

Oyedokun, T.B., Abidoye, R.B. and Akinbogun, S.P. (2021) Bridging the gap between real estate research and professional practice in Nigeria. *Property Management*, 39(4), pp. 493-508. (doi: 10.1108/PM-12-2020-0087).

This is the author's final accepted version.

There may be differences between this version and the published version. You are advised to consult the publisher's version if you wish to cite from it.

http://eprints.gla.ac.uk/253672/

Deposited on: 05 October 2021

Enlighten – Research publications by members of the University of Glasgow <a href="http://eprints.gla.ac.uk">http://eprints.gla.ac.uk</a>



# **Property Manag**

# Bridging the gap between real estate research and professional practice in Nigeria

Journal:	Property Management
Manuscript ID	PM-12-2020-0087
Manuscript Type:	Research Paper
Keywords:	Gap, Impact, Real estate, Real estate research, Real estate practice, Nigeria

SCHOLARONE™ Manuscripts

## Bridging the gap between real estate research and professional practice in Nigeria

#### **Abstract**

**Purpose** – Beyond contributing to literature, research findings are expected to reinforce existing best practices while also serving as a springboard for formulating new and more efficient methods of undertaking economic activities. However, academic research is sometimes divorced from implementation as more research findings are not implemented or translated into practice. This study, therefore, assesses the impact of real estate research activities and findings on the practice of real estate surveying and valuation in Nigeria as the largest real estate market in Africa.

**Design/methodology/approach** – An online questionnaire survey was conducted to obtain relevant data from Estate Surveyors and Valuers across the country. The survey questions cover reading of academic papers from the field of real estate and the reasons for doing so; whether or not they have made any changes to their professional practice based on findings from academic papers; and possible barriers to adoption academic research findings in your practice. Mean score ranking and principal component analysis were employed for data analysis.

**Findings** — Out of a total of sixty-one participants, only thirty-five have made a change to their professional practice based on findings from academic papers they have read. 'Personal development and enlightenment' ranks first on the list of reasons for reading academic papers among the participants while barriers to the adoption academic research findings relate mainly to education, dissemination and lack of guidance on how to apply research findings.

**Practical implications** – The study demonstrates how findings from real estate research are being applied and identifies possible barriers that must be addressed to improve the level of application and consequently, the value of academic studies.

**Originality/value** – The study provides evidence on barriers to the adoption of academic research and contributes to the global effort to bridge the gap between academia and practice.

**Keywords:** gap, impact, real estate, real estate research, real estate practice, Nigeria.

#### **Background**

One of the fundamental aims of academic research is to make significant impacts that can transform professional practices for improved social well-being. Impact as "an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia", remains a critical focus in the assessment of research quality, effectiveness and excellence (Research Excellence Framework, 2011, p. 26). Beyond contributing significantly to the existing literature, research findings are expected to reinforce existing best practices while also helping to generate new and more efficient methods of undertaking economic activities. Ultimately, research should provide the required information for developing frameworks for sustaining professional practices which are important for maintaining an acceptable standard of living globally.

However, there is a growing concern that "research is divorced from implementation" as more research findings are not implemented or translated into practice (Walley *et al.*, 2007, p. 424). This has been attributed to the popular concept of 'research gap' that has created a persistent divide between theory and practice (Walley *et al.*, 2007; Barría, 2017). While frantic effort is being made in

various disciplines and by various stakeholders to bridge this gap, evidence shows that much still needs to be done globally to make academic research more relevant and practicable (Panda and Gupta, 2014). The seriousness attached to the evaluation of research impact and value varies across countries (due to the difference in higher education funding systems) and disciplines (due to seemingly difference in the practical impacts of various professions on the society) (Young, 2005). Consequently, methods of assessment are rarely internationally adopted and remain a subject of an ongoing debate (Sivertsen, 2017), nevertheless, it is a generally accepted stance that research must be impactful regardless of how impact is defined and assessed (Niederkrotenthaler, Dorner and Maier, 2011). The real estate professional in Nigeria continues to expand which has pushed the discussion regarding the usefulness of academic research to the front burner. As a developing country, the use of research findings has been described as very limited and challenging due to a lack of communication between researchers and the end-users of academic research; low-quality studies and weak research environments (Uzochukwu *et al.*, 2016).

This study, therefore, aims to assess the impact of real estate research activities and findings on the practice of real estate surveying and valuation in Nigeria as the largest real estate market in Africa. Specifically, the study seeks to evaluate the impact in terms of how academic research is influencing and shaping real estate practice in the case study country. Literature distinguishes between 'academic impact' as an intellectual contribution to a specific field of study within academia and 'external socioeconomic impact' which on the other hand, relates to changes that transcend academia (Penfield *et al.*, 2014). While all studies are expected to make a certain intellectual contribution to the existing theoretical knowledge base to satisfy the requirement for 'academic impact', it is equally of utmost importance that they make a significant impact on society, economy and professional practice outside academia. It is this latter concept (i.e., 'external impact') that constitutes the focus of this study. This study considers how knowledge generated through academic research is being translated into outcomes, in form of new 'products' and 'services' for genuine impacts and added value (Duryea et al. 2007), in relation to the practice of estate surveying and valuation in the case study countries.

The analysis relied on data obtained through a survey of practising real estate surveyors as well as secondary data relating to citation and dissemination of research papers and findings. While the focus of this paper is more on the adoption and utilisation of research findings by each professional, the study also investigates the role of real estate professional bodies and institutions in research implementation and adoption. In terms of significance, this study will serve as a benchmark to assess and understand the extent and nature of the adoption of existing real estate research findings. Besides, it is expected that academic researchers in the field of real estate and urban economics in Nigeria will find the study useful for examining the effectiveness of their studies from a more critical and objective perspective of the 'end-users'. The rest of this paper is structured as follows. The review of relevant studies is presented in the next section followed by methods and procedure adopted for the research data collection and analysis. Results are presented in the fourth section followed by a discussion of findings in the fifth section before the conclusion in the sixth section.

