Entrepreneurial Opportunity And Collaborative Research Efforts As Panaceas For Improving Academic Entrepreneurship Among Ekiti State University Staff

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ABSTRACT
The study assessed the impact of entrepreneurial opportunity and collaborative research efforts on academic entrepreneurship among Ekiti State University Staff. The study made use of prior entrepreneurial opportunity and collaborative research efforts as independent variables. The period of study was between 2017–2018. Descriptive survey research design was adopted and the research sample size of 100 was drawn from the total population of academic staff in all faculties in Ekiti State University through the adoption of Taro Yamane (1967) model. Convenience and purposive sampling techniques were adopted to select the sample that shares the same characteristics in order to ensure that every member of staff of all faculties was represented. Data were analysed using both descriptive and inferential statistics. The study revealed that entrepreneurial opportunity exerts positive impact on academic entrepreneurship among Ekiti state university staff and also, that collaborative research efforts exert positive impact on academic entrepreneurship among Ekiti state university staff.

Keywords: Entrepreneurial opportunities, collaborative research efforts, and academic entrepreneurship

INTRODUCTION
Entrepreneurship is considered to be a core competence for growth, employment and personal fulfillment (Yildirim & Askun, 2012). Higher education institutions play a fundamental role in establishing and developing an entrepreneurship-oriented economy as these institutions represent a main source of new knowledge and hold a constantly regenerating stock of students and scientists (Lautenschlager & Haase, 2011). Roles of universities in economic growth through contributing to creation of entrepreneurship climate in a country have evolved in time and grew beyond being just educators and disseminating the existing knowledge. Universities naturally generate new ideas, to contribute to innovation by creating knowledge and developing technology as an output of their research activities. However, today, to overcome the challenges that the financial crisis brought, mission of universities evolved beyond their traditional roles.

Academic entrepreneurship has started to be considered a third mission in which university institutions engage, in addition to the traditional mandates of teaching and research. To encourage entrepreneurship among academics and students, universities are now developing entrepreneurship policies and implementing these initiatives to embed entrepreneurial thinking and practices within teaching, research and administration. (Nyeko, & Sing, 2015).

This phenomenon has been described as the academic revolution (Ahmad, Halim, Ramiyah, & Rahman, 2013), and has resulted in the emergence of various types of universities, such as, research universities, technological universities, teaching universities, hybrid universities and
of late, entrepreneurial universities. In a university setting, academic entrepreneurship is the synthesis and integration of scientific, academic and commercial activities (Sporn, 2001). It is often characterised by formal arrangements to commercialise academic intellectual property through knowledge (e.g. consulting or contract research), transfer of technology (e.g. patent or licensing) and transfer of products or services (e.g. spin-offs) (Radosevich, 1995). According to Tijesin (2006), Academic entrepreneurship occurs at the level of individuals or groups of individuals acting independently or as part of faculty or university systems, who create new organizations, or instigate innovation within or outside the university.

However there is still a significant need for up-to-date and multidimensional research and studies about the entrepreneurial opportunities and advantages inherent in collaborative academic efforts, intentions, activities and contributions of universities to economic growth in developing countries.

CONCEPTUAL CLARIFICATION

Entrepreneurial Opportunity
Shane and Venkataraman (2000) define entrepreneurial opportunities as ‘those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production.’ These opportunities are treated as objective phenomena, though their existence is not known by all agents. Opportunity is a central concept within the entrepreneurship field and there is now a critical mass of literature centered on this concept. Its identification constitutes an interesting step for any business creation (Gagliö & Katz, 2001). Beside the opportunities identification, access to external financing is very useful for the exploitation of these opportunities and for developing new products.

For a better clarification, the concept of Entrepreneurial Opportunity and Development were viewed from two dimensions: Prior entrepreneurial opportunities and collaborative research efforts.

