

## GENDER-ROLE ORIENTATION AND SELF EFFICACY AS CORRELATES OF ENTREPRENEURIAL INTENTION

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### ABSTRACT

**T**he study investigated gender-role orientation and self-efficacy as correlates of entrepreneurial intentions. A total of 350 participated in the study, comprising of two hundred and six male and one hundred and forty-four female students of Enugu State University of Science and Technology, Enugu, Nigeria. Participants responded to gender-role inventory, self efficacy scale and entrepreneurial intention questionnaire. It was hypothesised that gender-role orientation and self efficacy will not be significantly related to entrepreneurial intention. One-way analysis of variance and Pearson correlation statistics were used to analysis the data. The results showed that significant difference existed among the gender-role orientation dimensions  $F(350)=19.42, P<.01$ , and self efficacy relates significantly with entrepreneurial intentions,  $r(350)=0.34, P<.01$ . The implications of the study were discussed and suggestions provided for further studies.

**Keywords:** Self efficacy, gender-role orientation, entrepreneurial intention.

## INTRODUCTION

There has been growing interest in undertaking and intensifying actions to promote and support the idea of entrepreneurship as an attractive alternative to wage unemployment among students around the globe (Gelard & Saleh, 2010). Nigeria as a nation is experiencing great economic challenges that include unemployment of her teeming graduates, which presents the need for entrepreneurial skills to be acquired to curb this menace. (Nwankwo 2011). Considerable attention is being devoted to understanding the determinants of an individual's decision to engage in entrepreneurial activities (Bird, 1988; Krueger & Sokol, 1982; Seibert & Lumpkin, 2010).

Today, entrepreneurship has become one of the most dynamic forces in developing nations and reinforces world's economic growth. According to Romer (1994), entrepreneurial activities are seen as engine of a nation's long-term economic growth. Recent research literatures have focused on the role of intentions within the entrepreneurial process (Krueger & Carsrad, 1993). Intentions and the intention formation process are therefore considered within the entrepreneurship literature. The link between intentions and behaviour is very well explained in psychology. Intentions reflect the motivational factors that influence behaviour and are a reliable indicator of how hard a person is willing to try and how much effort he/she makes to perform a behaviour (Ajzen, 1991). As a result, intentions are widely seen as powerful predictors of behaviour, especially in the case of purposive, planned, and goal oriented behaviour (Bagozzi, Baumgartner & Yi, 1989).

Entrepreneurial behaviour is typically seen as a purposive behaviour directed towards specific entrepreneurial event, such as the creation of a new company or new products. These intentions are seen as central in understanding the entrepreneurial intents developed from both rational and intuitive thinking, which in turn are affected by the entrepreneur's social, political, and economic context, and his/her perceived history, current personality, and abilities (Mair & Noboa, 2003).

Entrepreneurial intentions are defined as intentions toward starting a high-growth business (Venkataraman, Van de Ven, Buckeye & Hudson, 199, Hmieleski & Corbett, 2006). They adopted a high growth perspective for three reasons. The primary rationale being that high growth start-ups operate in turbulent environments (Venkataraman et al, 1990). This type of environment is characterized by factors such as time, pressure and novelty, which demand frequent improvisation as a requirement for survival. A secondary reason is that high – growth ventures are primary creators of new jobs (Reynolds, Bugrave, Autio, Cox & Hay, 2002). Thus, new knowledge relating to the process of creating high growth ventures is likely to have important –societal implications. Thirdly, small businesses, which are content to maintain the status quo, are fundamentally different from high growth ventures in terms of innovation, strategic orientation, and propensity for bearing risk (Carland, Hoy, Boulton & Carland. 1984). Accordingly, the characteristics of the founders for each type of business (low-growth and high-growth) are likely to be substantially different (Stewart, Watson, Carland & Carland, 1998,).

According to Bird (1988) intentionality can be defined as a state of mind directing a person's attention, experience and action towards a specific goal or a path to achieve something. Therefore, entrepreneurial action can also be classified as an intentional behaviour or intention is a predictor or planned entrepreneurial behaviour (Kniger, 1993). Shapero (1982) indicate that the entrepreneurial intentions streams from the perception of feasibility and desirability of a person and this path is affected by the cultural and social context.

A growing area of entrepreneurship research seeks to identify underlying factors that motivate or encourage students to engage in entrepreneurial activity (Mueller & Dato-on, 2008). Having realised that entrepreneurs play a key role in economic growth and job creation of a country, entrepreneurial education has been argued as an effective way to promote and boost the interest of entrepreneurship among university students. Exposures to knowledge may instil positive attitudes towards entrepreneurship among students. Since entrepreneurial intentions has prove to be a primary predictor of future entrepreneurial behaviour (Tong, Tong & Loy, 2011; Basu & Virick, 2008; Karz, 1988; Reynolds, 1995; Krueger et al., 2000).