#### Literature review

There is arguably no global standard for assessing the impact of academic studies, although the use of bibliometric indicators and peer review of research outputs is common for 'academic impact'

assessment (Sivertsen, 2017). In evaluating research outputs, rigour-relevance is critical and tends to be more recognisable in many climes. This relates inter alia to how "rigorous the analysis of concepts and inter-relationship among various concepts" is and to what extent has research maintained "cognitive and emotional distance from the phenomena being examined" (Panda and Gupta, 2014, pp.157, 158). But highly rigour-relevance ranking does not necessarily translate to high relevance and usefulness in practice (Kieser and Leiner, 2009). Unlike bibliometric indicators and other more parametric measures for assessing 'academic impact', the assessment of the 'external impact' of academic research can be subjective as more often than not, it is based on a set of 'locally' established parameters (Niederkrotenthaler, Dorner and Maier, 2011). In fact, assessment frameworks can be limited in terms of application to faculty or institutional level. Beyond bibliographic ranking, the impact of academic studies should include reduction or prevention of injuries, risks, costs or other negative effects (REF, 2011; Watts, 2009).

As a solution to this global concern, Davies et al. (2005) proposed "approaches to assessing the non-academic impact of social science research". However, their recommendations are certainly applicable to other fields of study. Before making their recommendations, they suggested that "one size does not fit all" when trying to develop a model to assess non-academic research impact and that "instead, the appropriateness of the impact assessment approach will be a function of the purpose of the assessment; the nature of the research; and the types of impact of key interest" (p.22). As part of the review conducted in the report, five indicators of impact were identified, namely, "knowledge production (e.g. peer-reviewed papers); research capacity building (e.g. postgraduate training and career development); policy or product development (e.g. input into official guidelines or protocols); sector benefits (e.g. impacts on specific client groups); and wider societal benefits (e.g. economic benefits from increased population health or productivity)" (Davies et al., 2005). The first two relate mainly to 'academic impact' while the rest focus on 'external impact' beyond academia which is the focus of this study.

However, there are barriers to the adoption of academic research findings. For instance, the nature of a study can influence how readily potential users are willing to adopt and implement research findings. Hale (2011) identified two strands of research, namely basic and applied research. Basic research "focuses on fundamental principles and testing theories" while applied research "examines a specific set of circumstances, and its ultimate goal is relating the results to a particular situation" (Hale, 2011, p. 1). Consequently, it is sometimes implied (erroneously) that findings from basic research do not have immediate practical implementation compared to applied research ( Hale, 2011; Penfield *et al.*, 2014). On the other end, the nature of research users can also influence the willingness to adopt research findings. Using the 'diffusion of innovation' as the theoretical context, the 'innovators' and 'early adopters' might find it easy to apply new knowledge and findings (not necessarily to solve any identified problem), while the majority of practitioners tend to wait for proven evidence before deciding to adopt (Rogers, 1962).

Awareness also has a role to play and academic (and their institutions) should take the responsibility to disseminate their research findings (Panda and Gupta, 2014). This becomes imperative as potential users must be aware of new research discoveries before they can be expected to adopt and implement them. But, while it is important to sensitise the public about research findings, dissemination does not necessarily translate into impact and the two should not be equated (Davies et al., 2005). "Difficulty in changing current practice model, resistance and criticism from colleagues"

and "lack of trust" in evidence or research have also been identified as common barriers to implementation of research findings and recommendations (Spallek *et al.*, 2010, p.7). Tucker and Lowe (2014) in their study, found that 'difficulties in understanding academic research papers' and 'limited access to research finding' are significant barriers to research utilisation. The communication gap between researchers and end-users as well as lack of willingness to use research has also been reported as key barriers to research utilisation (Uzochukwu *et al.*, 2016). There are also growing "concerns that academics will sacrifice traditional scholarly activities to pursue commercial goals" due to influence from funders and funding mechanism in place (Goldfarb, 2008, p. 41).

The perception of potential research users of the credibility of data employed (Johnston and Warkentin, 2010), status and reputation of researchers and their institution (Zhu, Aquino and Vadera, 2016); nature of research funding and commercial interest (Lacasse and Leo, 2011) are other factors that have been found to have a significant impact on the adoption of research findings. Moreover, according to Zhu et al. (2016), ideology and perceptions regarding gender, race and caste can affect how individuals judge researchers' credibility. Although it could be argued that perceptions are sometimes irrational and untenable (Barría, 2017), but in reality, they subtly influence how potential users rate the credibility of research outputs, and consequently, on adoption and implementation research findings (Bauer *et al.*, 2005; Yousafzai, Foxall and Pallister, 2010; Southey, 2011).

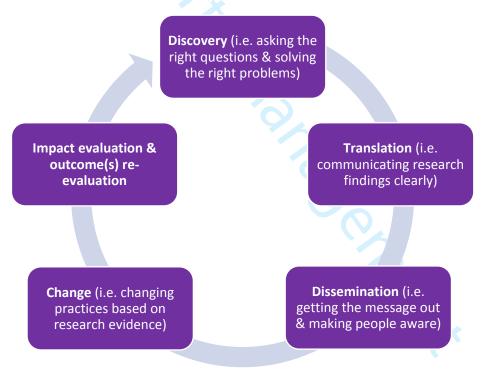


Figure 1: A framework of research adoption and diffusion Source: Adapted from Tucker and Lowe (2014, p. 400).