Prior Entrepreneurial Opportunities
Entrepreneurship research highlights that prior entrepreneurial experience increases the probability of identification and exploitation of entrepreneurial opportunities since it helps to develop the skills necessary to undertake such functions (Shane & Venkataraman 2000, and Shane 2000). For instance, Wright, Birley, & Mosey (2004) pointed to increasing evidence of the phenomenon of recurrent academic entrepreneurs, that is, researchers who undertake multiple entrepreneurial ventures. Similarly, Bercovitz & Feldman (2008) revealed that academic researchers who have disclosed inventions to their university technology transfer offices in the past are likely to repeat this behavior. Prior experience in identifying entrepreneurial opportunities is likely to increase a researcher's perception of the commercial potential of his/her current research activities.

Collaborative Research
Experience of working with industry, for example, has often been identified in the university-industry linkages literature as a good predictor of effective technology transfer. For instance, the study conducted by Landry, Amara and Ouimet (2007) shows that the relational capital of academic researchers with users (e.g. managers in firms and industrial associations) is positively and significantly associated with the extent to which the academic researcher engages in knowledge transfer activities. At the organisational level, Feldman & Desrochers (2004) and Jong (2006) found that universities and departments with an established tradition in collaborative research with firms, are more likely to recognise the commercial opportunities of their research activities. Along the same lines, Ponomariov & Boardman (2008) posit that
fostering informal links between university and industry favours later collaboration. Indeed, collaboration with industry on the one hand, and awareness and ability to exploit commercial opportunities are likely to be self-reinforcing.

**ACADEMIC ENTREPRENEURSHIP**

The common definition of academic entrepreneur is similar to the original definition of entrepreneur. It states that academic entrepreneur is a university scientist, most often a professor, sometimes a PhD student or a post-doc researcher, who sets up a business company in order to commercialize the results of his/her research. Academic entrepreneurship today can be understood as either:

(i) A knowledge-based profession that is centered on technological development
(ii) An income-oriented activity that creates a small business or firm from said technological development
(iii) A particular behavior to be adapted by researchers in order to modify the pattern of university research.

**Academic Entrepreneur vs. Entrepreneur**

A key distinction between the academic field of entrepreneurship and other entrepreneurial professions is that often small businesses tend to focus on societal impact and proliferation of their product, while researchers and the products that they market also aid in the progression and of the academic field. Many, if not most, academic entrepreneurs are also linked in some way to their university, faculty members, and students with both formal and informal obligations, which can create certain constraints and opportunities for researchers, while entrepreneurial businesses don't hold such connections.

**Figure 1. Proposed framework of opportunity recognition**

**Theoretical Framework**

**Economic Entrepreneurship Theories**

The economic entrepreneurship theory has deep roots in the classical and neoclassical theories of economics, and the Austrian market process (AMP). These theories explore the economic factors that enhance entrepreneurial behavior. While the classical theory extolled the virtues of
free trade, specialization, and competition (Ricardo, 1817; Smith, 1776), the neo-classical model emerged from the criticisms of the classical model and indicated that economic phenomena could be relegated to instances of pure exchange, reflect an optimal ratio, and transpire in an economic system that was basically closed and the Austrian Market Process (AMP) focused on unanswered questions of the neo-classical movement and this led to a new movement which became known as the Austrian Market process (AMP). The AMP, a model influenced by Joseph Alois Schumpeter (1934) concentrated on human action in the context of an economy of knowledge.

METHODS
The research design utilized for the purpose of this study is descriptive research survey design. The data were collected through questionnaires that were administered to selected respondents. This is because the variables of interest for the measurement are purely qualitative which lend themselves to description. The population comprised of 14,664, being the entire academic staff in Ekiti State University, Ado-Ekiti, Ekiti state, Nigeria. The researcher made use of convenience and purposive sampling techniques to arrive at 15 respondents from each faculty; these respondents were chosen because they were the easiest to obtain for the study. Therefore, the research sample size was 100 through the adoption of Taro Yamane (1967) model. This study made use of primary data collection because it allowed the respondents enough time to think and provide answers to questions.

