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DEMOGRAPHIC CORRELATES OF RESEARCH BEHAVIOR IN HIGHER EDUCATION: AN EMPIRICAL STUDY OF TERTIARY INSTITUTIONS IN ENUGU STATE, NIGERIA

By

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Abstract

Research behavior in higher education is an essential component of the contemporary education ecosystem. However, a growing indication suggests poor research behavior in Nigeria's academia. Although, the constrictions impeding efficient and globally competitive research development in the higher education system have been emphasized in the literature. However, most demographic factors are not fully explored relative to research behavior. Thus, the present paper examined research behavior based on years of service and gender. One hundred and fourteen academic staff pooled from public tertiary institutions in the Enugu States of Nigeria completed a self-report measure. The linear regression analysis conducted to determine the effect of the demographic variables on research behavior revealed that years of service $F(1,112)$, 6.01 $P < .019$, and gender $F(2,111)$, 6.01 $P < .533$ had no statistically significant interaction with research behavior in higher education. Notably, the R^2 indicated that the predictor variables accounted for 0.81% of the observed variance in research behavior in HEI. The result has implications for research, policy-making, and the development of research behavior in higher education.

Keywords: *Research behavior, YoS, gender, higher education*

INTRODUCTION

The contemporary education ecosystem is increasingly demanding evidence-based learning and an innovative paradigm. Integrating research-based knowledge with education is increasingly becoming a significant trend that requires much attention (Amaratunga & Senaratne, 2009). Research occupies a central position in the growth of higher education in recent times (Kachalova et al., 2019). Higher education institutions are experiencing an increasing shift to inquiry-based learning, encouraging more research models complementary to the age-long conventional teaching (Etzkowitz, 2003). Perhaps, robust systematic inquiry and logical research context are critical in national development (Ashrafi-Rizi et al., 2015). Hence, Bhagavathula et al. (2017) described evidence-based knowledge as a ubiquitous aspect of global education. Thus, research is an essential driver in advancing and improving every part of the global domain. Accordingly, Sabel'nikova-Begashvili and Khudoverdova (2020) underscored the relevance of imparting research knowledge to the learners. Krylova et al. (2019) emphasized teaching research competence to the students.

Research in higher education reflects gathering and evaluating relevant data to increase knowledge and understanding of a topic or an issue (Creswell, 2012). Thus, it denotes careful processes that provide credible knowledge. Numerous literature abounds that associates positive research behavior and the willingness to engage in research activities (e.g., McLaughlin et al., 2018; Mina et al., 2016; Partido & Colón, 2019). Similarly, Vossen et al. (2018) emphasized the significance of research and evidence-based inquiries on the growing Science, Technology, Engineering & Mathematics education (STEM). In general, the higher education system in the contemporary academic environment encompasses research and teaching. Hence, the famous saying 'publish or perish' (Uzochukwu et al., 2016). In particular, research in higher education is the pathway to institutional evaluation and comparisons.

Over the years, the quality of institutions of higher learning across the globe has been evaluated using the higher education ranking, which encompasses teaching and research appraisals (Boholano et al., 2014). Thus, the ranking of higher education is predominantly based on research productivity. This confirms the conception of research as a distinguishing feature of the higher institution (Marchant, 2009). Consequently, about seven HEIs in Nigeria are in the overall Times Higher Education World University Rankings, with the highest (University of Ibadan) ranked within the number 401–500 (Times Higher Education, 2021). Thus, signifying poor research behavior in HEIs.

Research behavior in higher education

Research behavior describes the predisposition to participate in research activities (Tack & Vanderlinde, 2014). Research behavior primarily reflects an individual's enthusiasm to explore a given phenomenon while conforming to the methods and procedures relative to academic inquiries. In particular, research behavior is an essential component of the higher education system and symbolizes the avenue to intellectual development in higher institutions (Ulla, 2018). Indeed, participating in academic research provides a pathway to acquiring the systematic skills required for study (Impedovo & Malik, 2016; Landicho, 2020). Moreso, research participation guarantees promotion in the system (Katz & Coleman, 2001) and facilitates success (Chin & Law, 2020). Importantly, conducting scientific inquiries is typical in the overall activities relative to educational development. Consequently, research participation in the present-day academic environment demands systematic processes to accomplish a systemic goal.