Figure 1 shows a framework of research adoption and diffusion and the critical stages involved from research discovery to impact. It is an extension of the framework by Tucker and Lowe (2014) with one additional stage added to the four contained in the original framework. The conceptual framework has been adopted in designing this study due to appropriateness and relevance. According to Tucker and Lowe (2014), the stages in the framework represent barriers that must be overcome to achieve increased adoption and implementation of academic research findings in practice. In terms of definition, the discovery stage relates to "knowledge production" and whether

the research questions are related to the day-to-day challenges faced by practitioners; translation stage entails the presentation of research findings in a "coherent and digestible" manner for the endusers; dissemination stage focuses mainly on awareness of and access to research findings while change relates to a measurable impact that resulted from implementing research findings (Tucker and Lowe, 2014, p. 401).

The last stage of the framework is the 'impact evaluation and outcome(s) re-evaluation'. It encompasses measuring the value of the changes implemented to justify the continuous implementation of current practices. The stage is also useful for identifying new research that should be conducted in case the implementation of from an original study lead to undesirable outcomes. Unlike the original framework, the introduction of this impact evaluation stage addresses the fact that the process of knowledge creation should be continuous with one research breakthrough leading to new research problems. To bridge the gap between research and practice, research must be designed to solve pertinent problems faced by practitioners, without jeopardising academic rigour (Panda and Gupta, 2014). Also, academic research findings should be easily understood, adequately disseminated and accessible (Walley *et al.*, 2007; Panda and Gupta, 2014; Tucker and Lowe, 2014).

The study by Uneke *et al.* (2012) focused on bridging the gap between researchers and policymakers in the Nigerian health sector. According to the study, "involving both parties in planning and execution of health research and health programmes; promoting dialogue between researchers and policymakers; institutionalising research grants and commissioning research in health ministries; and ensuring that researchers are made to focus on the core needs of policymakers" (Uneke *et al.*, 2012, p. 750), are paramount to narrowing the gap between academic research and policy. Meanwhile, higher institutions of learning have been recognised as being more credible compared to real estate firms and stockbrokers, in terms of contribution to real estate research in Nigeria to underscore the important role that academic research can play in shaping and advancing real estate professional practice in the country (Adewunmi and Olaleye, 2011).

#### Method and Procedure

This study aims to assess the impact of real estate research outputs on the practice of real estate surveying and valuation in Nigeria as the biggest economy and real estate markets in Africa. The country has a significant number of higher institutions of learning offering real estate surveying and valuation degrees/diplomas and have got a thriving real estate professional practice, which makes it a suitable focus for this study (Adewunmi and Olaleye, 2011; Oladokun and Olaleye, 2018). It is also noteworthy, that given its investment potentials, Nigeria is one of the African destinations that attract the attention of international real estate investors. This research is therefore pertinent to the series of efforts being made by concerned professionals to improve the practice of real estate surveying and valuation in the country. The research procedure followed involved an online survey of practising real estate professionals who are registered members of the Nigerian Institution of Estate Surveyors and Valuers (NIESV). The procedure aligns with the quantitative methodological approach that is connected to making inferences and generalisations about a phenomenon based on data obtained from an appropriate sample or an entire population (Abueisheh *et al.*, 2020; Adabre *et al.*, 2020).

The questionnaire was designed using Google Forms, a data collection tool that allows for anonymous online data collection. The link to the survey was then emailed to the research

participants using contact details obtained from NIESV's website. The questionnaire consisted of two parts with the first focusing on the background of the respondents in which they were asked to indicate the city where they were practising, area of specialisation, years of professional experience, NIESV's membership status, highest educational qualification, gender and age. The second part of the questionnaire was designed to capture information relating to:

- reading of academic papers from the field of real estate and the reasons for doing so;
- whether or not they have made any changes to their professional practice based on findings from academic paper(s); and
- possible barriers to the adoption of academic research findings in practice.
   Different factors were presented under the different sections mentioned above and the respondents were requested to indicate their agreement as to how each factor affects property research and practice. The factors were presented on a five-point Likert scale ranging from 1 (not important/strongly disagree) to 5 (very important/strongly agree).

Collection of data through an online questionnaire is common in the literature (see, for instance, Abidoye and Chan, 2016; Mooya, 2015; etc.) and was considered suitable for this study for its cost and time saving potential and easy access to the target population (Wright, 2005). There are other shortcomings inherent in the use of online surveys, but the benefits as far as this study is concerned, outweigh its demerits (see Evans and Mathur, 2005; Fricker and Schonlau, 2002 for discussion on the use of online survey and its pros and cons). The data collection lasted for three months and two reminders were sent to the respondents during this period to increase the response rate. We acknowledge that the use of an online survey and the data collection procedure followed has a few shortcomings. A total of 1,327 members of NIESV were emailed after retrieving their contact from the institution's website, but there were cases of invalid email that were only discovered through delivery failure notification.

After the data collection period, a total of sixty-one valid responses were retrieved which were used in this study. In literature, a sample size that is more than thirty participants is generally regarded as large (Levin & Rubin, 1998; Verma, 2013), hence, the sample size of this study has been considered adequate for analysis and to generate a meaningful conclusion. Besides, Adabre *et al.* (2020); Wilkinson *et al.* (2018) and Abidoye and Chan (2016), which also adopted a similar data collection approach are based on sample sizes ranging between 25 to 55. To further test the reliability of the method adopted, the data was subjected to some diagnostic statistical tests before the main data analysis (i.e., Principal Component Analysis) and the results obtained show that the data is sufficient to achieve the set objectives of the study.

Data regarding the background of the respondents is analysed using descriptive analysis in terms of percentage distribution. The strategies to improve the significance of academic research and the benefits of bridging the gap between theory and practice will be analysed using the mean score ranking. Any factor that has a mean score of between 4.00 - 5.00 will be adjudged as highly significant, between 3.50 - 3.99 is significant and those below 3.50 are not significant (Abidoye, 2017). Concerning the question on possible barriers to adoption of academic research findings in practice, factor analysis was conducted to identify a comparatively smaller number of factors out of the seventeen (17) factors presented in the questionnaire (Bügl *et al.*, 2009).

