

Management Factors Affecting Lecturers Performance: A Systematic Review and Synthesis for Future Research

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Abstract

This paper offered a systematic review of literature on the empirical studies on managerial factors affecting university lecturers' performance. In line with that, the paper reviewed empirical studies conducted on African universities. Specifically, the included papers referenced how at least one managerial factor influences lecturers' job performance in an African university. Employing systematic review methodology, we selected 92 English empirical articles on the subject as the sampled data. Results revealed that training, remuneration and performance management system are the most important predictors of job performance among lecturers in African public universities. As such, this paper provides future researchers a roadmap on managerial factors research. For practitioners, the study offers a guideline for successful use of managerial factors and how they affect lecturers' performance in public university setting.

Keywords: Universities; management factors; lecturers' performance; systematic review

Introduction

African universities like other universities across the globe were established based on clear mandates: teaching research and community service. These universities are the apex and heart of tertiary education, and are much often regarded as the key and drivers for development (Muturi, Sagwe, Cheruiyot & Maru, 2013; Zeleen, 2012). Universities, as opined by Alessandrini, Klose and Pepper (2013) are the principal agents that facilitate the advancement of scientific discoveries. The emphasis on research and training placed on universities makes them distinct from other tertiary institutions of learning. The lecturers in

these noble institutions play an active role in proffering solutions to numerous emerging challenges affecting the globe – malnutrition, poverty, disease, etc by developing new technologies that ameliorate them (Muriisa, 2014; Wolson, 2007). University lecturers are the key facilitators of academic learning and their competencies and performance undoubtedly affect students' learning and the institutions general performance (Haddad & Taleb, 2016; Karuhanga, 2015; Masron, Ahmad & Rahim, 2012; Kairuz, et al. 2016).

Several studies suggested that managerial factors influence lecturers' performance. For

instance Sukirno and Siengthai (2011) discovered that participatory decision making enhance lecturers' performance through energizing them, unleash their creativity and get them to 'buy into the restructuring agenda'. Quality teaching assessment was also discovered by Andreu, et al. (2006) to boost lecturers' performance through providing them with information concerning their strengths and weaknesses, which help them, acquire and deploy new skills during lectures delivery. Türk, (2008) found that good reward system has led to a highly motivated lecturers that equally boost their research performance over time. More so, a study conducted by Masron, Ahmad and Rahim (2012) revealed that sticking to a well-developed Key Performance Indicators (KPIs) comprising teaching, supervision, research, publication and consultancy improve university academic staff performance. While on the contrary, poor bureaucratic practices have been found to result in negative employee commitment as reported by Palladan (2021). Thus, through analyzing 92 previous studies, a detailed and comprehensive study on several managerial factors will be made available to scholars that would allow for better understanding of

the factors as well as suggest avenue for those that want to study on the area. Hence, we systematically review managerial factors that affect lecturers' job performance in African universities with the aim of developing a model for managerial factors and equally push for future research agenda.

Methodology

Research Approach

The procedure for conducting this review was shown in Figure 1. The initial step for successful commencement of this systematic review entails searching of databases for articles related to managerial factors in Africa. Automatic search was conducted in specific popular databases that included Emerald, JSTOR, Science Direct, Wiley Online Library, Taylor and Francis, Google scholar and Springer. Articles titles, abstracts, keywords and full texts were searched using different combinations of keywords - "Managerial Factors" AND "Academic Staff Performance in Africa", "Managerial Factors" AND "Lecturers Performance in Africa", "Managerial Factors" AND "Faculty Performance in Africa", "Managerial Factors" AND "Teachers Performance in Africa"

