EVALUATION OF PRIVATE UNIVERSITY ACADEMIC STAFF PARTICIPATION IN ACADEMIC ENTREPRENEURSHIP IN SOUTHWEST NIGERIA

Fehintola Tomi Lemo
tomi.akintolu@gmail.com
Olabisi Onabanjo University, Ago-Iwoye, Ogun State
&
Kayode Oyeyemi
oyeyemika@lasued.edu.ng
Department of Business and Entrepreneurship Education,
Otto/Ijaniki, Lagos State
&
Nuratu Temitayo Sobowale
Sobowale.temitayo@oouagoiwoye.edu.ng
Olabisi Onabanjo University, Ago-Iwoye, Ogun State

Abstract
This study evaluates private university academic staff participation in academic entrepreneurship in Southwest Nigeria. The study adopted a survey research design, the population consisted of four thousand, three hundred and seventy-seven, while the sample comprised one thousand, three hundred and nineteen academic staff of private universities in Lagos, Ogun, and Oyo in the Southwest of Nigeria, which were selected through proportionate and simple random sampling techniques. An adapted questionnaire, the Academic Entrepreneurship Scale (r= 0.92), was used for data collection in the study. Data was analyzed using descriptive statistics and a t-test (to find the significant difference in the engagement of academic staff in academic entrepreneurship). The result showed a low engagement in academic entrepreneurship among the academic staff at private universities in the Southwest of Nigeria (Mean = 61.89). It also showed that male and female teaching staff showed no significant difference in their engagement in academic entrepreneurship ($t = 1.250$, $P > 0.05$). The study concluded that academic staff engagement in academic entrepreneurship is low in private universities. It is thus recommended that private universities should provide facilities and make decisions that will allow teaching staff to engage in academic entrepreneurship.

Keywords: Academic Entrepreneurship, Gender, Academic staff, Private Universities

Introduction

The global economic landscape has undergone a significant transformation, shifting toward a knowledge-based model where the university has transitioned from a mere center of instruction to a primary engine for innovation. Traditionally, the predominant role of universities was the generation and transmission of knowledge. However, modern higher education institutions have increasingly become supporters of a broader entrepreneurial ecosystem. Today's universities maintain closer links between scientific research and the business world, adopting a more enterprising and creative posture. This shift has been driven by emerging viewpoints on the university's role in producing and disseminating intellectual property. Silva (2012) argues that this "third role" of academic entrepreneurship allows institutions to access a diverse range of non-governmental and public funding sources. While the search for mutually beneficial partnerships with industry has existed for some time, it has now matured into formal academic entrepreneurship. This involves the commercialization of academic activities, including teaching, research, and collaborative efforts between universities and their communities.

Academic entrepreneurship encompasses industry partnerships, academic-led start-ups, consulting services, licensing agreements, and patent applications. It may also involve institutions creating service packages to support an entrepreneurial environment that extends beyond simple financial or technical assistance. Essentially, this endeavor turns academic research into a profit-making enterprise, where research development is marketed and "sold" at academic gatherings in a manner like commercial products. Soler and Lopez-Delgado (2024) define these activities as innovative, risk-bearing ventures that occur outside traditional teaching roles and yield financial rewards for both the individual academic and the institution. The commercialization of research is now recognized as a cornerstone of the academic entrepreneur. Policymakers and scholars are increasingly focused on technology transfer, patenting, and the creation of university spin-off ventures established specifically to bring research-generated innovations to market. These spin-offs often focus on niche discoveries that might not initially attract larger, established firms. Consequently, higher education institutions play a vital role in regional innovation systems, provided they can produce the highly skilled workforce and research necessary to compete globally.

As the economic impact of university research has increased public scrutiny, the debate has shifted toward the individual and institutional factors that determine academic involvement in entrepreneurship. A critical variable in this debate is the role of gender. Despite institutional efforts to close the gap, several studies highlight a persistent disparity between male and female participation in entrepreneurial activities.