#### Results and discussion

Table 1 presents the background of the survey participants starting with location of practice. As shown in the table, twenty (representing 32.8% of the participants) practise in Lagos while twelve of them (representing 19.7%) practise in Abuja, the Federal Capital city. The remaining twenty-nine participants practise in other various cities which include Akure, Abeokuta, Ibadan, Kaduna and Minna. This distribution is as expected and proportionate to what obtains in reality as Lagos and Abuja are the two cities with the largest number of estate surveying and valuation firms in Nigeria. As also shown in Table 1, twenty-six (representing 42.6% of the participants) specialise in property valuation; seventeen (27.9%) in facilities and property management; seven (11.5%) in agency and marketing; six (9.8%) in property development and feasibility/viability studies while the remaining five specialise in other areas (e.g., land administration and involuntary resettlement planning/administration). Again, the distribution reflects property valuation; management and marketing as the main preoccupations of the target population.

In terms of professional membership, the majority (93.4%) of the survey participants are either an Associate or a Fellow of the NIESV with only a small proportion (6.6%) in the 'graduate' category. This shows that they are qualified to provide the data required to achieve the aim of the study. There were fifty-two male participants (85.2%) compared to nine females which represent only 14.8 per cent of the sample. The result clearly corroborates the fact that the real estate profession in Nigeria is male dominated. Majority of the respondents have more than five years of experience as only four of them (representing 6.6%) fall within the '1 – 5 years' category. In fact, sixteen (representing 26.2%) have more than twenty years of experience which further confirms the eligibility of the respondents to address the survey questions. The age distribution shows that more than half of participants are above forty years which correlates with the years of postgraduation experience discussed earlier. The background information presented in the table shows that the sampled professionals have the experience required to provide reliable data for the analysis.

When asked about the reading of academic papers from the field of real estate, fifty-three of them affirmed that they read either 'very often' or 'often' with only eight in the 'seldom' category. Again, it shows many of them are in a position to apply research findings from empirical studies and discuss possible barriers against research application.

Table 1: Background of the participants

		Frequency	Percent
City of practice	Lagos	20	32.8
	Abuja	12	19.7
	Others	29	47.5
	Total	61	100.0
Area of specialisation	Property valuation	26	42.6%
	Facilities and property	17	27.9%
	management		
	Agency and marketing	7	11.5%
	Property development and	6	9.8%
	feasibility/viability studies		
	Others	5	8.2%
	Total	61	100.0
NIESV's membership	Fellow	8	13.1
status	Associate	49	80.3
	Graduate	4	6.6
	Total	61	100.0
Highest educational	PhD	9	14.8
qualification	Masters	34	55.7
	BSc/HND	18	29.5
	Total	61	100.0
Gender	Male	52	85.2
	Female	9	14.8
	Prefer not to say	0	(
	Total	61	100.0
Age	20 - 30 years	2	3.3
0	31 - 40 years	25	41.0
	41 - 50 years	20	32.8
	51 - 60 years	14	23.0
	Total	61	100.0
Years of experience in	1-5 years	4	6.6
practice .	6-10 years	17	27.9
	11-15 years	15	24.6
	, 16-20 years	9	14.8
	Over 20 years	16	26.2
	Total	61	100.0
Reading of academic	Very often	23	37.7
papers from the field	Often	30	49.2
of real estate	Seldom	8	13.1
<del></del>	Total	61	100.0

NIESV has her journal (*The Estate Surveyor and Valuer*) and academics also use the medium to publish their research, so we decided to ask the respondents if they were aware of the journal. From Table 2, twenty-nine of them are aware of the journal while another fifteen affirmed that it is the only journal where they read most academic papers. Sixteen of the participants know the journal but do not normally read while one of the participants do not know the journal exists. This distribution shows that many are aware of the NIESV's journal and with only 24.6 per cent affirming that it is the only journal where they read academic papers, it shows that interest in *The Estate Surveyor and* 

*Valuer* is not likely to affect the participants' engagement with other academic journals as well as their ability to answer the survey questions objectively. While it would be necessary to get more people to read the NIESV's journal, there are other journals where research findings are published that the participants could explore.

Table 2: Awareness of NIESV's journal (The Estate Surveyor and Valuer)

	Frequency	Percent
I am aware of the journal	29	47.5
I know the journal exists but do not normally read	16	26.2
It is the only journal where I read most academic papers	15	24.6
I do not know it exists	1	1.6
Total	61	100.0

Participants were asked about reasons for reading academic papers and as shown in Table 3, "personal development and enlightenment", "requirement as part of a further educational programme" and because articles were "circulated during a NIESV's national or state chapter's meeting" rank as the first three reasons. Twelve read the papers because they were "published in *The Estate Surveyor and Valuer*", eight did because papers were "recommended as part of a CDP organised by NIESV" while only two read because papers were "recommended and made available by the authors". Lastly, the table shows none of the participants read academic studies on the instruction of their organisation or employer. This result shows that academics, NIESV and real estate firms can certainly do more to disseminate information to raise the level of engagement with academic papers. When asked if they or their firm ever made any change to their professional practice based on findings from academic papers they read, thirty-five of the respondents (57.4%) confirmed that their practice has been influenced while the remaining twenty-six disagreed or could not remember ever implementing any change.