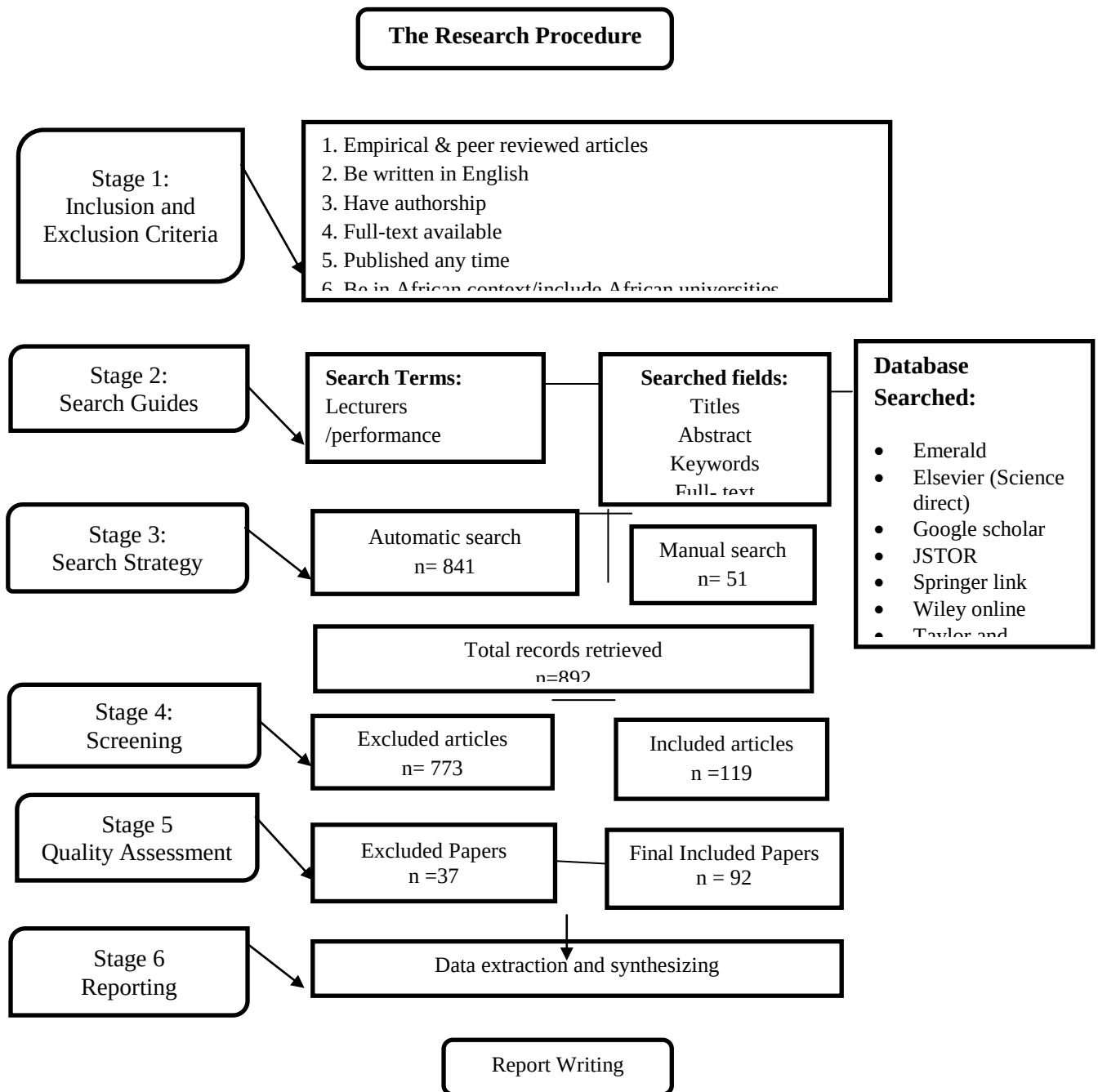


Figure 1

The Systematic Review Procedure

A suggested Linnenluecke, Marrone and Singh, (2020), we scanned throughout the titles, keywords, abstracts and in some cases the whole paper to extract the included managerial factors. Further as postulated by

Xiao and Watson (2019), we resolved any difference and disagreement about any factor that looks ambiguous through consensus. There is no restriction in years for the studies retrieved. This is to enable

inclusion of all relevant articles that discussed at least one of managerial factor that might affect lecturers' job performance in African context. Further, in conformity with Tonhäuser and Bükér (2016) rigour guideline, the study restricted itself to empirical papers emanated from doubled blind review process only. More so, we equally carried out Quality Assessment (QA) on the targeted articles. The QA was guided by the checklist proposed by this study in line with Bandara, Miskon and Fieft (2011) guidelines. The QA questions are:

QA1: Does the article's title related to lecturers' performance?

