female involvement in entrepreneurship (Adefare et al., 2024). The dearth of female entrepreneurs, namely in northern Nigeria (Shallangwa, 2022), implies that promoting a significant rise in the number of female entrepreneurs could stimulate economic growth in the region. Across the world, enterprises run by women have frequently shown remarkable success, highlighting the potential influence of more female entrepreneurial involvement (Al-Kwafi et al., 2019).

Nwachukwu et al. (2021) underscored the imperative of a greater representation of female entrepreneurs in Nigeria, highlighting their potential to significantly contribute to economic growth, bolster international trade, and provide significant employment prospects. Ukwueze (2022) emphasised that Nigerian women should consider entrepreneurship as a means to supplement their income and provide for their family. This is due to the recognition that depending solely on one source of income may not be enough. However, Diale and Carrim (2022) emphasised the widespread tendency to underestimate and ignore female entrepreneurs in Nigeria. They found that female entrepreneurs often feel inferior to their male counterparts, which may discourage them from pursuing entrepreneurship.

Various factors within the specific context of female graduates in North-West Nigeria have the potential to greatly enhance their inclination towards entrepreneurship. The entrepreneurial attitude, which refers to the assessment of entrepreneurship as either good or negative, can significantly influence individuals' tendency towards engaging in entrepreneurial activities (Mahfud et al., 2020). Soomro et al. (2020) found that having a positive attitude towards entrepreneurship increases the probability of participating in entrepreneurial activities. Furthermore, perceived behavioural control, which represents an individual's confidence in their capacity to effectively engage in entrepreneurial endeavours, has significant influence (Vamvaka et al., 2020). According to Shah et al. (2020), increasing self-efficacy and confidence in overcoming the difficulties of entrepreneurship can increase the probability of female graduates choosing entrepreneurial careers. In addition, subjective norm, which encompasses perceived societal pressures and expectations, plays a role in the decision-making process (Wijayati et al., 2021). According to Villanueva-Flores et al. (2023), providing positive societal encouragement and support for female entrepreneurship can serve as catalysts, motivating these graduates to actively contemplate and pursue entrepreneurial endeavours. This, in turn, enhances their entrepreneurial intentions in the North-West region of Nigeria. Therefore, this study examined how attitude, perceived behavioural control, and subjective norms influence the entrepreneurial intention of female graduates in North-West, Nigeria.

Several studies have shown that attitude, subjective norm, and perceived behavioural control have a positive and significant impact on entrepreneurial intentions (Wijayati et al., 2021; Soomro et al., 2020, Mahfud et al., 2020). However, other researchers have reported conflicting findings (Su et al., 2021; Baptista et al., 2017; Nguyen, 2018;

Mohammed et al., 2018; Naushad, 2018; Usman & Yennita, 2019). Several research have found that persons with lower levels of entrepreneurial alertness typically lack the necessary self-assurance to start their own firms (Anjum et al., 2021; Bahrudden et al., 2021). In their study, Mohd et al. (2021) emphasised the necessity of conducting additional research on entrepreneurial alertness, indicating its potential as a moderating variable in similar studies. Tang et al. (2021) and Jiatong et al. (2021) proposed the incorporation of moderators to address discrepancies in the literature. Despite the suggestion made by Mohd et al. (2019), no empirical study has investigated the moderating impact of entrepreneurial alertness on the connections between attitude, subjective norm, perceived behavioural control, and entrepreneurial intention, based on the existing literature available to the researcher. Consequently, there is a scarcity of information in the literature. This study aimed to investigate the moderating effect of entrepreneurial alertness on the link between attitude, perceived behavioural control, subjective norm, and entrepreneurial intention among female graduates in North-West Nigeria, in order to address the existing knowledge gap.

2. Literature Review

2.1 Theoretical Framework

The study is based on the Theory of Planned Behaviour (TPB), which was proposed by Ajzen in 1991. The Theory of Planned Behaviour (TPB) asserts that individual intentions play a crucial role in predicting planned behaviours. These intentions are impacted by three primary factors: Attitude, Subjective Norm, and Perceived Behavioural Control (Ulker-Demirel & Ciftci, 2020). Attitude is the manifestation of an individual's favourable or unfavourable assessment of participating in a specific behaviour. Subjective norm refers to the felt social pressure and expectations surrounding whether individuals should participate in a given behaviour. Felt Behavioural Control, on the other hand, relates to the perceived level of ease or difficulty in doing the behaviour (La Barbera & Ajzen, 2020).