Table 3: Reasons for reading academic papers and impact on practice

		Frequency (n = 61)	Percent
Reason for	For personal development and enlightenment	54	88.5
reading academic	It is required as part of a further educational programme	25	41.0
papers	It was circulated during a NIESV's national or state chapter's meeting	13	21.3
	The paper was published in the NIESV's journal (The Estate Surveyor and Valuer)	12	19.7
	It was recommended as part of a CDP organised by NIESV	8	13.1
	It was recommended by a colleague	3	4.9
	It was recommended and made available by the author(s)	2	3.3
	My organisation asked me to read	0	0.0
Made	Yes	35	57.4
changes to	No	17	27.9
practice	I can't remember	9	14.8

Participants were asked to cite specific examples of changes made to their practice through an openended question. After a careful examination of the responses received, it was clear that the changes made relate to four main aspects of real estate professional practice, namely valuation; property management; agency and marketing; and organisation. On valuation, one respondent stated that they have changed their "valuation reporting format of recent to accommodate the guideline from the green book". Similar to this, another respondent stated, "we have reworked on our reporting format and approaches to valuation exercises and in executing involuntary resettlement assignments". Other changes mentioned are "the use of hedonic pricing model to predict or evaluate property values using a firm-based database of a specific location where the database exists and developed for more than ten years"; "land acquisition and compensation payment" and "adjusting valuation models".

On property management, a respondent mentioned that "some material [academic papers] have helped us as a company to make some changes in area property management [including] attending to mechanical issues in multi-tenanted premises" while another mentioned changes in the area of "record update/keeping with clients". Relating to agency and marketing, academic papers have helped respondents to change the "mode and medium of marketing properties" and "improved on online marketing and extending facilities management [through] all available online media". On organisational practice and structure, one respondent stated that "exposure to academic papers on sustainability has made my practice more aware of the need for sustainable practices" while three others mentioned "creating in house specialisations"; "follow up after professional service has been rendered" and "restructure of my office" as the changes resulting from adopting findings from academic papers.

#### Barriers to adoption of academic research findings in your practice

Participants were asked to rank sixteen possible barriers to adoption academic research findings which were then subjected to Principal Component Analysis (PCA). The adequacy of the data used for this study was tested using the KMO test. A KMO value greater than 0.5 is agreed to indicate the adequacy of the sample data used for the analysis (Verma, 2013). In this study, a KMO of 0.68 was obtained which signifies that the data set used in this study is adequate (see Table 4). In addition, Bartlett's test of sphericity was conducted on the data set and the result was found to be significant (see Table 4) indicating that the correlation matrix is not an identity matrix.

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure o	f	0.68
Sampling Adequacy		
	Approx. Chi-Square	419.91
Bartlett's Test of Sphericity	df	136
	Sig.	0.00

As shown in Table 5, the communality of each of the variables is at least 0.522. Since they are all greater than 0.4, it implies that they are all important in the interpretation of the factors, hence, they were retained for further analysis in line with the guidelines provided by Verma (2013).

Table 5: Communalities

Communalities	Initial	Extraction
Topics are often irrelevant to my practice	1.000	0.746
I feel most of them are based on questionable data	1.000	0.732
Cost of accessing journal articles is too high	1.000	0.541
Academics do not inform me when they publish their works	1.000	0.676
I am not in a position to apply research findings even if I am aware of them	1.000	0.562
My company has a research department and does not need any external academic research	1.000	0.750
Research papers do not often include the cost implication of adopting new practices	1.000	0.644
We try to avoid disruption to our services and mode of operation unless if changes are unavoidable	1.000	0.666
My firm prefers to see others make changes to their operations before trying	1.000	0.700
I simply follow the dictates of NIESV, so I do not bother to read academic papers	1.000	0.717
The professional bodies are not promoting the application/importance of research findings to practice	1.000	0.705
Research findings are too difficult to understand and application guidelines are usually not provided	1.000	0.522
During my education, my lecturers (academics) did not demonstrate the application of research findings in practice	1.000	0.807
During my education, my lecturers (academics) did not demonstrate the relationship between research findings and practice	1.000	0.775
I am used to a certain way of practice and I feel comfortable to continue with it	1.000	0.543
Professionals are not familiar with the language (terms) used in research papers	1.000	0.790
Research findings are not usually showcased at state or national NIESV's MCPDs	1.000	0.531

Extraction Method: PCA.

Five components were extracted representing the broad categories for the initial seventeen factors that were included in the questionnaire. Altogether, the components exhibit 67.11% variance which compares well other similar studies (e.g., Adabre et al., 2020; Chan et al., 2018) and indicates that the model can be used explain the barriers to adoption academic research findings.

Component 1 relates to **inadequate dissemination and education** which has an Eigenvalue of 4.88 and is responsible for 28.73% variance in the model. The component consists of five factors: 'lecturers did not demonstrate the application of research findings in practice' (81.7%), 'academics do not inform professionals when they publish' (78.6%), 'research findings are too difficult to understand and application guidelines are usually not provided' (67.4%), 'lecturers did not demonstrate the relationship between research findings and practice' (64.0%) and 'professional bodies are not promoting the application/importance of research findings to practice' (63.8%) (see Table 6 for variance and loading values). Component 2 with an Eigenvalue of 2.34 and 13.74% variance is the second most influential variable in the model and has been described as a **lack of desire to adopt new practices**. There are four factors with significant loads on this component, namely 'simply

following the dictates of NIESV instead of reading and adopting academic findings' (84.0%), 'preferring to see others make changes first before trying' (79.9%), 'getting used to a certain way of practice and feeling comfortable to continue with it' (63.7%) and 'professionals are not familiar with the terms used in research papers' (62.8%).