Research indicates that female academics are less likely to disclose inventions, hold patents, or create new enterprises based on their research compared to their male colleagues. This gap is particularly striking because gender disparities in other academic metrics, such as publishing, are steadily closing. There is now substantial evidence to suggest that rates of academic entrepreneurship are greater in disciplines and fields that have a lower representation of female academics (Rosa and Dawson 2006). Evidence suggests that academic entrepreneurship rates are highest in disciplines where women are least represented. Furthermore, entrepreneurial success often correlates with senior academics who possess wide-ranging networks and commercialization experience a group that remains predominantly male. Civera et al. (2025) suggest that understanding this gap requires examining the process through mindset, intention, and action phases. Quantitative methods often struggle to capture these nuances due to the low number of women currently involved in technology commercialization.

Statement of the Problem

Universities are currently facing intense pressure to seek alternative funding sources due to dwindling national support and heightened competitive pressures. This financial strain is most acutely felt by private universities, which have increasingly turned to academic entrepreneurship as a means of survival and stabilization. However, despite the growing theoretical interest in the subject, empirical research into actual entrepreneurial behavior within university settings remains incipient compared to other industries. The generally low rates of commercialization and academic start-ups necessitate urgent investigation. A significant sub-problem within this evolution is the persistent and troubling gender gap in entrepreneurial output. Although more women are entering the academy, they remain significantly underrepresented in commercialization compared to their male counterparts. This disparity is often attributed to a "triple hurdle": limited access to venture capital, smaller professional networks, and a "chilly climate" in STEM fields that stereotypically view entrepreneurship as a masculine pursuit. In the African context, and specifically within Nigeria, female academic entrepreneurship takes on a unique dimension. Women academics in this region must balance heavy pedagogical loads with rigorous social expectations. Despite these barriers, they demonstrate high "entrepreneurial intentions" often driven by a desire for social impact rather than pure financial gain. There is, therefore, a critical need to examine how these institutional and individual factors interact within Nigerian private universities to either hinder or facilitate female participation in the entrepreneurial ecosystem.

Objective of the study

The objective of the study was to evaluate private university academic staff participation in academic entrepreneurship in Southwest Nigeria

Research Questions

1. How engaged are academic staff in Academic entrepreneurship in private universities in the Southwest, Nigeria?
2. Is gender a conditional prerequisite for engagement in Academic entrepreneurship?

Methods

This study used a descriptive survey methodology**.** This method allows obtaining data without manipulating any of the study's variables of interest. The population consisted of the four thousand, three hundred and seventy-seven (4,377) teaching staff in the Southwest of Nigeria. The sample comprised one thousand, three hundred and nineteen (1,319) academic staff members of private universities in the Southwest. Simple random sampling techniques were used to select three states for this study (Lagos, Ogun, and Oyo States). In addition, from the selected states, 50% of the private universities in each state were selected. This accounted for selecting 3 universities from Lagos, 6 universities from Ogun, and 3 from Oyo. At the next stage, 60% of academic staff from the selected universities were used as the sample. This is equal to 417 for Lagos, 626 for Ogun and 267 for Oyo, which make up the total of one thousand, three hundred and nineteen (1,319) private universities academic staff. However, 1098 instruments were completed appropriately and used for the analysis. The Academic Entrepreneurship Scale was used for data collection. The Academic Entrepreneurship Scale (AES) was adopted from Zahra's

(1996), which measured corporate entrepreneurship. This study was expanded based on the category of academic entrepreneurship aspects of enterprise within a corporation. It consists of twenty-one items, and it's used to assess the academic entrepreneurial behavior of lecturers. The questionnaire is based on a four-point Likert scale. For reliability purposes, Cronbach Alpha method was adopted, and the result showed a 0.92 reliability coefficient.

Result

1. How engaged are academic staff in Academic entrepreneurship in private universities in the Southwest, Nigeria?

Table 1: Descriptive Statistics of academic staff engagement in Academic **entrepreneurship in Private Universities'**

Academic Entrepreneurship		Statistics	Std. Error
Mean		61.8953	.20176
95 Percent Confidence Band for Mean	Lower Bound	61.4994	
	Upper Bound	62.2911	
5% Trimmed Mean		62.0544	
Median		62.0000	
Variance		44.697	
Std. Deviation		6.68561	
Minimum		42.00	
Maximum		84.00	
Range		42.00	
Interquartile Range		10.00	
Skewness		-.284	.074
Kurtosis		.027	.148

According to Table 1 findings, academic staff at private universities in South-West Nigeria scored high in terms of academic entrepreneurship. The findings revealed the following values: Mean (61.89), Median (62.00), Variance (44.69), standard deviation (6.68); lowest score (42.00), highest score (84.00), range (42.00); interquartile range (10.00); skewness (-.284) and kurtosis (.027).