However, recent attempts have been made by research on factors influencing entrepreneurial intentions and one consistent finding is the controversy surrounding societal gender role prescriptions (Mueller & Datoon, 2008). Women and men have historically assumed different roles in society. Certain jobs have traditionally been considered more appropriate for men and others more appropriate for women (William & Best, 1982). Underlying widely-held beliefs in the appropriateness of these conventional sex roles are male and gender stereotypes. These stereotypes assure patterned differences in the psychological characteristics of males and females (Williams, Satterwhite & Best, 1999). Studies show a persistence gap between men and women student in the motivation, desire and intentions to become an entrepreneur. Recent studies suggest that the intention to become an entrepreneur is more likely determined by an individual's gender perception of self and values than by biological sex perse (Gupta, Turban, Wasti, & Sikolar, 2009; Mueller & Dato-on, 2008, 2010). Mueller and Dato-on (2010) studies MBA students to determine whether gender role orientations are consistent across cultures and discovered that gender –role orientation explains entrepreneurial behaviours across culture better than biological sex.

Gender-role orientation is a personal trait or attribute conditioned by a traditional social system in which men are expected to think and behave as men (masculine) and women are expected to think and behave as women (feminine). Within such a social system, some behaviours, roles and careers are stereotyped as masculine while other are stereotyped as feminine (Williams & Best, 1982). Masculinity is a cognitive focus on getting the job done. Instrumental behaviours and attitudes that are stereotyped as masculine and aggressiveness. Femininity is an affective concern to the welfare of others and the harmony of the group expressive behaviours and attitudes that are stereotyped as feminine include submissiveness, dependence, deference, cooperation, caring and nurturing (Williams & Best, 1982). Based on the conceptualization of masculinity and femininity as independent dimensions of gender role orientation researchers explain variations among students in entrepreneurial activities (Mclabe, Ingram, & Dato-on, 2006) further researchers attribute differences in entrepreneurial intentions to variation in the prevalence of “potential entrepreneurs”- individuals with the propensity, motivation, and desire to start a business (Muller & Thomas 2001; Lee & Peterson, 2000; Beyelsdijk & Noorderhaven, 2004). Nevertheless, there still remain a persistent gap between males and females in desires and intentions to become an entrepreneur (Langouitz & Minniti, 2007). Longouitz and Minniti (2007) asserts that gender-role orientation matters more than biological sex in determining an individual's self -efficacy in performing entrepreneurial tasks.

A robust body of research emerged over the years extending the concept of self-efficacy to the entrepreneurship domain. Early pioneers in this research team, Boyd and Vozikis (1994) incorporated self-efficacy into Bird's (1988) model of entrepreneurial intentions. They proposed that self-efficacy influences the development of entrepreneurial intentions among students and hence the probability of venture creation. They argued that few students from intentions about engaging in entrepreneurial activities if they believe there is a high probability of failure. By extension, a person will have the intention to create a new venture, or act upon an existing entrepreneurial intention, only when self-efficacy is high in relation to the perceived requirements of a specific opportunity (Mueller & Dato-on, 2011; Boyd & Vozikis, 1994).

According to Bandura (1997) self-efficacy is the strong personal belief in skills and abilities to initiate a task and lead it to success. It is the perceptions of self-efficacy, rather than objective ability that motivates individuals to demonstrate entrepreneurial behaviours (Markhary Balkin, & Baron, 2002). Unlike other personality traits of entrepreneurship which are relatively static, self-efficiency is affected by contextual factors such as education and past-experiences (Holleabeck & Hall, 2004). Kllood and Bandurer (1989) defined self-efficiency as the belief in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands. It reflects an individual's self – assessment as to whether they have the ability to perform a particular task as well as the belief that they convert those skills into a successful outcome (Wilson, Kickul & Marlino, 2009).