Within the scope of this study, the Theory of Planned Behaviour (TPB) provides a thorough framework for comprehending the various elements that impact the Entrepreneurial Intentions of female graduates in the North-West region of Nigeria. Attitude significantly influences individuals' predisposition towards entrepreneurship, indicating their favourable or unfavourable assessments of participating in entrepreneurial endeavours (Shi et al., 2020). Subjective Norm examines the societal norms and pressures associated with female entrepreneurship,

highlighting the impact of external influences on their intentions (Lim et al., 2021). According to Yasir et al. (2021), Perceived Behavioural Control is very important because it indicates the level of confidence and perceived capability of female graduates to start and maintain entrepreneurial operations in a difficult environment.

This study intends to contribute to the existing research on the relationship between Attitude, Subjective Norm, Perceived Behavioural Control, and Entrepreneurial Intentions by examining the moderating role of entrepreneurial alertness. Previous studies have shown conflicting results on this topic. The adaptability of the TPB enables the examination of supplementary factors that could impact the interactions within the framework. The study aims to improve the explanatory capability of the Theory of Planned Behaviour (TPB) by considering Entrepreneurial Alertness as a potential moderator. It focuses on female graduates in North-West Nigeria to gain a better understanding of the factors that influence their entrepreneurial ambitions.

2.2 Conceptual Review

Entrepreneurial Intention

Entrepreneurial Intention is a significant concept in the field of entrepreneurship study. It represents an individual's deliberate mindset and desire to start a new business or introduce innovative practices in an existing organisation (Barba-Sánchez et al., 2022). This concept is based on the Theory of Planned Behaviour (Ajzen, 1991), which suggests that an individual's intention directly influences their behaviour. Ajzen (1991) posits that intention is shaped by three main factors: attitude, subjective norm, and perceived behavioural control. Alshebami et al. (2020) argue that Entrepreneurial Intention is essential for comprehending individuals' inclination towards entrepreneurship and acts as a preliminary factor for actual entrepreneurial activity. The study conducted by Chien-Chi et al. (2020) highlights the importance of having strong entrepreneurial intentions. It indicates that there is a favourable relationship between having a strong intention and achieving better results in entrepreneurial activities.

Entrepreneurial Attitude

The Theory of Planned Behaviour (TPB), founded by Icek Ajzen in 1991, includes the concept of Entrepreneurial Attitude as a key element. TPB is a psychological framework used to analyse and forecast human behaviour. Within the framework of the TPB, attitude pertains to an individual's comprehensive assessment, encompassing both positive and negative aspects, of participating in a certain behaviour (Al-

Mamary et al., 2020). It includes personal emotions and beliefs linked to the behaviour and represents the individual's evaluation of whether performing the activity is desirable or undesirable (Mykolenko et al., 2021). Ajzen argues that having a more positive attitude towards a specific behaviour enhances the chances of developing a favourable intention, which then impacts the actual execution of that behaviour. Al-Mamary and Alraja (2022) found that attitudes under the Theory of Planned Behaviour (TPB) are shaped by various beliefs and evaluations associated with the specific behaviour being considered. These beliefs consist of behavioural beliefs, which refer to the perceived results or consequences of the behaviour, and outcome evaluations, which are subjective assessments of the desirability of those outcomes (Anwar et al., 2021). The intensity and polarity of these convictions contribute to the development of an individual's overall attitude towards the conduct. Regarding entrepreneurial ambitions, an individual's attitude can be influenced by the perceived advantages of initiating a business, such as financial prosperity, personal fulfilment, or society impact (Mykolenko et al., 2021).

Perceived Behavioural Control (PBC)

Perceived Behavioural Control (PBC) is a fundamental notion in the Theory of Planned Behaviour (TPB), which was formulated by Icek Ajzen in 1991. PBC, as defined by Vamvaka et al. (2020), pertains to an individual's personal impression of the level of ease or difficulty involved in carrying out a particular activity. As stated by Boubker et al. (2021), self-efficacy refers to an individual's confidence in their ability to effectively carry out a specific action, as well as their perception of control over the resources, opportunities, and external circumstances that can impact that behaviour. PBC essentially represents an individual's perception of the degree of control they possess over a specific action. Within the TPB paradigm, PBC is influenced by two main factors: control beliefs and perceived power (Thelken & de Jong, 2020). Control beliefs refer to an individual's evaluation of the elements that might either support or impede the performance of a behaviour. These considerations include internal aspects such as skills and external aspects such as environmental conditions (Cop et al., 2020). Perceived power, in contrast, pertains to the perceived impact of these circumstances on an individual's capacity to carry out a specific behaviour (Thelken & de Jong, 2020). The combination of these elements contributes to the development of PBC, which reflects the degree to which individuals perceive themselves as capable and in control of participating in a specific behaviour (Vamvaka et al., 2020).