Literature suggests a link between institutional research participation and institutional integrity (Hajdarpasic et al., 2015). Also, research in higher education arms students with advanced information (Davis & Jones, 2017), intensifies scholarly inspiration (Falconer & Holcomb, 2008), and impacts front-line knowledge and basic research procedures on the students (Brown et al., 2016). In particular, several studies have emphasized the importance of exposing learners to inquiry-based learning (e.g., Abu-helalah et al., 2015; Beanland et al., 2020; Borakati et al., 2017; Kozlov et al., 2017; Noguez & Neri, 2019; Razeghi, 2019; Roach, 2017; Swan et al., 2018; Weiner & Watkinson, 2014). Thus, research behavior in higher education is fundamental to achieving the required developmental objective of contemporary societies.

However, given the presumptions of a fragile research culture (Yusuf, 2012), especially in the Nigeria higher education sector, researchers have underscored several factors limiting the success of research productivity HEI (see., Imhonopi & Urim, 2013; Okoduwa et al., 2018; Pascal Iloh et al., 2020). Similarly, Igiri et al. (2021) identified gender, motivation, age, empirical knowledge and skills, ranking, research orientation, and collaboration, including leadership, availability of resources, and institutional research policy, as the main barriers to research behavior the Nigerian academia. Indeed, the growing trend of poor research quality and output in higher education suggests a widening gap in research behavior. In particular, the present paper examined year of service and gender as an antecedent of research attitudes in HEI. In particular, years of service and gender as demographic variables that can constrain research involvement among lecturers. Thus, they could contribute to the variance in research behavior among lecturers in higher education.

Hypothesis:

H1: Years of service would significantly predict research behavior in higher education.

H2: Gender would significantly predict research behavior in higher education.

Method

The participants in the present paper comprised scholars from three public tertiary institutions in Enugu State, Nigeria. One hundred and twenty-five male and female lecturers from different academic disciplines were approached between March and May 2022. They were asked to participate in a study to understand their research behavior. The one hundred and nineteen lecturers who consented to participate in the study were given the study instrument. In all, one hundred and sixteen (116) copies of the research instruments were filled correctly and utilized for the study. Conceivably, the improperly filled copies were discarded.

Measure

The participants completed a self-report measure designed to assess their research behavior. The scale assesses the cognitive, affective, and behavioral domains relative to research practice. The 10-item Linkert type scale is scored in a 5-point response format, with high scores indicating a high research attitude. The reliability of the scale was obtained following a pilot study. Observation of the Cronbach's alpha coefficients revealed acceptable levels of internal consistency reliabilities of the instrument, which exceeded the cutoff rules-of-the thumb of .86 as recommended for study purposes (Kaplan & Saccuzzo, 2001). Year of service and gender was ascertained from responses in the demographic section.

Result

The present paper adopted a cross-sectional research design. Data were analyzed using the statistical package for social sciences (SPSS V,23). Notably, 58 females (50.9%) and 56 males (49.1%) participated in the study. On the other hand, years of service were classified into older (those who have spent above ten years and above in academics) and younger academic staff (those who have spent below ten years in academics). A total of 68 respondents (59.6%) represented older academics, and 46 respondents (40.4%) representing younger academic staff responded to the study instrument. The linear regression analysis conducted to determine the effect of the demographic variables on research behavior revealed that years of service $F(1,112), 6.01 P<.019$, and gender $F(2,111), 6.01 P<.533$ had no statistically significant interaction with research behavior in higher education. Notably, the R^2 indicated that the predictor variables accounted for 0.81% of the observed variance in research behavior in HEI.

Table 1:

Table showing the linear regression results for the variables

	B	SEB	β	R^2	t	Sig
YoS	-.271	.114	-.266		-2.38	.019
Gender	-.070	.112	-.070	.081	-.66	.533

Note. YoS= years of service. B = Unstandardized regression coefficient; SEB = Standardized error of the coefficient; β = Standardized coefficient; R^2 = Coefficient of determination. * $P<.000$.