QA2: How adequate is the article methodology of the study?

QA3: Was the context in which the study conducted clearly reported?

QA4: Does the included paper reported at least one managerial factor?

Upon applying the above QA questions on each article, Nidhra, et al.'s (2013) criteria that its score ranges for 0 to 6 points was equally used to score the articles. '0 point' connotes the least score while '6 point' denotes the highest score. The outcome of QA led to removal of further 37 papers. Finally a total of 92 articles were considered suitable for further analysis. In all, we arrived at twenty seven (27) factors that we all agreed affects lecturers' job performance in African public universities (Figure 1). Some article offered only one managerial factor while others provide as much as five factors.

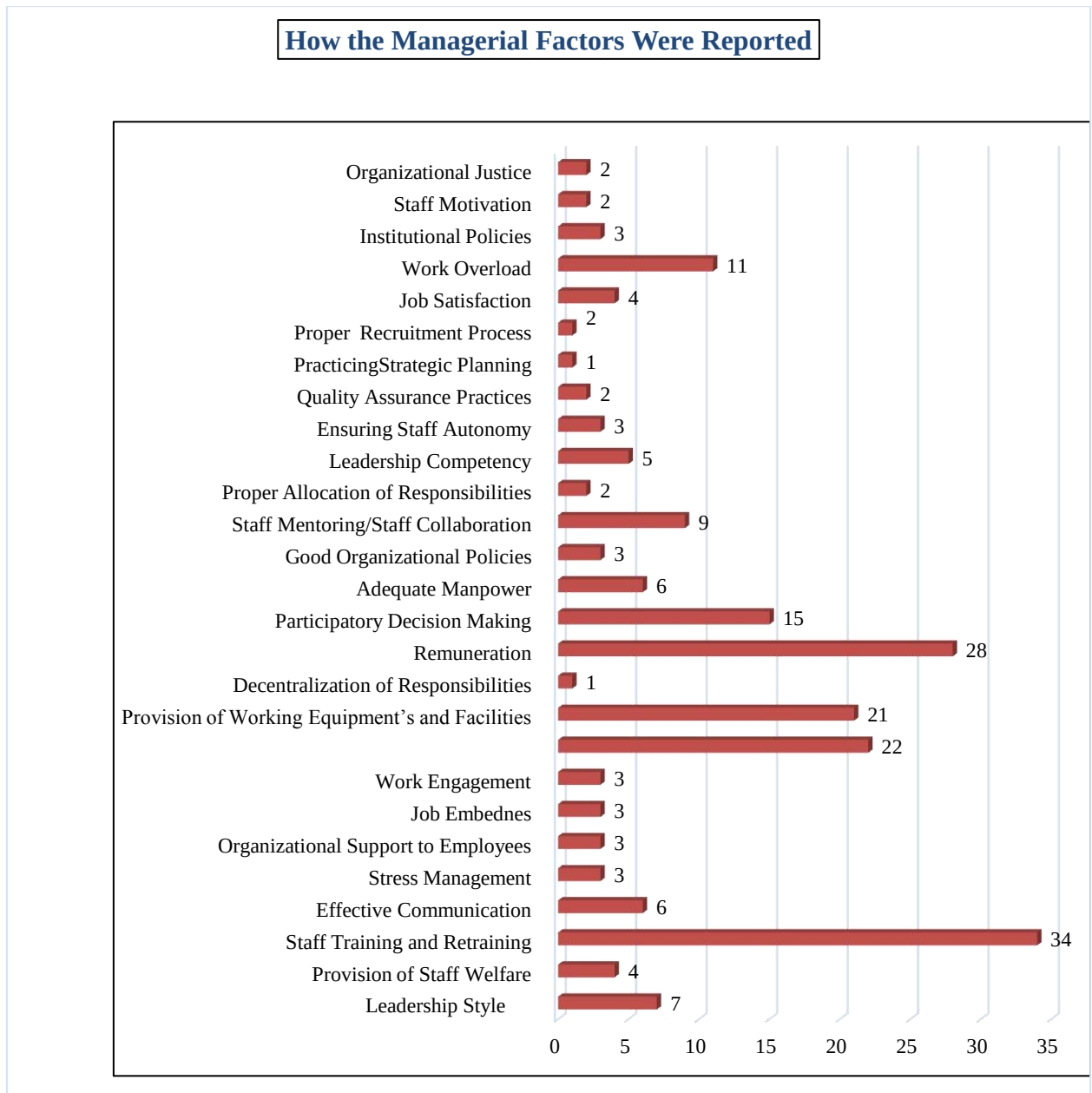


Figure 1
Reported Managerial factors

Presentation of Results

Article Numbers and Spread Patterns

The final sample of the study is made up of 92 articles. Out of this number, 73 papers representing 79.3 per cent of them were published between 2010 and 2020. This indicates that the prevalence of online research article publications by African

academics has become more pronounced from the year 2000. This could be discerned from the huge systematic reviews on African context that reported similar findings (c.f Atatsi, Stoffers & Kil, 2019; Bervell & Umar, 2017; Kaliisa & Picard, 2017; Khalid & Pedersen, 2016). This period could be regarded as the new dynamism online article

publication in Africa. As for geographical spread of the articles, Nigeria and South Africa has the highest number of published articles that discussed managerial factors affecting university lecturers' job performance. In the selected data, Nigeria contributed 31 articles (33.7%) in addition to one article coauthored with South Africa. South Africa has produce 24 articles (26.1%) apart from another three articles coauthored with Nigeria, Zimbabwe and Botswana. West Africa has the highest published articles of 38 (41.3%) and followed by South African sub-region with 32 articles representing 34.9% of the sample. Fewer articles came from Eastern African sub-region with 22 published articles (23.9%). On this base, we now explore the theoretical frameworks of these publications

Co-authorship, Collaboration and Citations

Atatsi, Stoffers and Kil, (2019) posited that having collaborative effort in authorship among most scientists is not only desirable but necessary. In line with this, 63 articles representing 68.5% of the reviewed articles were co-authored by between 2 to 10 authors. Wuchty, Jones and Uzzi, (2007) argued that social sciences articles nowadays are mostly co-authored by two authors and the trend is growing into larger teams of co-authorship. Further, the review