With the Mean < Median, it suggest that the distribution is negatively skewed, thus some score are pulling down the mean score Figures 1 and 4.11 provide a graphic illustration of the outcomes.

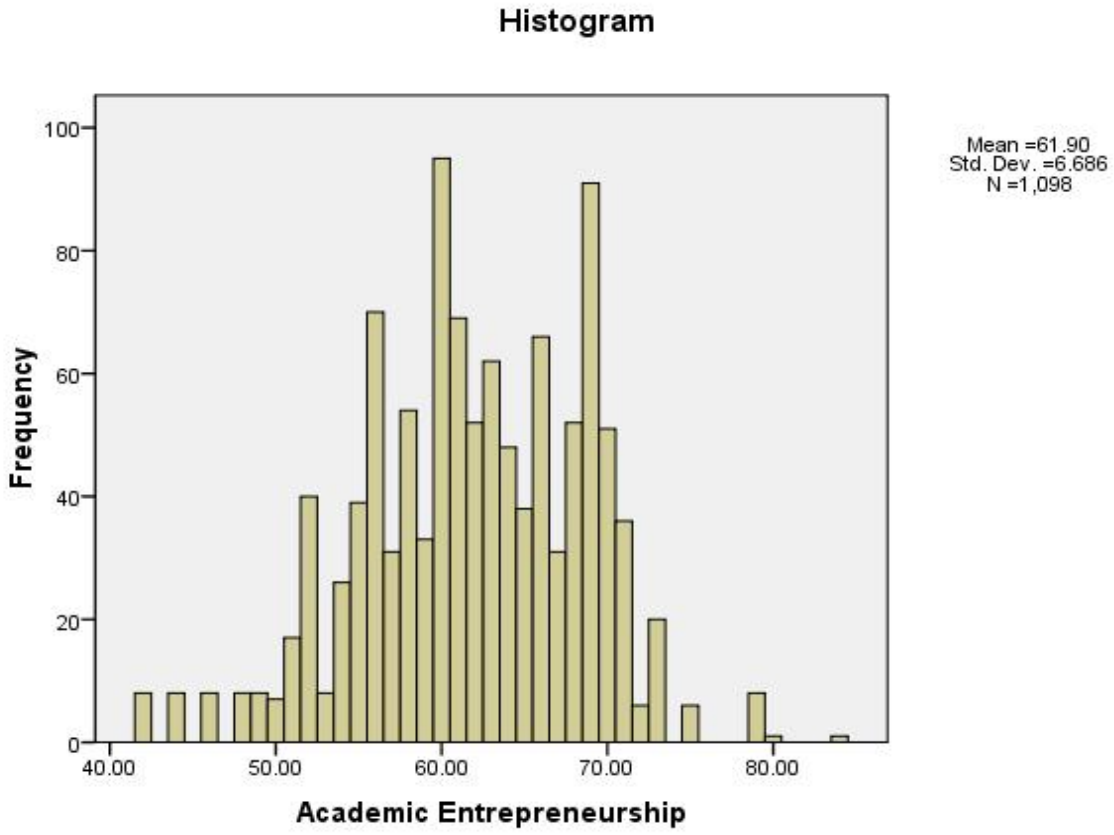

Figure 1: Graphical Illustration of Academic Entrepreneurship

This result suggested that the academic staff at private universities in South West Nigeria had a lower level of academic entrepreneurship. Based on the results, the academic staff's engagement in academic entrepreneurship is low. This indicated a lower level of academic entrepreneurship among the academic staff at private universities in the Southwest of Nigeria. Is gender a pre-requisite for engagement in Academic entrepreneurship research?

Table 2: Difference in the engagement in Academic entrepreneurship research

Staff Gender	Frequency	Mean	SD	Std Error	df.	T	Sig. of t
Male staff	678	29.31	12.3	.475	1096	1.250	.202
Female staff	420	30. 29	12.9	.633			

Table 2 showed no that male and female teaching staff showed no significant difference in their engagement in academic entrepreneurship ($t = 1.250$, $P > 0.05$). The table showed that male staff (N= 678) had mean score value of 29.31 with 12.3 standard deviation while female staff (N = 420) had 30.29 mean score with 12.9 standard deviation. This implied that there is no significant difference between male and female staff engagement in academic entrepreneurship. Thus, gender is not a pre-requisite for engagement in Academic entrepreneurship research.