Component 3 described a lack of clarity and perception regarding research credibility has an Eigenvalue of 1.77 and exhibits 10.39% variance. It consists of four factors 'research papers do not often include the cost implication of adopting new practices' (76.3%), 'avoiding disruption to our services and mode of operation unless if changes are unavoidable' (73.6%), 'academic studies are based on questionable data' (69.5%) and 'not being in a position to apply research findings even if cess cos.
as only one tagenvalue of 1.08 a. one is aware of them' (53.3%). Component 4 has got only two factors summarised as the relevance of research to practice and access cost and has an Eigenvalue of 1.34 and 7.88% variance on the model. Lastly, component 5 has only one factor described as the presence of an in-house research **department** which has an Eigenvalue of 1.08 and 6.36% variance.

Table 6: Rotated Component Matrix

·	Component				
_	1 2 3 4				
During my education, my lecturers (academics) did not	0.817				
demonstrate the application of research findings in					
practice					
Academics do not inform me when they publish their	0.786				
works					
Research findings are too difficult to understand and	0.674				
application guidelines are usually not provided					
During my education, my lecturers (academics) did not	0.640				
demonstrate the relationship between research					
findings and practice					
The professional bodies are not promoting the	0.638				
application/importance of research findings to practice					
Research findings are not usually showcased at state or	0.431				
national NIESV's MCPDs					
I simply follow the dictates of NIESV, so I do not bother		0.840			
to read academic papers		0.700			
My firm prefers to see others make changes to their		0.799			
operations before trying		0.627			
I am used to a certain way of practice and I feel comfortable to continue with it		0.637			
Professionals are not familiar with the language (terms)		0.628			
used in research papers		0.026			
Research papers do not often include the cost			0.763		
implication of adopting new practices			0.703		
We try to avoid disruption to our services and mode of			0.736		
operation unless if changes are unavoidable			0.750		
I feel most of them are based on questionable data			0.695		
I am not in a position to apply research findings even if			0.533		
I am aware of them					
Topics are often irrelevant to my practice				0.788	
Cost of accessing journal articles is too high				-0.433	
My company has a research department and does not					0.826
need any external academic research					
Eigenvalue	4.884	2.336	1.767	1.34	1.08
Variance (%)	28.731	13.743	10.394	7.884	6.356
Cumulative variance (%)	28.731	42.474	52.867	60.751	67.107

Extraction Method: PCA.

Rotation Method: Varimax with Kaiser Normalization

Rotation converged in 12 iterations.

Table 7 presents the strategies to improve the significance of academic research in the opinion of the real estate professionals who participated in the survey. The table shows that the first five factors are highly significant (with MS ranging from 4.13 to 4.49) while the remaining three are significant. The highest-ranked strategy with MS of 4.49 is that academics and industry professionals should always synergise in identifying problems being faced in the industry. This means that the researchers should identify the exact problems professionals are facing in practice before conducting bespoke research to address such issues. If this gap exists, the research outcomes may not solve any problem, hence, the research will not be making any impact. This finding corroborates the results of Uneke et al. (2012) that all relevant stakeholders should discuss the problem and the research so that the research outcomes can be significant and impactful. Research findings that lead to positive practical

impacts should be celebrated by NIESV and Professional bodies should propagate the importance and usefulness of academic research both have an MS of 4.41 which made them the second and third most significant strategies. This result indicates that the professional bodies are an important stakeholder in ensuring that the gap between research outputs and industry problems is bridged by through training, mandatory continuous professional development (MCPD) among others. This is similar to the position of Panda and Gupta (2014) that the awareness of the research findings by the professionals is key in the adoption of the research findings.

Table 7: Strategies to improve the significance of academic research

	NI	SI	N	1	VI	Total	Mean Score
Academic and professionals should always synergise to identify problems in practice that needs research	1	4	2	11	43	61	4.49
Research findings that lead to positive practical impacts should be celebrated by NIESV	0	5	5	11	40	61	4.41
Professional bodies should propagate the importance and usefulness of academic research	1	5	3	11	41	61	4.41
Bulletin of studies that have implications for practice should always be published	0	5	4	14	38	61	4.39
Academics should do more to propagate their research findings by using various social media platforms	0	6	10	15	30	61	4.13
Every real estate firm should be mandated to have a research utilisation unit	3	8	12	14	24	61	3.79
Real estate firms should fund research	6	6	9	15	25	61	3.77
Real estate professionals should consider undertaking a postgraduate research study	3	8	14	13	23	61	3.74

NI is not important, SI is slightly important, N is neutral, I is important and VI is very important

Bulletin of studies that have implications for practice should always be published has an MS of 4.39 to merge as the fourth most important strategy to improve the impact of academic studies on real estate practice in Nigeria. Again, the result reinforces the role of NIESV in disseminating research findings so that members are kept abreast of recent research findings and developments that have implications for their practice. However, there is also an important role for academic researchers as indicated through the MS of Academics should do more to propagate their research findings by using various social media platforms. With an MS of 4.13, it emerged as the fifth most important strategy suggesting that academics must be more proactive with the way they publicise their research findings. While the main platforms (e.g., journals and conferences) remain relevant, the use of social media platforms has also become an auxiliary but potent means of getting the public aware of research findings.

Table 8: Benefits of bridging the gap between theory and practice

	SD	D	N	Α	SA	Total	Mean
							Score
It can enhance practice-based learning in higher institutions	1	3	3	19	35	61	4.38
It can motivate professionals to acquire additional knowledge	2	2	5	15	37	61	4.36
Creates awareness of the state-of-the-art approach to practice	1	4	9	11	36	61	4.26
Improves capacity for internalisation of services	2	2	9	22	26	61	4.11
It can lead to time and cost savings in practice	1	4	8	25	23	61	4.07

SD is strongly disagree, D is disagree, N is neutral, A is agree and SA is strongly agree.