Self-efficacy is domain specific advances across tasks and situations (Wilson et al., 2007) it can also be generalized to other related tasks or performance (Clien, Greene & Crick, 1998). Other than gender-role orientation, self-efficacy is considered another core factor in entrepreneurial intentions because if self-efficacy is how an individual will not act (Boud & Vozikis, 1994). Individual who show how self-efficacy inhibit lower tendencies in engaging in entrepreneurial activity because higher entrepreneurial self-efficacy is associated with higher intention to become an entrepreneur (Segal, Borgia & Schoenfeld, 2008). Hence improving student's self-efficacy in entrepreneurship enables them to put more efforts over a longer time, persist the challenges and develop plans and strategies to achieve higher entrepreneurial goals (Shane, Locke & Collins, 2003). These variables, gender-role orientation and self-efficacy will be studied as factors in entrepreneurial intentions among students. It is well known that a career in entrepreneurship offers significant opportunities for individual's to achieve financial independence, creates jobs thereby contributing to the economy, innovations, and economic growth. Today's students are tomorrow's potential entrepreneurs, which may explain why a growing number of universities offer courses and programs in entrepreneurship (Souitaris, Zerbinati & Al-Laham, 2007). However, there is little understanding of the factors that affect student's intentions of becoming entrepreneurs as many lack the necessary skills and abilities that is required in entrepreneurial activities. Similarly, little is known about differences in entrepreneurial intentions and attitudes among students who share different gender-role orientations and self-efficacy. Entrepreneurship is an essential driver of economic development, often representing in modern economies not only a badge of economic legitimacy but a harbinger of social prosperity. Therefore investigating what factors determine the entrepreneurial intentions of students is a crucial issue in entrepreneurship research. Thus, the purpose of this study is to investigate whether gender- role orientation and self-efficacy will be significantly related to entrepreneurial intention.

## **THEORETICAL BACKGROUND**

Entrepreneurship has been described and is often defined as a process through which an individual exploit an opportunity and create value (Baron & Share, 2008). Potential entrepreneurs recognise an opportunity and evaluate whether or not they have the knowledge and skills needed to develop it. Based on the assumption that the entrepreneurship process is consciously engaged in by individuals, theories have been developed which explain what drives an individual to engage in this process. These theories revolve around the notion that the entrepreneur first forms the intention to begin a business and then, if the intention to act is strong enough, the entrepreneur tasks steps to carryout his or her intentions.

The theory of planned behaviour (Ajzen, 1991; Ajzen & Fishbein, 1980) suggests that attitudes towards a behaviour (for instance, new venture creation) predict intentions, which in turn predict the actual behaviour. Ajzer's model based on the theory of planned behaviour argues that intentions in general depend on perception of personal attractiveness, social norms and feasibility and Shapero's model (1952) of the Entrepreneurial Event states that entrepreneurial intentions depend on perceptions of personal desirability, feasibility and propensity to act. Krueger, Reilly and Carsad (2000) employed a competing models approach and compared the two intentions –based models using a sample of students were all facing career choice decisions. The results of the analysis offered strong support for both models leading to the conclusion that intentions are the single best indicator of any planned behaviour including entrepreneurship, and that personal and situational variables have an indirect effect on entrepreneurship through their influence on key attitudes and general motivation to act. Krueger and Carsrad (1993) specify three key antecedents of entrepreneurial intention:(1) the attitude one holds with respect to venture creation, which develops from perceived desirability:(2) the perceived social norms for the engagement in venture creation and(3) the perceived control one maintains for entrepreneurial behaviour. Additional person/situational exogenous influences are predicted to affect an individual's entrepreneurial intentions indirectly through their influence on one of these key altitudinal antecedents (Ajzen, 1991; Kolvereid & Isaken, 2006). The theory of planned behaviour is based on the premise that much human behaviour is planned and is therefore preceded by

intention towards that behaviour (Fishbein & Ajzen, 1975). Understanding the intentions towards any purposeful behaviour is essential to our understanding of the antecedents of that behaviour (Ajzen & Fishbein, 1980). Basu and Viriciz (2008) argued that intention is an accurate predictor of planned behaviour, especially in cases where behaviour is difficult to observe, rare, or involve unpredictable time lags, and the entrepreneurial intention fulfilled these characteristics. Robinson, Stimpson, Huefner and Hunt (1991) argued that planned behaviour can be changed both across time and across situations in virtue of the individual's interaction with the environment. The theory states that the individual's attitudes have an impact on behaviour via intention (Schwarz, Widoniak, Almer-Jarz & Breitenecher, 2009). Autio, Keeley, Klofsten, Parker and Hay (2001) pointed out that attitudes have been shown to explain approximately 50% of the variance in intentions. Attitudes have been recognised as independent variables that predicted the variance in entrepreneurial intention by previous researchers (Schwarz et al, 2001; Autio et al., 2001).

Traits theory holds that entrepreneurs are born not made. Jacobwitz (1980) observed that entrepreneurs commonly share certain personality characteristics. These includes, restlessness, independence, a tendency to be a loner, extreme self confidence, innovative, action orientation, high on need for personal control and highly autonomous. Trait theories such as Jacobwitz (1980) suggest that entrepreneurial aptitude is static – that is, either people are born with the related characteristics or they are not. While personality and other individual differences may predispose individuals to entrepreneurial behaviour the dissatisfaction with the trait approach prompted a growing focus on identifying what the entrepreneur does (Byrgrar & Ytafer, 1991; Gartner, 1988).