Subjective Norms

Subjective norms are a crucial element in the Theory of Planned Behaviour (TPB), which was formulated by Icek Ajzen in 1991. Subjective norms, within the framework of TPB, pertain to the individual's perception of societal pressures and expectations about the execution or avoidance of a specific behaviour (Santos & Liguori, 2019). As stated by Igwe et al. (2020), this factor encompasses the impact of significant individuals, such as friends, family, coworkers, or society norms, on an individual's decision-making process. Subjective norms emphasise the importance of social variables in influencing intentions and behaviours. Subjective norms in the Theory of Planned Behaviour (TPB) are influenced by normative views and the desire to conform (Mawardi & Baihaqi, 2020). Normative beliefs refer to an individual's understanding of the expectations of important people regarding a specific behaviour. These beliefs reflect the perceived social norms associated with that behaviour (Santos & Liguori, 2019). Compliance motivation refers to an individual's inclination to adhere to perceived social standards and the significance they place on achieving the expectations of others (Contreras-Barraza et al., 2021). Regarding entrepreneurial ambitions, Subjective Norms may be shaped by societal perceptions of entrepreneurship, familial anticipations, or the viewpoints of influential peers (Mawardi & Baihaqi, 2020).

Entrepreneurial Alertness

Entrepreneurial alertness is a concept that extends beyond the conventional elements of the Theory of Planned Behaviour (TPB) and is essential for comprehending the process of entrepreneurial decision-making. Entrepreneurial alertness, a term introduced by Kirzner (1973), pertains to an individual's capacity to recognise and discern opportunities in their surroundings that may go unnoticed by others. Lanivich et al. (2022) state that it signifies an increased consciousness and receptiveness to possible business prospects, which entails continuously examining the external surroundings for gaps, requirements, or inventive chances. Entrepreneurial alertness, in contrast to other parts of TPB, specifically refers to an individual's cognitive ability to identify and take advantage of entrepreneurial possibilities (Chavoushi et al., 2020). Li et al. (2020) argue that Entrepreneurial alertness is commonly regarded as an important factor that precedes entrepreneurial purpose and subsequent conduct. Individuals that possess a heightened degree of Entrepreneurial alertness are more inclined to

recognise opportunities, assess their viability, and form intentions to engage in entrepreneurial endeavours (Pirhadi et al., 2021). This concept is in line with the notion that entrepreneurship requires a proactive and innovative mind-set, where individuals actively seek and capitalise on possibilities instead of just reacting to current circumstances (Lanivich et al., 2022).

TPB generally emphasises internal elements such as attitudes, subjective norms, and perceived behavioural control. In contrast, entrepreneurial alertness adds an external and cognitive aspect to the process of making entrepreneurial decisions. Awwad and Al-Aseer (2021) highlight the significance of information processing, perception, and cognitive ability in identifying and understanding entrepreneurial opportunities. Within the framework of Entrepreneurial intention, individuals who possess heightened Entrepreneurial alertness are more likely to have a stronger inclination to participate in entrepreneurial activities. This is because they have the capability to detect and assess opportunities with greater effectiveness.

2.3 Empirical Review

Attitude and Entrepreneurial Intention

Chuah et al. (2016), Mohammed, Fethi and Djaoued (2017), Ayalew and Zeleke (2018), Usman and Yennita (2019) did a study on the factors that affect Entrepreneurial intentions. They utilised the antecedents of the theory of planned behaviour to examine the Entrepreneurial intentions of students. The study's findings revealed that attitude exerts a favourable and substantial impact on entrepreneurial inclination. Nevertheless, Koerkamp (2015), Baptista et al. (2017), Nguyen (2017), Zahid and Haji Din (2019), and Gultom et al. (2020) did research on the relationship between attitude and entrepreneurial intention among students. Their findings concluded that Attitude does not have a substantial impact on the entrepreneurial intention of students.