Discussion of findings

The result showed a lower level of academic entrepreneurship among the academic staff at private universities in the Southwest of Nigeria. The results of this study contrast with the expectations of academic researchers, who are typically strongly encouraged (or even required) to disclose their inventions to the university and actively participate in the commercialization of their research findings (Owen-Smith & Powell, 2001; Murray, 2002; Siegel et al., 2015). Similarly, it could be because the staff lacks encouragement. After all, "academics and scientists working at universities who obtain rewards for entrepreneurial endeavours were found to possess higher levels of spin-off and patenting or licensing intentions" (Urbano & Guerrero, 2013). Numerous studies have found that institutions must promote a commercialization-friendly culture to reduce conflicts of interest between traditional academic endeavors' and entrepreneurial activities (Urbano & Guerrero, 2013). Another suggestion for this outcome could be that because of lack of adequate facilities for the staff. Academic entrepreneurship needs different organisational structures in place to facilitate commercialization (Etzkowitz, 2008). This is in line with Allessandrini et al. (2013) that clear policies, dedication from senior management, and a positive work environment are key success factors for academic entrepreneurship. This is against earlier submission that universities should establish a culture that is supportive of start-ups and provide tangible investments (Huyghe & Knockaert, 2014; Hayter, 2018). Several studies highlight that universities need to create an environment that supports commercialisation and potentially reduces the conflict of interest between traditional and entrepreneurship efforts (Urbano and Guerrero 2013). Similar to this, Huyghe and Knockaert (2014) assert that "organisational context, above and beyond individual-related characteristics, can facilitate or impede academic entrepreneurship." It also confirms Allessandrini et al.'s (2013) finding that "low rates of academic start-ups and low levels of commercialization are typically observed. Also Huyghe and Knockaert (2014) also confirmed that the "organisational context can facilitate or impede academic. entrepreneurship above and beyond individual-related characteristics.

It was also found that gender is not a prerequisite for engagement in Academic entrepreneurship research. The result is not like the finding of Rosa and Dawson, (2006), which reported that academic entrepreneurship rates are higher in fields and subjects where female academics are underrepresented. However, Bello and Okoro (2024) argue that the traditional gender role expectations prevalent in Nigerian society, where women bear the disproportionate weight of domestic and caregiving responsibilities, directly conflict with the high intensity demands of launching an academic spin-off. Similarly, Akinyemi et al. (2025) supported that female academic entrepreneurs in Nigeria are less likely to access large-scale grants or venture capital from domestic investors, who often perceive women-led tech ventures as "high risk" due to unconscious biases. While Colyvas et al. (2012) find that male faculty members are slightly more likely to report an invention and significantly more likely to report multiple inventions to their institution's Technology Transfer Office (TTO) than their female colleagues, Ibrahim (2026) notes that the economic fluctuations and salary delays often experienced in the Nigerian public sector have pushed many female academics to commercialize their expertise, albeit on a smaller, "consultancy" scale rather than through formal high tech spin-offs. This suggests that while the formal numbers for patents and startups might remain low, female academics are actively engaged in informal entrepreneurial activities that contribute significantly to the local economy.

This corroborates earlier evidence by Thursby and Thursby (2005), which shows that despite a few differences in publications by gender, the probability of disclosure of an invention by a male academic is 43% higher than that of a female academic.

Conclusion and Recommendations

The study concluded that academic staff engagement in academic entrepreneurship is low in private universities. It was also concluded that gender is not a prerequisite for engagement in Academic entrepreneurship research. It is thus recommended that private universities should provide facilities and make decisions that will allow for teaching staff to engage in academic entrepreneurship.

References

Abreu, M., & Grinevich, V. (2013). The nature of academic entrepreneurship in the UK: Widening the focus on entrepreneurial activities. *Research Policy*, *42*(2), 408–422. https://doi.org/10.1016/j.respol.2012.10.005

Adisa, T. A., Adekoya, O. D., Abdulraheem, I., & Sani, K. F. (2023). Academic entrepreneurship: Promoting economic and societal developments. In I. Abdulraheem & T. A. Adisa (Eds.), *Academic entrepreneurship in Nigeria: A book of reading* (pp. 113–140). University of Abuja Press.