Feminist theory by Greene, Hart, Gatewood, Brush & Carter, (2003) is concerned with women's rights since it has along tradition of analyzing gender relations, it is a useful perspective for researching gender and entrepreneurship (Greene et al, 2003). Feminist theory comprises two major distinct branches – liberal feminism and social feminism – which have different assumptions regarding the nature and the reasons for gender differences (Vehail, 2005). Liberal feminism, holds that men and women will behave differently because of situational factors, while social feminism assumes that gender differences in behaviour are caused by dispositional factor (Fischer, Reuber & Dyke, 1993). Social feminism has its antecedents in differential, socialization perspective. It posits that men and women exhibit fundamentally different views of the world because of difference in their socialization. Different – socialization of men and women results in the appearances of feminine and masculine mode of knowing, which are equally valid for science and society. Thus according to this perspectives, male and female entrepreneurs might differ in their traits, behaviours, and experiences, while their ventures might differ in their characteristics and outcomes.

Liberal feminist perspective assumes that both sexes posses equal capacity rationality. Although men and women are essentially the same, gender differences are due to the fact that women are deprived of opportunities such as education and discouraged to develop their full capacities. Gender differences in entrepreneurship may be explain through the fact that female entrepreneurs have unequal access to resources or face gender – based discrimination. Liberal feminism assumes that women will evolve and become like men when all forms of discrimination in a society are eliminated. Shapero and Sokol (1982) advanced a process model of new venture formation which include what they called a displacement event. They argued that inertia guided human action and as a result there needed to be a displacing event to push or pull on individual to change course, and in this case to found a business. This displacement has also been called the “trigger” or “precipitating” event. This model is more dynamic and suggests that entrepreneurial intention is based on the interaction between personal characteristics, perceptions, values, beliefs, background and environment (situational context). They base this approach on a model of the entrepreneurial event in which entrepreneurship is defined as “the pursuit of an opportunity irrespective of existing processes” (Kirzner, 1985).

Shapero and Sokol's (1982) entrepreneurial event theory is inherently an intention based model created with the entrepreneurial domain in mind. Within the model, an individual's perceptions of feasibility and desirability to become an entrepreneur, in addition to one's general propensity to act, predict entrepreneurial intentions (Peterman & Kennedy, 2003). Specifically, perceived feasibility is defined in terms of whether one feels capable of starting a business, while perceived desirability is concerned with the overall attractiveness of starting a business. The theory predicates that a general sense of inertia guides an individual's behaviour until a specific entrepreneurial event" causes such inertia to be displaced (Shapero & Sokol, 1982). Unlike the traits theory, this approach incorporates the influence of environment, and the notion that entrepreneurial behaviour is planned and intention. This approach is process –focused in that the interactions of several factors are examined in order to predict behaviour. Beliefs, perceptions and assumptions are learned within the context of a given environment. These attitudes and perception predict intentions, which in turn influence behaviour. An entrepreneurial intention is thus mediated in the following manner: Environment or event causes an individual to form perceptions, attitudes and assumptions (consider the assumptions and beliefs that might be formed in a change –oriented environment as opposed to a static environment). These perceptions then translate themselves into intentions, or potential. Intentions or potential then are expressed through behaviour. Thus, this theory suggests that entrepreneurial characteristics not only can be learned, but also can vary across individuals and situations (Maalu, N-zuve & Magutu, 2010; Shapero & Sokol, 1982).

Social cognitive career theory (Lent, Brown & Hackett, 1994: 2000) is an established theory of vocational psychology that has been used extensively to explain individuals' career-related decision making behaviour. It is anchored in social cognitive theory and highlights the importance of self-beliefs and self-thought in fostering an individual's motivation and subsequently guiding their behaviour (Seyal, Borgia & Schoenfeld, 2003). With its foundation in Banduras, (1989; 2001) social cognitive theory, SCCT asserts that the psychological process underlying career decisions and behaviours is dictated largely by the interplay of three key constructs; (1) self-efficiency, which is defined as the dynamic set of beliefs about one's capacity to carry out a specific course of action within a given domain (2) outcome expectations, which are characterised as the expected consequences of a given behaviour, and (3) goals, which are specified in terms of one's determination to engage in a specific behaviour (Bandura, 1986; Lent et al., 1994). This goal construct, moreover, encompasses an individual's intention to engage in a specific behaviour. Social cognitive career theory further acknowledges that person and environment/contextual elements influence the career decision-making process, with self-efficiency, outcome expectations, and goals/intentions are predicted to mediate the relationships between individual and environmental experiences and outcome behaviour (Lent, Brown, Nota & Sores, 2003; Lent et al, 1994). Conceptualizing entrepreneurship as a career choice, scholars recognize the utility of key SCCT constructs as predictors of individuals' intention to become an entrepreneur. For example, equal, Borgia and Schoenfeld (2002) found that self-efficiency beliefs and outcome expectations (operationalized in terms of earning potential, financial security, and independence) together explained over half the variance of students' entrepreneurial intentions. The applications of social cognitive career theory to the entrepreneurial domain focuses solely on the subset of these three key models construct (Winkel, Vanevenhoven & Ehrhardt. 2011). Research conducted by Flacherty and Dusck (1980) discovered that androgynous and masculine individuals exhibit more desirable intentions to entrepreneurial behaviours. The study found that masculine individual's show more psychological traits, including higher self-concept, self-esteem, and higher career self-efficacy (Flaherly & Dusck, 1980, Matsui & Onglatco, 1991). The study conducted Scherer, Brodzinski and Wibe (1990) found that masculine individuals perceived a greater degree of competency for performing entrepreneurial task associated with owning and managing a business than the feminine (Females). In a study by Zhao, Seibert and Hills (2005) they found that gender-role orientation was not significantly related to entrepreneurial intentions. Using a broad sample of MBA students at five US university, they found no difference in entrepreneurial intentions between male and females. According to the finding of Daron, Markman and