Perceived Behavioural Control and Entrepreneurial Intention

Chuah et al. (2016), Mamun et al. (2017), and Sen et al. (2018) did a study on the entrepreneurial intention of university students. The study revealed that perceived behavioural control has a significant impact on entrepreneurial intention. Mohammed et al. (2017), David and Lawal (2018), and Usman and Yennita (2019) did a study on the Theory of Planned Behaviour (TPB) to determine the factors that influence the entrepreneurial intentions of students. The findings indicated that there is not a statistically significant

correlation between perceived behavioural control and entrepreneurial intentions.

Subjective Norm and Entrepreneurial Intention:

Mohammed, Fethi, and Djaoued (2017), Mamun et al. (2017), and Gultom et al. (2020) did a study on the entrepreneurial intention of university students. The study revealed that subjective norm has a substantial impact on entrepreneurial inclination. Nevertheless, Baptista et al. (2017), Al-mamary et al. (2020), and Su et al. (2021) did a study on the theory of planned behaviour to determine the impact of entrepreneurial intention on students. The study's findings indicate that there is no significant correlation between subjective norm and entrepreneurial intention.

Moderating Role of Entrepreneurial Alertness

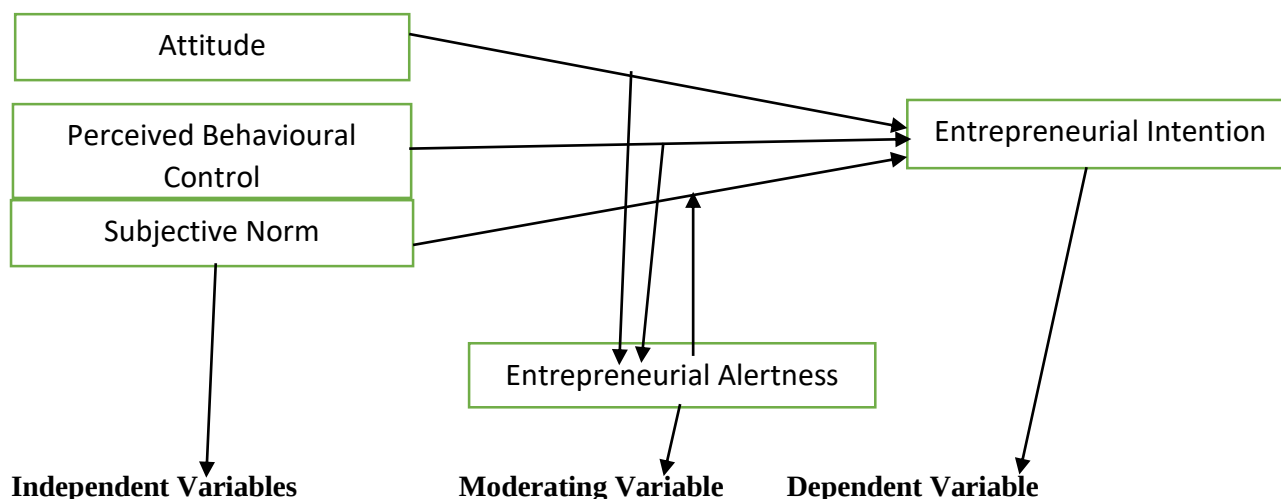
The significance of Entrepreneurial Alertness in moderating cognitive elements within the Theory of Planned Behaviour (TPB) paradigm is crucial for understanding relationship dynamics. Entrepreneurial alertness refers to an individual's sharp perception of opportunities in their surroundings. It can play a moderating role in the context of entrepreneurial intentions, as stated by Heinemann et al. (2022). Kirzner's (1973) research indicates that persons with greater degrees of entrepreneurial alertness have a clear edge in identifying and exploiting possibilities, which could potentially impact the conventional elements of TPB. Entrepreneurial alertness can influence the connection between mindset and entrepreneurial intentions. This is because persons who possess a heightened feeling of vigilance may be more perceptive to the favourable features of entrepreneurship, such as the possibility for creativity and monetary achievement (Ugwueze et al., 2022). Consequently, their favourable attitudes towards entrepreneurial activities may be strengthened and intensified, thereby raising the probability of developing stronger entrepreneurial intentions (Urban, 2020). Entrepreneurial alertness can also moderate the link between perceived behavioural control and entrepreneurial intentions. People who possess a higher level of entrepreneurial alertness are more likely to perceive a better level of control over the intricate and unpredictable parts of business. The increased sense of control may amplify the favourable influence of perceived behavioural control on entrepreneurial intentions, as these individuals may experience greater self-assurance and competence in dealing with the difficulties related to initiating and overseeing a business.