Discussion

The present study examined the variation in research behavior in higher education based on years of service and gender. One hundred and sixteen respondents conveniently pooled from public tertiary institutions in Enugu state completed the research instrument. The linear regression analysis performed on the data revealed that years of service as a factor had no significant effect on research behavior in higher education. This means that whether an academic staff is old or young in academia does not contribute to their research behavior. The probable explanation for this outcome might be attributed to a systemic lack of research motivation in academia. The finding presupposes that the number of years spent in an institution is not a prerequisite for academic research behaviors. Importantly, the result failed to support the hypothesis that years of service would significantly predict research behavior in higher institutions in the Enugu state. Furthermore, the finding revealed that gender as a factor does not influence academic staff research behavior in higher institutions. The result suggests that whether an academic staff is male or female does not contribute to the observed variation in research behavior in the educational environment in Nigeria. Also, the second revelation of the present investigation did not affirm the hypothesis that gender as a factor would significantly predict research behavior in higher education in Enugu state.

Conclusion

The present study aimed to investigate the role of demographic variables such as years of service and gender as a prerequisite of research behavior in higher education in Enugu state. The analysis conducted on the data revealed that years of service and gender did not predict research behavior among the respondents. Thus, the present paper concludes that demographic variable (years of service and gender) is not a significant determinant of research behavior in higher education. Although, certain limitations constrain the study. For instance, the self-report measures and the sample size poses a vital burden in generalizing the finding. Thus, multiple data collection methods and a comprehensive sampling approach are needed in future research. Regardless, the finding has implications for the development of research attitudes in higher education. More so, the result provides valuable data to researchers, policy-makers, and stakeholders in education to improve the practice of research in higher education.