Hirsa (2001) individual with masculine orientation don't significantly differ in entrepreneurship activities from those that received feminine orientation. The research showed that both the masculine and feminine individual share the perceived characteristics required for entrepreneurial activities e.g. assertiveness, competitiveness, boldness and risk taking whether the (entrepreneur) is a male or female. Also, the results revealed by the national women's foundation (2004) suggested that there is no significant difference in entrepreneurial intention between males and females. The study found that 48 percent of all privately held businesses in US are owned by females. The study also estimated that 10.6 million businesses in US are at least 50 percent female owned. This shows that gender-role orientation is not a significant factor in entrepreneurial intention among US citizens.

Studies conducted by Crant (1996), Rolvereid, (1996), Veciana, Aponte and Urbano (2005) found that feminine individuals (females) have lower entrepreneurial intentions than masculine individual (males). Carter, Anderson and Shaw (2001) found that feminine orientation individuals differ in entrepreneurial intentions from their masculine (male counterparts) individual in that they females are less likely to have prior business experience or training. Results revealed that they feminine individuals choose entrepreneurship as a result of experiencing glass ceiling in large organisations, and have difficulties to acquire resources such as financial, human and social capital (Carter et al., 2001). Gupta and Bharve (2007) demonstrated experimentally that the stereotype of "fewer entrepreneurial skill in women than in men" reduced female business schools student's entrepreneurial intentions. An entrepreneurial intention was associated with instrumental behaviours and attitudes that are stereotyped as masculine such as assertiveness, competitiveness, independence and aggressiveness. Gupta and Bharve (2007) postulates that expressive behaviour and attitudes that are stereotyped as feminine including submissive, dependence, difference and caring are negative associated with entrepreneurial intentions among female students. Achterhager and Welter (2007) and Gheraodi and Poggio (2004) in their findings reported that gender-role orientation is a significant predictor of entrepreneurial intentions among students. They found that entrepreneurship is carried by individuals who show masculine orientation. Friedman and Tribunella (2009) in their empirical study found that gender-role orientation is a significant predictor of entrepreneurial intentions among MBA students. Their study showed that students who received the masculine orientation exhibit entrepreneurial behaviour more than those who showed feminine orientation. Cox, Mueller and Moss (2002) reported in their study that self-efficacy is a predictor of entrepreneurial intentions and behaviours. Their study showed that students who have high self-efficacy perform better than those who show low self-efficacy in entrepreneurial tasks. Also, they discovered that men have higher self-efficacy in performing entrepreneurial tasks than do women. Gender-role stereotypes, transmitted to women via socialization experiences, pose psychological barriers to entrepreneurial intentions and career choice (Cox et al, 2002).

Scherer, Brodzinski and Wiebe (1990) found that men have higher self-efficacy than women in entrepreneurial intention; however more recent studies by Sequeira, Mchree, and Mueller (2005) did not support the findings. The results of Mueller and Dato-on (2008) also found no statistical significant difference in self-efficiency between men and women in entrepreneurial intentions using a representative sample of MBA students. Segal, Borgia and Schoenfeld (2005) found that higher self-efficiency is associated with higher intention to become an entrepreneurs. The empirical evidence showed that students who have high self-efficacy as a result of entrepreneurship education and training exhibited higher entrepreneurial intention than those who show low self-efficacy. They conclude that entrepreneurial education was effective in developing entrepreneurial self-efficacy and consequently intention of students to set up their own business.

The study conducted by Zhao, Seibert and Hills (2005) also established a strong relationship between self-efficiency and entrepreneurial intentions. The result reveals a reliable correlation between high self-efficiency and entrepreneurial intentions among university students. They argued that entrepreneurship education should not only focus on technical aspects of entrepreneurship, but it also should strengthen student's self-confidence to become entrepreneurs through offering them variety of learning opportunities.