Gaining a thorough understanding of the moderating effect of entrepreneurial alertness is crucial for a comprehensive comprehension of the

entrepreneurial decision-making process. It introduces an external cognitive aspect that can influence and enhance the effects of the traditional components of TPB. The acknowledgement of entrepreneurial alertness as a moderator provides valuable insights for

educators, policymakers, and practitioners. It highlights the significance of developing cognitive capacities and environmental scanning skills in individuals to boost their entrepreneurial intentions within the TPB framework.

Research Model



From the literature review, it is seen that the independent variables in the study are attitude, perceived behavioural control, and subjective norm, while the dependent variable in the study is entrepreneurial intention. The moderating variable is entrepreneurial alertness. Thus, the study hypothesised that:

H₁: Attitude has a significant effect on entrepreneurial intention of female graduates in North-West, Nigeria.

H₂: Perceived behavioural control has a significant effect on entrepreneurial intention of female graduates in North-West, Nigeria.

H₃: Subjective norm has a significant effect on entrepreneurial intention of female graduates in North-West, Nigeria.

H₄: Entrepreneurial alertness significantly moderates the relationship between attitude and the entrepreneurial intention of female graduates in North-West, Nigeria.

H₅: Entrepreneurial alertness significantly moderates the relationship between perceived behavioural control and the entrepreneurial intention of female graduates in North-West, Nigeria.

H₆: Entrepreneurial alertness significantly moderates the relationship between subjective norm and the entrepreneurial intention of female graduates in North-West, Nigeria.

3. Methodology

The research adopted a cross-sectional methodology, precluding the feasibility of undertaking a longitudinal study. The impractical nature of longitudinal surveys, acknowledged for their prolonged time commitments as discussed by Kothari and Garg (2014), prompted the preference for cross-sectional surveys as a more practical substitute. The study focused on the population of female youth corps members stationed in Kaduna state and Katsina state, Nigeria. Despite efforts to obtain an official figure for the total number of female corps members in these states, the researcher encountered challenges in accessing the precise data. Consequently, due to the lack of an official count, a pragmatic decision was made to use a sample size of 250 female corps members for the study. This sample size was considered a representative and feasible number for the research, allowing for a comprehensive exploration of entrepreneurial intentions among this specific demographic within the constraints of the study's scope and resources.

The study utilised copies of questionnaire based on items previously applied by researchers to examine the variables of the study. Specifically, four items were used to measure entrepreneurial attitude taken from the study of Miao (2012). On the other hand, perceived behavioural control was measured using the five item measurement scale of Kraft et al. (2005). Similarly, subjective norms was measured with the four items developed by Kraft et al. (2005). Furthermore, four items were used to measure

entrepreneurial alertness based on the five items developed by Tang et al (2012). Finally, entrepreneurial intention was measured using the six items developed by Linan and Chen (2009).

Preliminary assessments were carried out to guarantee the durability and accuracy of the data intended for analysis. The evaluation involved conducting composite reliability and Average Variance Extracted (AVE) tests. According to Garson (2016), it is considered acceptable for the composite reliability coefficient to be 0.7 or higher and for the

AVE coefficient to be 0.5 or higher as standards for reliability and validity. The study hypotheses were tested at a significance level of 5%. More precisely, if the P value is less than 0.5, it would justify rejecting the null hypothesis. Conversely, if the P value is equal to or greater than 0.5, it would support retaining the null hypothesis. The study's conclusions were ensured to be accurate and credible through the implementation of rigorous testing standards.