Adisa, T. A., et al. (2023). Academic entrepreneurship: The commercialisation of academic activities. *Journal of Higher Education and Management*, *45*(1), 112–129.

Akinyemi, A., et al. (2025)**.** Funding gaps and institutional innovation: Assessing the commercialization of research in Nigerian Public Universities. *Nigerian Journal of Research and Development*, 14(2), 45-62.

Allessandrini, M., Klose, K., & Pepper, M. (2013). University entrepreneurship in South Africa: Developments in technology transfer practices. *Innovation: Management, Policy & Practice*, *15*(2), 205–214.

Bello, M., & Okoro, I. (2024). The Dual-Burden: Domestic responsibilities and entrepreneurial intentions among female academic staff in South West Nigeria. *Journal of African Business and Economic Research*, 11(1), 102-118.

Civera, A., Temporin, G., Meoli, A., Caviggioli, F., & Colombelli, A. (2025). Women's academic entrepreneurship: Understanding gender disparities. *Foundations and Trends in Entrepreneurship*, *21*(6), 591–737. https://doi.org/10.1561/0300000129

Colyvas, J. A., Snellman, K., Bercovitz, J., & Feldman, M. (2012). Disentangling effort and performance: A renewed look at gender differences in commercializing medical school research. *Journal of Technology Transfer*, *37*(4), 478–489.

D'Amico, E., et al. (2022). Patenting and technology transfer: Attracting academics to the commercialization of research. *Research Policy*, *51*(4), 104471.

Etzkowitz, H. (2003). Research groups as 'quasi-firms': The invention of the entrepreneurial university. *Research Policy*, *32*(1), 109–121.

Hayter, C. S., Nelson, A. J., Zayed, S., & O'Connor, A. C. (2018). Conceptualizing academic entrepreneurship ecosystems: A review, analysis and extension of the literature. *The Journal of Technology Transfer*, *43*(4), 1039–1082.

Huyghe, A., & Knockaert, M. (2014). The influence of organisational culture and climate on entrepreneurial intentions among research scientists. *The Journal of Technology Transfer*, *40*(1), 138–160.

Ibrahim, I. S. (2026). Entrepreneurial leadership across systems: Navigating social and economic development in the Federal Republic of Nigeria. Presented at the E-Lab Social Ventures Symposium, University of Cambridge

Murray, F., & Graham, L. (2007). Buying and selling science: Gender differences in the market for commercial science. *Industrial and Corporate Change*, *16*(4), 657–689.

Olayinka, A. P., & Adeyemi, P. (2025). Social capital and the glass ceiling: Investigating the 'Old Boys' Network' in Nigerian academic commercialization. *West African Journal of Entrepreneurship and Innovation*, 9(5), 99-109.

Rosa, P., & Dawson, A. (2006). Gender and the commercialization of university science: Academic founders of spinout companies. *Entrepreneurship and Regional Development*, *18*(4), 341–366.

Rothaermel, F. T., Agung, S. D., & Jiang, L. (2007). University entrepreneurship: A taxonomy of the literature. *Industrial and Corporate Change*, *16*(4), 691–791. https://doi.org/10.1093/icc/dtm023

Siegel, D. S., & Wright, M. (2015). *Academic entrepreneurship: Time for a rethink?* (ERC Research Paper No. 32). Enterprise Research Centre.

Silva, M. J. (2012). The third role of universities: Accessing non-governmental funding sources. *European Journal of Education*, *47*(3), 341–356.

Soler, I., & Lopez-Delgado, P. (2024). Financial rewards and risk-taking in academic entrepreneurship. *Higher Education*, *87*, 201–219.

Thursby, J. G., & Thursby, M. C. (2005). Gender patterns of research and licensing activity of science and engineering faculty. *Journal of Technology Transfer*, *30*(4), 343–353.

Urban, B. (2019). Academic entrepreneurship and entrepreneurial alertness: A focus on attitudes, norms and beliefs. *South African Journal of Higher Education*, *33*(3), 192–204.

Urbano, D., & Guerrero, M. (2013). Entrepreneurial universities: Socioeconomic impacts of academic entrepreneurship in a European region. *Economic Development Quarterly*, *27*(3), 210–230.