Through a longitudinal study over a period of 18 months, Audet (2002) found that entrepreneurial intention changes due to the impacts of some positive factors. Investigating entrepreneurial intention of 354 undergraduate students of Business Science and Economics in two public universities, found that intentions is a function of perceived self-efficiency. The research showed a significant relationship between high self-efficiency and entrepreneurial intention (Linan, Rodriguez & Rueda-Cantuche, 2005). Found and Smith (1996) lent, Brown, and Hachett, (1994, 2000), Lent, Lopez and Shen (2008) empirical research supports, that self-efficacy directly influences entrepreneurial intention with higher self-efficacy enhancing entrepreneurial activities. Found and Smith (1996), Lent et al (2008) found an average weighted correlation of 32 and 49 respectively between self-efficacy and entrepreneurial intentions. They assert that if an individual perceives control over a specific event, he/she will attempt to exert that control over that particular task. Boyed and Vozikis (1994) reported that self-efficacy influences the development of entrepreneurial intentions and hence the probability of venture creation. They revealed that a person will have the intention to create a new venture or act upon an existing entrepreneurial intention, only when self-efficacy is high in relation to the perceived requirements of a specific opportunity (Boyd & Vozikis, 1994). Empirically, several studies have been conducted by different researchers from the western societies. The limited interactive concerning the Nigerian sample and inconclusive research of these findings creates a vacuum which must be filled by further studies. Further research study will be conducted in these variables using Nigerian sample.

## **HYPOTHESIS**

1. People will not significantly differ on entrepreneurial intention on the basis of their gender role orientation.
2. Self-efficacy will not be significantly related to entrepreneurial intentions.

## **METHODS**

### **Participants**

A total of 350 participants were used in the study. The participants were students of Enugu State University of Science and Technology, Enugu drawn from three faculties. One hundred and seventeen students were drawn from the faculty of Arts, one hundred and ten (110) were drawn from the faculty of Social Sciences and one hundred and twenty-three (123) were drawn from the faculty of management. These participants comprises of two hundred and six (206) males and one hundred and forty-four (144) female with ages ranging from 18 – 25 years. A convenience sampling technique was used to select the participants because this involves a non-probably sampling procedure in which the research chooses a number of respondents at will.

### **Measures**

Three instruments were used in this study. They include Bem Sex Role Inventory (1974), New General self-efficacy (NGSE) by Chen, Gully and Eden (2001) and Entrepreneurial Intention question by Linan and Yi-Wen Chen( ).

Gender-role Orientation Inventory by Bem's (1974) BSRI scale was used to measure gender-role orientation. As anticipated, factor analysis result confirms two factors: masculinity and femininity. Both factors have strong reliability with a Cronbach alpha score of 0.88 for masculinity and 0.83 for femininity. A median split method was used to divide respondents into one of four gender-role orientation categories: masculine, androgynous, feminine and undifferentiated. For these data, the mean masculinity score above 4.43 and a femininity score above 4.02 respectively. Respondents with a masculinity score above 4.43 and a femininity score above 4.43 and femininity score below 4.02 were categorized as masculine (N = 56). Respondents with a masculinity score below 4.43 and femininity score above 4.02 were categorized as feminine (N = 62). Respondents with a masculinity score below 4.43 and a femininity score below 4.02 were

categorized as undifferentiated ( $N = 44$ ). Bem (1974) provided a construct validation for the concepts and a product moment correlations for the masculinity, femininity, androgyny and androgynous. The researcher revalidated the instrument to make it suitable for the Nigerian sample and obtained a reliability coefficient Cronbach alpha of masculinity 0.53 and femininity 0.64.

The second instrument used in the study is the self-efficacy scale. Self-efficacy of employees will be assessed through the New General self-efficacy (NGSE), scale developed by Chen, Gully and Eden, (2001). The questionnaire asked questions regarding self-efficacy in order to establish a qualitative measure of self-efficacy. The scale contains 8 items measuring the participants perceived level of self-efficacy. The response categories on each self-efficacy item ranged from “strongly agree” to “strongly disagree”, with numerical values of 1 through 5 assigned to each response. The items were reverse scored so that items numbers shaded 5, 4, 3, 2, 1 respectively are scored 1,2,3,4,5. The higher the score the higher the self-efficacy while the lower the score the lower the self-efficacy. Inter-item correlations ranged from .32 to .86 with internal consistency reliability estimate of Cronbach alpha = .91 (Gully and Eden, 2001). The scale was revalidated by Oji (2011) to make it suitable for the Nigerian sample. The result obtained from the items analysis shows no duplication. Item-total correlation of the 8-item ranged from .29 to .79 with reliability estimate for Cronbach alpha = .78