RESULTS AND INTERPRETATION

Table 1.1: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>AE</th>
<th>PEO</th>
<th>CRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEO</td>
<td>0.814945</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CRE</td>
<td>0.807435</td>
<td>0.831044</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1.1 presents correlation coefficient for pairs of variables used in the study. Specifically the table reported correlation statistics of 0.814945, 0.807435, 0.831044, for AE, CRE, and PEO respectively. The result revealed that there is positive relationship between the variables used in the study. Notably the result showed that academic entrepreneurship among Ekiti state university staff has increased over the years alongside increase in entrepreneurial opportunities and collaborative research efforts. This gives a reflection of the interconnection between pairs of variables included in the model of the study.

Table 1.2: Regression Estimation Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.727841</td>
<td>1.817055</td>
<td>0.950902</td>
<td>0.3558</td>
</tr>
<tr>
<td>PEO</td>
<td>0.130345</td>
<td>0.124834</td>
<td>1.044150</td>
<td>0.3119</td>
</tr>
<tr>
<td>CRE</td>
<td>0.066068</td>
<td>0.155849</td>
<td>0.423925</td>
<td>0.6773</td>
</tr>
</tbody>
</table>

R-Squared=0.920875; Adjusted R-Square=0.906039; F-statistics=62.07020; Prob(F-statistics)=0.000000

Result of the regression estimation presented in table 1.2 revealed coefficient estimates of 0.130345, 0.066068, alongside probability values of 0.3119, 0.6773, for prior entrepreneurial opportunities and collaborative academic efforts respectively. The result revealed that all the explanatory variables exert positive impact on academic entrepreneurship. In specific term the result showed that academic entrepreneurship will increase by about 0.130345 for every unit
increase in prior entrepreneurial opportunities. The increase in academic entrepreneurship for every unit increase in collaborative academic efforts stood at 0.66068. The corresponding probability values presented in table 4.2 showed that prior entrepreneurial opportunities and collaborative academic efforts on academic entrepreneurship tend to be significant. R-square statistics reported in table 1.2 stood at 0.920875, which implies that about 92.0% of the systematic variation in academic entrepreneurship can be explained by joint variation in prior entrepreneurial opportunities and collaborative academic efforts. F-statistics and probability values reported in table 4.2 reflect that the model is a good fit, with the probability value of the reported statistics less than 0.05.

**DISCUSSION OF FINDINGS**

The study discovered that prior entrepreneurial opportunities exert positive impact on academic entrepreneurship among Ekiti state university staff which implies that earlier entrepreneurial exposures of researchers often lead to a positive influence in academic entrepreneurship. The level of prior entrepreneurial opportunities will determine improvement on academic entrepreneurship which will be favorable to the economy and the educational system on the long run. The study discovered that collaborative research efforts exert positive impact on academic entrepreneurship among Ekiti state university staff which implies that increase in academic entrepreneurship could result based on collaborative research efforts of intellectuals from within the industries and academics.

**CONCLUSION AND RECOMMENDATIONS**

This study assessed impact of prior entrepreneurial opportunities and collaborative academic efforts on academic entrepreneurship. Prior entrepreneurial opportunities were found to have positive impact on academic entrepreneurship and collaborative academic efforts were found to be positively impacted on academic entrepreneurship. By these, it is thus concluded that prior entrepreneurial opportunities and collaborative academic efforts are both means of improving on entrepreneurial base of institutions and the nation. Meanwhile, vocational centers should be strengthened and expanded where staff can be apprenticed to, since entrepreneurship education offers no specific vocational skill. Also, there is a need to ensure that entrepreneurship curriculum contents in Nigerian universities motivate entrepreneurial actions and real life simulations of the process of entrepreneurship. Further studies can be carried out on other dimensions of entrepreneurial opportunities and development like external academic research networks, integration of multi-disciplinary research and quality of academic research.

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