4. Results and Discussion

Table 1: Construct Reliability and Validity

Construct	Items	Loadings	AVE	CR
Entrepreneurial Attitude	ATT1	0.796	0.695	0.865
	ATT2	0.879		
	ATT3	0.809		
	ATT4	0.847		
Perceived Behavioural Control	PBC2	0.833	0.785	0.913
	PBC3	0.915		
	PBC4	0.902		
	PBC5	0.892		
Subjective Norm	SN1	0.787	0.695	0.864
	SN2	0.867		
	SN3	0.884		
	SN4	0.792		
Entrepreneurial Alertness	ETA1	0.780	0.647	0.875
	ETA2	0.771		
	ETA3	0.831		
	ETA4	0.880		
	ETA5	0.775		
Entrepreneurial Intention	EI1	0.780	0.691	0.915
	EI2	0.805		
	EI3	0.854		
	EI4	0.854		
	EI5	0.864		
	EI6	0.825		

NOTE: No items were deleted from the data set, as they all met the minimum requirements. AVE stands for Average Variance Extracted while CR represents Composite Reliability. PBC1 was deleted to poor item loading.

Hair et al. (2019) emphasize the significance of loadings exceeding the 0.7 threshold. As evident in Table 1, all items exhibit loadings surpassing the 0.7 criterion, indicating a consistent and robust association with their respective constructs. Table 1 further demonstrates that each construct possesses a composite reliability coefficient exceeding 0.7, thereby satisfying the prescribed minimum threshold for composite

reliability (Tabachnick & Fidell, 2013). Furthermore, all constructs meet the stipulated minimum requirement for average variance extracted (AVE) of 0.5, as outlined by Tabachnick and Fidell (2013). Consequently, it can be inferred that the evidence strongly supports convergent validity. The assessment of discriminant validity, based on the data in Table 2, was also conducted.

Table 2: Discriminant Validity using Heterotrait-monotrait Ratio

	1	2	3	4	5
1. Entrepreneurial Intention					
2. Entrepreneurial Alertness	0.740				
3. Entrepreneurial Attitude	0.691	0.666			
4. Perceive Behavioural Control	0.750	0.821	0.693		
5. Subjective Norm	0.611	0.674	0.635	0.644	

The results obtained from the HTMT (Heterotrait-Monotrait) analysis indicate that the correlations between different constructs (off-diagonal components) are notably lower compared to the correlations within the same constructs (diagonal elements). Specifically, the HTMT values for each pair of attributes fall significantly below the recommended threshold of 0.85, as advocated by Hair et al. (2019). This suggests that each construct exhibits stronger

associations with its own indicators than with indicators of other constructs, confirming the presence of discriminant validity. The diverse assessment methods employed to scrutinize these constructs underscore that they measure distinct underlying concepts in the research, further reinforcing the notion of discriminant validity.

Test of Hypotheses

Table 3: Path Coefficient

Hypotheses	Beta Value	Std. Error	T Stat	P Value	Decision
H ₁ : ATT->EI	0.353	0.06	5.786	0.00	Supported
H ₂ : PBC->EI	0.310	0.07	4.410	0.00	Supported
H ₃ : SN->EI	0.081	0.14	0.573	0.57	Not Supported
H ₄ : ATT*ETA->EI	0.431	0.09	4.768	0.00	Supported
H ₅ : PBC*ETA->EI	0.396	0.06	6.551	0.00	Supported
H ₆ : SN*ETA->EI	0.308	0.10	3.077	0.00	Supported

It is seen on Table 3 that there exists a positive and significant relationship between Entrepreneurial Attitude (ATT) and the Entrepreneurial Intention (EI) of female graduates in the study area. The data presented demonstrates a statistically significant relationship between the variables at less than 1% significant level ($\beta = 0.353$, T Stat = 5.786, $P < 0.01$). As a result, hypothesis 1 that states that attitude has a significant effect on entrepreneurial intention of female graduates in North-West, Nigeria is supported. Similarly, on Table 3, it is seen that Perceived Behavioural Control (PBC) does exert positive and significant influence on the Entrepreneurial Intention (EI) of female graduates in North-West, Nigeria ($\beta = 0.310$, T Stat = 4.410, $P < 0.01$). This means that the study does support the second hypothesis of the study that states that perceived behavioural control has a significant effect on entrepreneurial intention of female graduates in North-West, Nigeria. On the contrary, based on the empirical analysis of the study, Subjective Norm (SN) is not a significant predictor of entrepreneurial intention of female graduates in the study area as $P \text{ value} > 0.05$ ($\beta = 0.081$, T Stat = 0.573, $p > 0.05$). Therefore, the hypothesis three of the study which states that subjective norm has a significant effect on entrepreneurial intention of female graduates in North-West, Nigeria is not supported. For moderating relationships, the empirical analysis on