The participants were also asked about their opinion regarding the benefits of bridging the gap between academic research and practice. The result is as presented in Table 8 which shows that they agree with all the items posted in the questionnaire. In order of MS, participants agree that it can enhance practice-based learning in higher institutions (MS = 4.38) which is crucial for enhancing employability as a solution to one of the main challenges facing graduates in the country. With learning and research focusing on real-life problems, students are more likely to grow confidence and become critical thinkers which are essential for practice. They also agree that bridging the gap between theory and practice can motivate professionals to acquire additional knowledge (MS = 4.36) and create awareness of the state-of-the-art approach to practice (MS = 4.26). Lastly, they agree when the gap between academic research and practice is narrowed, it improves capacity for internalisation of services (MS = 4.11) and can lead to time and cost savings in practice (MS = 4.07). These benefits show the potential of research with practical applications but are realisable only when academic studies address specific problems facing real estate professionals.

#### Summary and conclusion

The mismatch between research activities and professional practice continues to be a source of concern to relevant stakeholders as academic studies remain largely inadequate in providing meaningful solutions to the myriad of problems in the Nigerian real estate industry. This study has been conducted to investigate the factors responsible for this gap and identify the strategies that can be adopted narrow the gap in the Nigerian real estate industry. Adopting a survey research approach, an online survey was conducted to obtain relevant data from real estate professionals who are members of NIESV. Data analysis was mainly through descriptive statistics, mean score and PCA.

The analysis showed that "personal development and enlightenment", "requirement as part of a further educational programme" and because articles were "circulated during a NIESV's national or state chapter's meeting" are the main reasons why the participants read academic papers from the field of real estate. While the first two are expected, the finding shows that NIESV's national or state chapter's meetings can also be an avenue to facilitate engagement with academic papers and academics are advised to leverage these meetings to promote their findings. NIESV's journal is a good platform for disseminating academic findings and should be used when possible, but based on this

finding, NIESV's meetings can also be employed to make members know of emerging studies and findings. Apart from making the main article available to potential readers and users, authors can also summarise their findings and publish as blogs for wider access. The main aspects of practice the participants have implemented research-based changes are real estate valuation; property management; agency and marketing; and organisational structure and practice, which reflect the content of real estate education curriculum in Nigeria and the main research domains for academics in the field of real estate.

PCA was used to analyse the barriers to the adoption of research findings in practice. The seventeen factors included in the questionnaire were reduced to five main components, namely "inadequate dissemination and education", "lack of desire to adopt new practices", "lack of clarity and perception regarding research credibility", "relevance of research to practice and access cost" and "presence of an in-house research department". To bridge the gap between academic research and practice, participants feel that "academics and industry professionals should always synergise in identifying problems being faced in the industry". Also, "research findings that lead to positive practical impacts should be celebrated by NIESV" and "professional bodies should propagate the importance and usefulness of academic research". Besides, while the main platforms (e.g., journals and conferences) remain relevant, social media platforms must be used more proactively as channels to disseminate and create awareness regarding research findings.

Findings from the study emphasise the role of the professional bodies in promoting research application, e.g., professional bodies and real estate firms should provide funding support to researchers and readily engage with them in the process of formulating research proposals. However, the study also challenges researchers to be more creative with research dissemination. This study is significant as it assesses the relevance of academic studies in the field of real estate which will be useful for develop strategies that can help to bridge the gap between theory and practice. However, there are also some limitations that users of this study should take into consideration. For instance, the findings of the study rely on relatively small sample size. While the authors are confident that the data employed is reliable, access to a larger sample size will increase confidence in the findings and generalizability. Where possible, it is recommended that similar future studies should be based on larger samples. Alternatively, interviews can be used to obtain data as a separate study or as part of a mixed-approach research. Future studies can investigate the effectiveness of dissemination methods being used by researchers and how research impacts are chronicled and tracked.

### References

Abidoye, R. B. (2017). Towards property valuation accuracy: A comparison of hedonic pricing model and artificial neural network. (Doctorate Degree), The Hong Kong Polytechnic University, Hong Kong. Retrieved from

http://ira.lib.polyu.edu.hk/bitstream/10397/70359/2/991021965755503411\_pira.pdf (LG51 .H577P BRE 2017 Abidoye)

Abidoye, R. B., & Chan, A. P. C. (2016). A survey of property valuation approaches in Nigeria. Property Management, 34(5), 364-382.

Abueisheh, Q. et al. (2020) 'Design for safety implementation among design professionals in construction: The context of Palestine', Safety Science. Elsevier, 128(October 2019), p. 104742.