equally suggested collaborative authorship among researchers from different African countries, institutions and disciplines. For instance, authors of 18 studies representing 19.6% of the sample came from different disciplines; while 16.3% (15 papers) were co-authored by scholars from different institutions. Again, 9 papers representing 9.8% of the reviewed articles were as result of collaboration of authors from different countries. Onyancha and Ocholla, (2007) posited that collaboration among scholars allows researchers from different backgrounds to share skills, knowledge and techniques that lead to broadening the researchers' network and equally facilitate intellectual companionship. Collaboration was also found to significantly effects success of proposals submitted for research grants (Lee & Bozeman, 2005). The study also examined the level of citation for the included papers. Google Scholar citation was used for this assessment because the search engine is a promising tool for assessing journal impact (van Aalst, 2010). Further, Google scholar citation is said to be a reliable source that has global recognition due to its true reflection of lecturers' research performance (Nafukho, Wekullo & Muyia, 2019). In line with this, 33 papers (35.9%) were cited between 10 to 50 times, while 20 articles (21.7%) were cited 51 times and above. Taken it together, 57.6% amounting to 53 reviewed articles were cited

10 times and above. Nonetheless, since 30.2% of the included articles were published just three years back (2017 to 2020); they might not have attained a high number of citations within three years (Asadi, Abdullah, Yah & Nazir, 2019). The three most cited articles are Ssesanga and Garrett, (2005) with 315 citations, Rothmann and Jordaan (2006) with 209 citations and Barkhuizen and Rothmann (2008) that has been cited 205 times. The review also revealed that articles written by more than one authors enjoyed more citations than single author papers. Precisely, 34 (36.9%) articles written by 2 to 5 researchers were each cited 10 times and above. Conversely, only 19 papers (20.6%) singled-authored were cited 10 times and above each. Literature attests that multiple authored papers have highest opportunity of being cited than singled authored papers. Figg, et al. (2006) and Bornmann (2017) suggested that the number of citations an article received has significant correlation with the number of its authors. Further, researchers that manage their collaboration well; tend to produce a superior work that results in a higher impact (Figg et al., 2006). Smart and Bayer, (1986) posited that this practice is more popular in multi-authored articles in management sciences.