The Entrepreneurial Intention Questionnaire (EIQ) developed by Linan and Chen (2007) focused on the probability that the respondent will start a new business at some time in the future. The EIQ measures the core Entrepreneurial Intention model events of becoming an entrepreneurial. Entrepreneurial intentions were measured by asking participants how interested they were in different careers including starting and owning their own business. Respondents rated their interest level on a 7-point likert scale ranging from 1 = Disagree strongly to 7 = Agree strongly. An example of the items in the scale is “i am ready to make anything to become an entrepreneur”. The developers obtained a composite reliability of Cronbach alpha of 0.95. However, the researcher revalidated the instrument and obtained a reliability coefficient at 0.88.

## **Procedure**

With the assistance of the class reps in the faculties involved in the study. The researcher was able to create a report with the students which provided the necessary environment for the researcher to share the questionnaires to the students and their different classes. The questionnaires were distributed to the students a few minutes before their lecture period. During the exercise that lasted for 15-20 minutes, instructions were given for clarity purposes and after the exercise the researcher also collected the questionnaire with the help of the class reps before their lecture commences. A total of 380 questionnaires were distributed to the participants and 362 questionnaires were recovered, 12 discarded for improper completion and the final 350 copies were used for the final analysis.

## **Design/Statistics**

The researcher employed a cross-sectional survey design in the study and ANOVA and Pearson r correlation were used to analyse the data.

## RESULTS

The result of the analysis shows the findings of the study which includes the inter inter-correlation between the independent variables and the dependent variable, their descriptive statistics and analysis of variance result obtained from the study. Table 1 shows the descriptive statistics and the inter-correlation between the variables studied, while table 2 showed the ANOVA analysis of the variables.

**Table 1: Descriptive statistics of Inter-correlation between gender role orientation (masculinity and femininity)**

S/N	Variables	Mean	SD	1	2	3	4
1	Entrepreneurial intentions	5.27	1.41	1			
2	Masculinity	5.11	.81	.32**	1		
3	Femininity	5.23	.70	.24**	.34**	1	
4	Self efficacy	4.05	.73	.34**	.29**	.28**	1.

\*\* P <.01 (2-tailed)

Table 1 revealed that there is a significant positive correlation between masculinity and entrepreneurial intention  $r(350)=0.32, P<.01$ . There is a significant positive correlation between femininity and entrepreneurial Intention  $r(350)=0.24, P < .01$ . There is a significant positive correlation between self efficacy and entrepreneurial intention  $r(350) =0.34, P < .01$ . The table also reports a significant positive correlation between masculinity and femininity  $r(350)=0.34, P < 0.1$ . Masculinity and self efficacy  $r(350)=0.29, P < 0.1$  and femininity and self efficacy  $r(350)=0.28, P < .01$ .

**Table 2: ANOVA summary of gender role orientation and entrepreneurial intentions**

Source	SS quare	Df	M.sq	F
Gender R	100.682	3	33.56	19.42*
Error	598.029	346	1.73	
Total	698.711	349		

Note: \* P<.05

The results of the analysis, as shown in Table 2 a significant difference exist among the mean scores obtained in the gender role orientation dimension (masculinity = 5.75, femininity = 4.98, Androgyny = 5.72, in differentiated = 4.42) on entrepreneurial intentions. Thus, the null hypothesis that people will not significantly differ on entrepreneurial intention on the basis of their gender role orientation was rejected.

## DISCUSSION

The result of the analysis showed that the first null hypothesis which states that people will not significantly differ on entrepreneurial intention on the basis of their gender role orientation was rejected. The result showed a significant prediction. The result corroborates with the findings of Naherly and Dusck (1980), Matsui and Onglatco (1999), Scberer, Brodzinski and Wibe (1990), Crant (1996), Rolvereid (1996), Veciana, Aporte and Urbano (2005), Carter, Anderson and Sharv (2001), Gupta and Bhawe (2007), Achterhager and Welter (2007), Gheraoodi and Poggio (2004), Friedmanard and Tribunella (2009), which reported that gender role orientation is a significant prediction of entrepreneurial intentions. On the contrary, the result disagrees with the findings of Zhoo, Seibert and Hills (1995), Dara, Markman and Hirsra (2001), and the national homes foundation (2004) which reported no significant difference in entrepreneurial intentions between people with masculinity and femininity orientation.