REFERENCES

- [1] Abu-helalah, M. A., Alshraideh, H. A., Al-abdouh, A. A., Dalbah, T. A., Badran, Y. R., Masarweh, O. F., Hirzallah, M. I., & Hijazeen, J. K. (2015). Research participation among medical students in Jordan: Rates, attitudes, and barriers. *International Journal of Academic Research*, 7(2). <https://doi.org/10.7813/2075-4124/7-2/A.52>
- [2] Almazova, N., Krylova, E., Rubtsova, A., & Odinkaya, M. (2020). Challenges and opportunities for Russian higher education amid covid-19: Teachers' perspective. *Education Sciences*, 10(12). <https://doi.org/10.3390/educsci10120368>
- [3] Amaratunga, D., & Senaratne, S. (2009). Principles of integrating research into teaching in higher education: Built environment perspective. *International Journal of Construction Education and Research*, 5(3). <https://doi.org/10.1080/15578770903152856>
- [4] Ashrafi-Rizi, H., Fateme, Z., Khorasgani, Z. G., Kazempour, Z., & Imani, S. T. (2015). Barriers to research activities from the perspective of the students of Isfahan University of Medical Sciences. *Acta Informatica Medica*, 23(3). <https://doi.org/10.5455/aim.2015.23.155-159>
- [5] Beanland, V., Walsh, E. I., & Pammer, K. (2020). Undergraduate Students' Perceptions of and Engagement in Research Participation to Fulfill an Introductory Psychology Course Requirement. *Teaching of Psychology*, 47(1). <https://doi.org/10.1177/0098628319888115>
- [6] Bhagavathula, A., Bandari, D., Tefera, Y., Jamshed, S., Elnour, A., & Shehab, A. (2017). The Attitude of Medical and Pharmacy Students towards Research Activities: A Multicenter Approach. *Pharmacy*, 5(4). <https://doi.org/10.3390/pharmacy5040055>
- [7] Boholano, H. B., Olvido, M. M. J., & Cardillo, M. B. (2014). Fractal variations of research and teaching in top-ranking universities in Asia and the world. *European Journal of Educational Sciences*, 01(01). <https://doi.org/10.19044/ejes.v1no1a8>
- [8] Borakati, A., McLean, K., Bhangu, A., Drake, T. M., Fitzgerald, J. E., Harrison, E. M., Kamarajah, S. K., Khatri, C., Woin, E., Glasbey, J., Nepogodiev, D., Abbas, M., Abdalkoddus, M., Abdel-Fattah, A., Abdelgalil, R., Abdikadir, H., Adams, R., Adams, S., Adelaja, I., ... Zulkifli, A. (2017). Students' participation in collaborative research should be recognized. In *International Journal of Surgery* (Vol. 39). <https://doi.org/10.1016/j.ijso.2017.01.114>
- [9] Brown, A. M., Lewis, S. N., & Bevan, D. R. (2016). Development of a structured undergraduate research experience: Framework and implications. *Biochemistry and Molecular Biology Education: A Bimonthly Publication of the International Union of Biochemistry and Molecular Biology*, 44(5). <https://doi.org/10.1002/bmb.20975>
- [10] Chin, D. C. W., & Law, R. (2020). Back to basics: Academic research in tourism and hospitality management – The case of Hong Kong. *Tourism and Hospitality Research*, 20(3). <https://doi.org/10.1177/1467358419863157>
- [11] Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. In *Educational Research* (Vol. 4).
- [12] Davis, S. N., & Jones, R. M. (2017). Understanding the role of the mentor in developing research competency among undergraduate researchers. *Mentoring and Tutoring: Partnership in Learning*, 25(4). <https://doi.org/10.1080/13611267.2017.1403534>
- [13] Etzkowitz, H. (2003). Research groups as "quasi-firms": The invention of the entrepreneurial university. *Research Policy*, 32(1). [https://doi.org/10.1016/S0048-7333\(02\)00009-4](https://doi.org/10.1016/S0048-7333(02)00009-4)
- [14] Falconer, J., & Holcomb, D. (2008). Understanding undergraduate research experiences from the student perspective: a phenomenological study of a summer student research program. *College Student Journal*, 42(3).
- [15] Hajdarpassic, A., Brew, A., & Popenici, S. (2015). The contribution of academics' engagement in research to undergraduate education. *Studies in Higher Education*, 40(4). <https://doi.org/10.1080/03075079.2013.842215>
- [16] Igiri, B. E., Okoduwa, S. I. R., Akabuogu, E. P., Okoduwa, U. J., Enang, I. A., Idowu, O. O., Abdullahi, S., Onukak, I. E., Onuruka, C. C., Christopher, O. P. O., Salawu, A. O., Chris, A. O., & Onyemachi, D. I. (2021). Focused Research on the Challenges and Productivity of Researchers in Nigerian Academic Institutions Without Funding. *Frontiers in Research Metrics and Analytics*, 6. <https://doi.org/10.3389/frma.2021.727228>
- [17] Imhonopi, D., & Urim, U. M. (2013). Factors affecting scholarly research output in Nigeria: perception of academics in South-Western universities. In *Unilag Sociological Review (USR): Vol. X*.
- [18] Impedovo, M. A., & Malik, S. K. (2016). Becoming a reflective in-service teacher: The role of research attitude. *Australian Journal of Teacher Education*, 41(1).
- [19] Kachalova, L. P., Kolmogorova, I. V., Kolosovskaya, T. A., Svetonosova, L. G., & Solonina, L. V. (2019). Students research technology in the educational process. *International Journal of Innovative Technology and Exploring Engineering*, 8(8).
- [20] Kaplan, R. M., & Saccuzzo, D. P. (2001). Psychological testing: Principles, applications, and issues (5th ed.). *Psychological Testing: Principles, Applications, and Issues (5th Ed.)*, 44.
- [21] Katz, E., & Coleman, M. (2001). The growing importance of research at academic colleges of education in Israel. *Education + Training*, 43(2). <https://doi.org/10.1108/EUM0000000005423>
- [22] Kozlov, A. V., Tamer, O. S., Lapteva, S. V., Temirbaev, R. M., Vorobyeva, T. I., & Bondarovskaya, L. V. (2017). Didactic system for improving the students' research activities. *Man in India*, 97(15).
- [23] Krylova, O. V., Mamontova, E. R., Tsyapkina, A. V., & Rozhnova, S. A. (2019). Implementation of scientific research activities of students within the framework of the interdisciplinary competency approach to specialty