Research Design and Sample Size Employed by the Studies

All the included articles used primary data collected either through questionnaires or interviews. One of the probable reasons behind this is in general; having access to secondary data is one of most daunting challenge for researchers in Africa (Kolk & Rivera-Santos, 2018; Vigan & Giauque, 2018). Looking at the research design employed by the studies, it showed that 71 papers (77.2%) were quantitative, 11 papers (11.9%) were qualitative while 11 papers represented by 11.9% adopted mixed method design. Quantitative research is the most popular design mostly adopted by African researchers. The adoption of mixed method approach is becoming more pronounced as well (c.f. Bervell & Umar, 2017; Kaliisa & Picard, 2017).

Integration of qualitative and quantitative paradigms in single study leads to mutual validation of data and production of more coherent findings (Kelle, 2006). And much often, results from mixed method studies are superior compared to mono-method research studies (Johnson & Onwuegbuzie, 2004). Further, 17 (19.8%) of the papers used adopted multi-source response in order to ensure data reliability and also to avoid common method bias problem (Podsakoff et al., 2003; Tehseen, Ramayah & Sajilan, 2017). Additionally, sample sizes range

from 35 to 3,533 respondents for quantitative studies, while 4 to 30 informants was the range for qualitative articles. The research conducted by Czerniewicz and Brown (2009) has the highest number of sample size. This large sample might be connected with the email questionnaire used to cater for non-response bias, since response rate on email questionnaires has been reported to be very low in Africa. Descriptive statistics dominated the techniques used by the sampled studies in their data analysis with 37.2%. This was followed by regression and correlation with 12.8% each. 6 articles representing 6.9% used structural equation modeling (SEM) technique. More so, 36.0% of the included articles used a single method for data analysis. Equally, 36.1% included studies went for two data analysis techniques, while 4.7% and 1.2% of the papers used 4 and 5 techniques for data analysis respectively. Pertaining use of theories by the included studies, only 15 papers amounting to 16.3% used theories to underpin their findings, while the remaining 77 studies representing 83.7% used no single theory.

Assessing Lecturers Job Performance

The included studies used several words to refer to lecturers' performance. Out of 92 included papers, 45 papers (48.9%) used the word 'performance' and 13 articles

represented by 14.1% opted for 'productivity'. Looking closely on how the studies used these two variables, one will discern that both performance and productivity means the same thing for the studies, with exception of Maina and Nzuki, (2015) that used performance for lecturers and productivity to refer to universities performance. Performance connotes excellence, and comprises productivity, profitability, as well as other non-cost related aspects like flexibility, quality and speed (Hanaysha, 2016). Literature suggests that it is difficult to define and conceptualize employee productivity. The most popular definition of productivity refers to the quantities of input factors employed by a system to produce output (Pekuri, Haapasalo & Herrala, 2011). Apart from this, other definitions and conceptualizations abound. Conceptualization and definition of productivity seems to be contingent to the authors' point of view and the context they use. Thus, performance has become a concept that is most frequently confuse with productivity by many researchers (Pekuri, Haapasalo & Herrala, 2011). This may probably explain the mixed usage of performance and productivity by the studies.

The remaining 32 (36.9%) studies used different words to show effect of managerial factors they reported on lecturers' job performance. For instance, lecturers' job

satisfaction was reported six times by different authors. Further, Kiplangat, Momanyi and Kangethe (2017) reported that university leadership style and shared governance structures leads to lecturers' job satisfaction in Somaliland. Lecturers' quality service delivery on research activities in South African university was equally attributed to effective performance management practices as posited by Leibowitz, Bozalek, Van Schalkwyk and Winberg (2015). Other variables reported suggesting lecturers' performances by the studies include turnover intention, career advancement, lecturers' commitment and motivation etc.