The result revealed that differences exist in entrepreneurial intention between masculinity and femininity in gender role orientation. People who possess masculinity orientation are more inclined towards entrepreneurship compared to those who possess that family orientation in the society. The result shows that males engage in entrepreneurial activities more than the females because the orientation is that male possesses personality characteristics that predispose them to aggressive act, assessments, risk taking and creative attitudes. Students, who manifest masculinity gender role orientation, have this feminine attitude in life activities and are always encouraged by the societal stereotype to be entrepreneurs. Most people believe that business activities, innovations and risk of behaviours are meant for males (masculine) while domestic

chores and more subtle activities and services are meant for the females (feminine).

The second null hypothesis which states that self-efficacy will not be significantly related to entrepreneurial intentions was also rejected. The study showed a significant positive correlation between self efficacy and entrepreneurial intentions. The study corroborated with the findings of Zhao, Seibert and Hills (2005), Linan, Rodriguez & Rueda Cantuche (2005), Lent, Brown and Hachelt (1994, 2000) Lent, Lopez and Shen (2008), Smith (1996) and Boyed and Vozikis (1994) which reported that self efficiency positively correlates with entrepreneurial intentions. Students who have strong belief and positive perception about their abilities are mostly entrepreneurial in nature. A student's attitude and courage in himself/herself will go a long way in influencing his/her entrepreneurial intention. These intentions form the positive attitude required for entrepreneurial activities. The belief and courage in oneself (self efficacy) motivates a student to engage in risk taking behaviours. Those with low self-efficacy lack the courage and trust in themselves. Therefore, they are mostly dependent on those, who are achievers for survival. Self efficacy is a significant factor in entrepreneurial behaviour of students. Courageous individual strives to become creative, innovative and forerunners in activities that are challenging in the environment. The orientation and perception of a creative and courageous student is always different from the dependent students who believe that he/she is not in control of his life events. Students with high self efficacy show that the environment can be exploited and subdued.

Several implications have been deduced from this study. The study revealed that people significantly differed in entrepreneurial intention on the basis of their gender role orientation. This implies that males are known for aggressive, creative and risk taking role that differentiate them from the females who are known for their submissive, dependent and caring behaviour. Since gender role orientation is a personal trait or attribute conditioned by a traditional social system, it is expected that these stereotypes attitude and behaviour will influence the role and career decisions every student will make in his/her society. The male (masculine) who think and behave as breadwinners will always want to go for job that will benefit their status as males, thereby, choosing a particular vocation is stereotyped as masculine. In other words, the males (masculine) knowing their responsibilities are more inclined to think more about becoming self-sustaining and independent. This attitude in turn, stimulates intention of becoming entrepreneur.

However, self efficacy being a strong personal belief in skills and abilities to initiate a task, strengthens entrepreneurial intentions and behaviour. Self efficacy is affected by education and past experiences therefore; students who are dedicated to their academic activities acquired different relevant skills and abilities necessary for entrepreneurial activities. When the skills and abilities are acquired the individual self efficacy is boosted and thoughts of innovating, creating and exploring the environment become paramount. A student with high self efficacy will always believe that he/she will succeed in any business venture he/she participates in. Students who find themselves in entrepreneurial environment will also strive to add value to themselves so as to be able to make impact in any competitive environment. Entrepreneurs are people with competitive mind and therefore will be people with positive belief of achievement.

### **Summary and Conclusion**

This study investigated gender-role orientation and self efficacy on entrepreneurial intentions. Three instruments were used in the study. Two hypotheses were postulated and tested by the research. The first hypothesis which states that people will not significantly differ on entrepreneurial intention on the basis of their gender role orientation was rejected. The result proved significant. The second null hypothesis which states that self efficacy will not be significantly related to entrepreneurial intentions was also rejected. The result should show a significant positive relationship between self-efficacy and entrepreneurial intentions.

From the result, gender-role orientation and self efficacy are significant factors in entrepreneurial intentions. Students with masculine orientation engage more in entrepreneurial activities compared to those who manifest to feminine gender-role orientation. Males possess the personality characteristics that predispose them to entrepreneurial activities. They are dominant in nature, possessive and more assertive than the female students who are more caring, independency and submissive in nature. This is mostly as a result of the fact that our social system has stereotyped some behaviours, roles and careers as masculine, while others are stereotyped as feminine. In other words, male students behave as males, striving to fulfil their social responsibilities as males (masculine). This predisposes them to the thought of being independent, and they must achieve this by engaging in entrepreneurial activities while the females are made to think as females (feminine) who mostly depend on the males for survival and assistance. Also, the belief that one has the necessary skills and abilities to excel in a particular task motivates the individual towards pursuing such task and this encourages the thought and intentions of becoming an entrepreneur. Demographic variables like ethnic group, age and socio-economic status were not considered in the study. Further researches are encouraged to increase their sample size while conducting similar study for better analysis. Variables like age, socio-economic status of parents and ethnic group of students should be studied as control variations in similar studies to easily assess more information about the study. The inclusion of such variable will help provide more information in the study.

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