Table 3 shows that Entrepreneurial Alertness (ETA) significantly moderates the relationship between Entrepreneurial Attitude (ATT) and Entrepreneurial Intention (EI) ($\beta = 0.431$, T Stat = 4.768, $P < 0.01$). This means that the study supports hypothesis four of the study that states that entrepreneurial alertness significantly moderates the relationship between attitude and the entrepreneurial intention of female graduates in the study area. North-West, Nigeria. Similarly, Entrepreneurial Alertness (ETA) significantly moderates the relationship between Perceived Behavioural Control (PBC) and Entrepreneurial Intention (EI) ($\beta = 0.396$, T Stat = 6.551, $P < 0.01$). Hence, hypothesis five of the study that states that entrepreneurial alertness significantly moderates the relationship between perceived behavioural control and the entrepreneurial intention of female graduates in the study area is supported. Finally, based on empirical analysis, it is seen that Entrepreneurial Alertness (ETA) significantly moderates the relationship between Subjective Norm (SN) and Entrepreneurial Intention (EI) ($\beta = 0.308$, T Stat = 3.077, $P < 0.01$). Hence, hypothesis six of the study that states that entrepreneurial alertness significantly moderates the relationship between subjective norm and the entrepreneurial intention of female graduates in the study area is supported.

Table 4: R Square

Construct	R Square
Entrepreneurial Intention	0.596

The R-square value of 0.596 in the study signifies that approximately 59.6% of the variability observed in the dependent variable can be explained by the independent variables included in the model. In other words, the set of variables under consideration has a substantial explanatory power, capturing a significant proportion of the variance in the outcome variable.

Discussion of Findings

The study reveals a noteworthy and positive correlation between Entrepreneurial Attitude (ATT) and the Entrepreneurial Intention (EI) of female graduates in the examined region. The presented data showcases a statistically significant relationship between these variables at a significance level of less than 1% ($\beta = 0.353$, $T \text{ Stat} = 5.786$, $P < 0.01$). This confirms the backing for Hypothesis 1, which states that attitude has a major impact on the entrepreneurial intention of female graduates in North-West, Nigeria. The discovered correlation implies that when female graduates develop a more optimistic and advantageous entrepreneurial attitude, their predisposition towards entrepreneurial pursuits increases. This discovery is consistent with the conceptual framework of the theory of planned behaviour, which highlights the significant impact of attitude on forming behavioural intentions. Prior research has also emphasised the crucial connection between a positive attitude and increased entrepreneurial intentions (refer to Mahfud et al., 2020; Ferreira et al., 2022), further strengthening the reliability of this observed relationship specifically among female graduates in North-West Nigeria. The study found a positive correlation between Entrepreneurial Attitude (ATT) and Entrepreneurial Intention (EI) among female graduates in North-West Nigeria. Additionally, the analysis in Table 3 revealed that Entrepreneurial Alertness (ETA) has a significant moderating effect on the relationship between ATT and EI ($\beta = 0.431$, $T \text{ Stat} = 4.768$, $P < 0.01$). This confirms the evidence supporting Hypothesis 4, suggesting that entrepreneurial alertness has a substantial moderating effect on the relationship between Attitude and entrepreneurial intention in the research area. The results indicate that the influence of a favourable entrepreneurial attitude on intention is strengthened when individuals demonstrate elevated levels of entrepreneurial alertness. This supports the idea that people who are more aware of entrepreneurial prospects are more likely to turn their favourable thoughts into actual plans to participate in entrepreneurial activity. This finding aligns with prior

studies that highlight the significance of cognitive elements, such as entrepreneurial alertness, in shaping the connection between attitude and intention (Mahfud et al., 2020; Ferreira et al., 2022).