- Adabre, M. A. et al. (2020) 'Critical barriers to sustainability attainment in affordable housing: International construction professionals' perspective', Journal of Cleaner Production. Elsevier Ltd, 253, p. 119995.
- Adewunmi, Y. A. and Olaleye, A. (2011) 'Real estate research directions and priorities for Nigerian institutions', Journal of Real Estate Practice and Education, 14(2), pp. 125–140.
- Barría, M. P. (2017) 'The gap remains: The challenge of translating research into policies for the health care of people and communities', Invest Educ Enferm., 35(2), pp. 129–130.
- Bauer, H. H. et al. (2005) 'Driving consumer acceptance of mobile marketing: a theoretical framework and empirical study', Journal of Electronic Commerce Research, 6(3), pp. 181–192.
- Bügl, R. et al. (2009) 'Sustainable property funds: financial stakeholders' views on sustainability criteria and market acceptance', Building Research & Information, 37(3), pp. 246–263.
- Davies, H., Nutley, S. and Walter, I. (2005) 'Approaches to assessing the non-academic impact of social science research. Report of the ESRC Symposium on assessing the non-academic impact of research 12th/13th May 2005', Economic & Social Research Council, ESRC, (May), pp. 1–35. Available at: <a href="http://www.esrc.ac.uk/files/research/research-and-impact-evaluation/international-symposium/">http://www.esrc.ac.uk/files/research/research-and-impact-evaluation/international-symposium/</a>
- Evans, J. R. and Mathur, A. (2005) 'The value of online surveys', Internet Research, 15(2), pp. 195–219.
- Fricker, R. D. and Schonlau, M. (2002) 'Advantages and Disadvantages of Internet Research Surveys: Evidence from the Literature', Field Methods, 14(4), pp. 347–367.
- Hale, J. (2011) 'Understanding Research Methodology 5: Applied and Basic Research', PsychCentral, pp. 1–3. Available at: <a href="https://psychcentral.com/blog/understanding-research-methodology-5-applied-and-basic-research">https://psychcentral.com/blog/understanding-research-methodology-5-applied-and-basic-research</a>
- Johnston, A. C. and Warkentin, M. (2010) 'The Influence of Perceived Source Credibility on End User Attitudes and Intentions to Comply with Recommended IT Actions', Journal of Organizational and End User Computing, 22(3), pp. 1–21.
- Kieser, A. and Leiner, L. (2009) 'Why the Rigour Relevance Gap in Management Alfred Kieser and Lars Leiner', Journal of Management Studies, 46(May), pp. 516–533.
- Lacasse, J. R. and Leo, J. (2011) 'Knowledge of ghostwriting and financial conflicts-of-interest reduces the perceived credibility of biomedical research', BMC Research Notes. BioMed Central Ltd, 4(1), p. 27.
- Levin, R. I., & Rubin, D. S. (1998). Statistics for management. New Jersy: Prentice-Hall.
- Mooya, M. M. (2015). The education and professional practice of valuers in South Africa: A critical review. Property Management, 33(3), 245 274.
- Niederkrotenthaler, T., Dorner, T. E. and Maier, M. (2011) 'Development of a practical tool to measure the impact of publications on the society based on focus group discussions with scientists', BMC Public Health, 11(588), pp. 1–9.
- Oladokun, T. T. and Olaleye, A. (2018) 'Bridging skill gap in real estate education in Nigeria', Pacific Rim Property Research Journal. Routledge, 24(1), pp. 17–34.
- Panda, A. and Gupta, R. K. (2014) 'Making academic research more relevant: A few suggestions', IIMB Management Review. Elsevier Ltd, 26(3), pp. 156–169.
- Penfield, T. et al. (2014) 'Assessment, evaluations, and definitions of research impact: A review', Research Evaluation, 23(1), pp. 21–32.

- Research Excellence Framework (2011) 'Assessment framework and guidance on submissions', Research Excellence Framework, (July 2011), p. 63. Available at: <a href="http://www.ref.ac.uk/media/ref/content/pub/assessmentframeworkandguidanceonsubmissions/GOS">http://www.ref.ac.uk/media/ref/content/pub/assessmentframeworkandguidanceonsubmissions/GOS</a> including addendum.pdf
- Sivertsen, G. (2017) 'Unique, But Still Best Practice? The Research Excellence Framework (Ref) from an International Perspective', Palgrave Communications. Nature Publishing Group, 3(17078), pp. 1–6.
- Southey, G. (2011) 'The Theories of Reasoned Action and Planned Behaviour Applied to Business Decisions: A Selective Annotated Bibliography', Journal of New Business Ideas & Trends, 9(1), pp. 43–50.
- Spallek, H. et al. (2010) 'Barriers to implementing evidence-based clinical guidelines: Survey of Early Adopters', J Evid Based Dental Pr act, 10(4), pp. 195–206.
- Tucker, B. P. and Lowe, A. D. (2014) 'Practitioners are from Mars; academics are from Venus?: An investigation of the research-practice gap in management accounting', Accounting, Auditing and Accountability Journal, 27(3), pp. 394–425.
- Uneke, C. J. et al. (2012) 'Promotion of evidence-informed health policymaking in Nigeria: Bridging the gap between researchers and policymakers', Global Public Health, 7(7), pp. 750–765.
- Uzochukwu, B. et al. (2016) 'The challenge of bridging the gap between researchers and policymakers: Experiences of a Health Policy Research Group in engaging policymakers to support evidence informed policymaking in Nigeria', Globalization and Health. Globalization and Health, 12(1), pp. 1–15.
- Verma, J. P. (2013). Data analysis in management with SPSS software. India: Springer Science & Business Media.
- Walley, J. et al. (2007) 'How to get research into practice: first get practice into research', Bulletin of the World Health Organization, 85(6), pp. 424–425.
- Young, J. (2005) 'Research, policy and practice: Why developing countries are different', Journal of International Development, 17(6), pp. 727–734.
- Yousafzai, S. Y., Foxall, G. R. and Pallister, J. G. (2010) 'Explaining Internet Banking Behavior: Theory of Reasoned Action, Theory of Planned Behavior, or Technology Acceptance Model?', Journal of Applied Social Psychology, 40(5), pp. 1172–1202.
- Zhu, L., Aquino, K. and Vadera, A. K. (2016) 'What makes professors appear credible: The effect of demographic characteristics and ideological beliefs', Journal of Applied Psychology, 101(6), pp. 862–880.
- REF (2011) Assessment Framework and Guidance on Submissions. Available at: <a href="http://www.ref.ac.uk/media/ref/content/pub/assessmentframeworkandguidanceonsubmissions/02">http://www.ref.ac.uk/media/ref/content/pub/assessmentframeworkandguidanceonsubmissions/02</a> 11.pdf
- Watts G, 2009. Beyond the impact factor. Brit Med J, 338:440-441.
- Wilkinson, S., Antoniades, H., & Halvitigala, D. (2018). The future of the Australian valuation profession. Property Management, 36(3), 333-344.
- Wright, K. B. (2005). Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. Journal of computer-mediated communication, 10(3), JCMC1034.
- Rogers, Everett M. (1962). Diffusion of Innovations. Free Press of Glencoe, Macmillan Company.