- «pharmacy. *Russian Journal of Biopharmaceuticals*, 11(1).
- [24] Landicho, C. J. B. (2020). Research Attitudes, Motivations, and Challenges of STEM Education Researchers. *International Journal of Technology in Education*, 3(1). <https://doi.org/10.46328/ijte.v3i1.21>
- [25] McLaughlin, J., Patel, M., Johnson, D. K., & De la Rosa, C. L. (2018). The Impact of a Short-Term Study Abroad Program that Offers a Course-Based Undergraduate Research Experience and Conservation Activities. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 30(3). <https://doi.org/10.36366/frontiers.v30i3.424>
- [26] Mina, S., Mostafa, S., Albarqawi, H. T., Alnajjar, A., Obeidat, A. S., Alkattan, W., & Abu-Zaid, A. (2016). Perceived influential factors toward participation in undergraduate research activities among medical students at Alfaisal University - College of Medicine: A Saudi Arabian perspective. *Medical Teacher*, 38. <https://doi.org/10.3109/0142159X.2016.1142508>
- [27] Noguez, J., & Neri, L. (2019). Research-based learning: a case study for engineering students. *International Journal on Interactive Design and Manufacturing*, 13(4). <https://doi.org/10.1007/s12008-019-00570-x>
- [28] Okoduwa, S. I. R., Abe, J. O., Samuel, B. I., Chris, A. O., Oladimeji, R. A., Idowu, O. O., & Okoduwa, U. J. (2018). Attitudes, Perceptions, and Barriers to Research and Publishing Among Research and Teaching Staff in a Nigerian Research Institute. *Frontiers in Research Metrics and Analytics*, 3. <https://doi.org/10.3389/frma.2018.00026>
- [29] Partido, B. B., & Colón, M. (2019). Motivations and Challenges Towards Research Activities Among Undergraduate Dental Hygiene Students. *Journal of Dental Hygiene : JDH*, 93(5).
- [30] Pascal Iloh, G. U., Amadi, A., Iro, O., Agboola, S., Aguocha, G., & Chukwuonye, M. (2020). Attitude, practice orientation, benefits and barriers towards health research and publications among medical practitioners in Abia State, Nigeria: A cross-sectional study. *Nigerian Journal of Clinical Practice*, 23(2). https://doi.org/10.4103/njcp.njcp_284_18
- [31] Razeghi, N. (2019). Factors influencing research activities of postgraduate students in the University of Mazandaran, Iran. *Asian Journal of University Education*, 15(1).
- [32] Roach, M. (2017). Encouraging entrepreneurship in university labs: Research activities, research outputs, and early doctorate careers. *PLoS ONE*, 12(2). <https://doi.org/10.1371/journal.pone.0170444>
- [33] Sabel'nikova-Begashvili, N., & Khudoverdova, S. (2020). Improving the Professional Competence of the Teacher in the Organization of Research Activities of Students. *Standards and Monitoring in Education*, 8(3). <https://doi.org/10.12737/1998-1740-2020-11-16>
- [34] Swan, A., Inkelas, K. K., Jones, J., Pretlow, J., & Keller, T. (2018). The Role of High School Research Experiences in Shaping Students' Research Self-Efficacy and Preparation for Undergraduate Research Participation. *Journal of The First-Year Experience & Students in Transition*, 30(1).
- [35] Tack, H., & Vanderlinde, R. (2014). Teacher Educators' Professional Development: Towards a Typology of Teacher Educators' Researcherly Disposition. *British Journal of Educational Studies*, 62(3). <https://doi.org/10.1080/00071005.2014.957639>
- [36] Times Higher Education. (2021). *Impact Rankings 2021 | Times Higher Education (THE)*. https://www.timeshighereducation.com/impactrankings#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/undefined
- [37] Uzochukwu, O. C., Orogbu, O. L., & O., I. R. (2016). TETFund International Programmes and Academic Staff Development of Selected Universities in southeast Nigeria. *Journal of Economics and Public Finance*, 2(1). <https://doi.org/10.22158/jepf.v2n1p171>
- [38] Vossen, T. E., Henze, I., Rippe, R. C. A., Van Driel, J. H., & De Vries, M. J. (2018). Attitudes of secondary school students towards doing research and design activities. *International Journal of Science Education*, 40(13). <https://doi.org/10.1080/09500693.2018.1494395>
- [39] Weiner, S. A., & Watkinson, C. (2014). What do Students Learn from Participation in an Undergraduate Research Journal? Results of an Assessment. *Journal of Librarianship and Scholarly Communication*, 2(2). <https://doi.org/10.7710/2162-3309.1125>
- [40] Yusuf, A. (2012). An appraisal of research in Nigeria's University sector. *Jorind*, 10(2).