The findings presented in Table 3 illuminate a substantial and positive impact of Perceived Behavioral Control (PBC) on the Entrepreneurial Intention (EI) of female graduates in North-West Nigeria ($\beta = 0.310$, $T \text{ Stat} = 4.410$, $P < 0.01$). This outcome affirms the validity of Hypothesis 2, positing that perceived behavioral control significantly influences the Entrepreneurial Intention of female graduates in the studied region. The study underscores that as female graduates perceive a greater level of control over engaging in entrepreneurial activities, their intentions to pursue such endeavours are correspondingly strengthened. Concurrently, the analysis also reveals that Entrepreneurial Alertness (ETA) serves as a significant moderator in the relationship between Perceived Behavioral Control (PBC) and Entrepreneurial Intention (EI) ($\beta = 0.396$, $T \text{ Stat} = 6.551$, $P < 0.01$). This supports Hypothesis 5, indicating that the impact of perceived behavioral control on entrepreneurial intention is further augmented when individuals exhibit higher levels of Entrepreneurial Alertness. The interconnected influence of perceived behavioral control and entrepreneurial alertness highlights the interplay between cognitive factors and perceived control in shaping the entrepreneurial intentions of female graduates in North-West Nigeria. These results align with the theoretical underpinnings of the study (See Su et al. 2019; Gieure et al., 2020) and contribute to a more comprehensive understanding of the intricate dynamics influencing entrepreneurial decision-making among female graduates in the region.

Contrary to expectations, the empirical analysis indicates that Subjective Norm (SN) does not emerge as a significant predictor of the entrepreneurial intention of female graduates in the study area, evident from the P value exceeding 0.05 ($\beta = 0.081$, $T \text{ Stat} = 0.573$, $p > 0.05$). Consequently, Hypothesis 3, asserting that subjective norm significantly influences the entrepreneurial intention of female graduates in North-West Nigeria, is not supported by the study's findings. However, the analysis unveils a significant moderating role of Entrepreneurial Alertness (ETA) in the relationship between Subjective Norm (SN) and Entrepreneurial Intention (EI) ($\beta = 0.308$, $T \text{ Stat} = 3.077$, $P < 0.01$). Thus, Hypothesis 6, positing that entrepreneurial alertness significantly moderates the

relationship between subjective norm and the entrepreneurial intention of female graduates in the study area, garners support. This suggests that while subjective norm alone may not be a direct influencer of entrepreneurial intention, the interplay of entrepreneurial alertness amplifies its impact, emphasizing the intricate role of cognitive factors in shaping the relationship between social influences and entrepreneurial intentions among female graduates in North-West Nigeria.

5. Conclusion and Recommendations

Conclusively, this study examined the entrepreneurial environment among female graduates in North-West Nigeria, exploring how entrepreneurial attitude, perceived behavioural control, subjective norm, and entrepreneurial alertness influence entrepreneurial intentions. The results confirm that entrepreneurial attitude and perceived behavioural control had a strong positive impact on entrepreneurial intentions. However, subjective norm did not show any significant predictive power. Nevertheless, the influence of entrepreneurial alertness in strengthening the effect of both attitude and perceived behavioural control on intentions was apparent. The findings of this study provide useful understanding of the complex dynamics of entrepreneurial decision-making among female graduates in the region. They highlight the significance of cognitive elements and personal agency in the process of entrepreneurship. These findings have important implications for educational programmes, policy formulations, and efforts that aim to create a favourable climate for female entrepreneurship in North-West Nigeria.

Based on the study's results, there are various specific recommendations that arise to support and encourage female entrepreneurship among graduates in North-West Nigeria. First and foremost, educational institutions should give priority to incorporating actual

entrepreneurship skills within the academic curriculum. This involves cultivating a favourable mind-set towards entrepreneurship and offering practical opportunities that improve one's perception of their ability to take action. The curriculum should also prioritise the significance of entrepreneurial alertness, giving female graduates with the cognitive capacity to recognise and take advantage of possibilities in the ever-changing business environment.

In order to counter the lack of significant impact of subjective norms on entrepreneurial intentions, it is necessary to implement awareness programmes and initiatives that aim to fight the societal stereotypes associated with female entrepreneurship. The collaboration between educational institutions, government authorities, and non-governmental organisations can have a crucial impact on changing society perceptions. By focusing on the achievements of women entrepreneurs and showcasing the beneficial influence they have on the economy, we can help break down prevailing preconceptions and foster a more encouraging and supportive atmosphere.

Moreover, policymakers should prioritise the establishment of a supportive environment for female entrepreneurs through the implementation of laws that explicitly target the distinct obstacles encountered by women in the business sector. This encompasses granting access to financial resources, implementing mentorship programmes, and cultivating networks that enable the exchange of knowledge and collaboration. Furthermore, it is imperative for support programmes to acknowledge and commend the accomplishments of female entrepreneurs, as they can serve as powerful sources of encouragement to encourage aspiring female graduates to embark on entrepreneurial endeavours.

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