Dimension of Lecturers Performance Reported

The common practice is to conceptualized lecturers' job performance into three main dimensions viz research, teaching, and service (Gaus & Hall, 2016). The included studies took different approaches to linking their reported managerial factors to lecturers' performance. 51 studies connoting (55.4%) referred to general lecturers' performance without making any reference to a particular dimension of it. More so, 10.9% of the papers (10 articles) were specific in mentioning teaching, research and service as dimensions of lecturers' performance they focused on. 7 included papers (7.6%) related performance to

managerial factors on teaching and research only, while 15 studies (16.3%) devote on teaching. Again, 8 articles (8.7%) banked on research; and only one article (1.1%) linked its reported managerial factors to research and service as dimensions of lecturers' job performance. Taken it together, the sampled studies focused more on teaching than any other dimension of lecturers' performance. This is not surprising since most African universities are struggling to contain the problem of accessibility that deprives them from paying much attention that research deserves (Sawyer, 2004).

Future Research and Conclusion

Overall, this systematic review provided a background for meta-analysis study on managerial factors that influence lecturers' job performance in Africa. Although this study is not exhaustive, yet it has offered a review of relevant studies on managerial factors that affect performance. This review strongly agreed with Horwitz, (2015) and Kamoche et al. (2012) that advocated for a shift in human resource researches in Africa lamenting the unsuitability of Western managerial paradigms and practices presently used in some studies. Horwitz, (2015) advocated for African management paradigm and 'not-invented-here syndrome'.

Again, breakdown of the included researches regarding the managerial factors suggested the existence of plentiful factors that relate to lecturers' performance. The analysis equally showed several positive and consistent relationships between different managerial factors and the three dimensions of lecturers' performance. Predominantly, the dimension of teaching has been researched relatively well, with results showing training, remuneration, equipment and facilities, performance management system, and participatory decision making to be key factors predicating performance for the university teachers.

Another area of concern is the use of intervening variables by the studies. Apart from Atatsi et. al. (2020) that employed organizational citizenship behaviour to mediate between leader member exchange and lecturers performance and David and Rahim (2012) that used ICT tools and awareness strategies as moderating and mediating variables respectively, the other sampled studies only modelled their researches on direct relationships. Torraco, (2005) proclaimed that integration of intervening variables in research models can lead to better understanding of meanings, better synthesization and effective conceptualizations of areas being researched. This indicates that relationship among predictors, moderators and mediators

and their causal relationships are yet to be fully explored. Therefore, future researches should focus on broad and integrative approach in determining the effects of managerial factors on lectures' performance in African universities.

Though this study showed relative progress in terms of inter-country collaboration among African scholars with nine (9) papers co-authored by different researchers from various countries (c.f. Bigirimana & Sibanda, 2016; Bigirimana & Sibanda, 2016), yet there is still need for more collaborations among scholars across countries as this will facilitate production of collaborative knowledge (Onyancha & Maluleka, 2011). Thus, more collaboration in terms of inter-institutions, inter-disciplines and precisely inter-countries is strongly recommended. Likewise, given the diversity and complexity of Africa, the potentiality of and significance for comparative researches between countries and regions is also encouraged. So far, studies on managerial factors as they relate to lecturers' performance in African universities are more pronounced in Nigeria, South Africa, Kenya and Ghana. Hence, there is need for African scholars to engage in comparative studies on any managerial factor that may influence university lecturers' performance in particular and human resources in in general (Horwitz,

2015). Garrett (1999) averred that lecturers' context and working attitudes are well connected in a complex manner and warrants better understanding.

References

- Allen, M. (2017). *The sage encyclopedia of communication research methods* (1-4). Thousand Oaks, CA: SAGE Publications, Inc doi: 10.4135/9781483381411
- Arasa, R., & K'Obonyo, P. (2012). The relationship between strategic planning and firm performance. *International Journal of Humanities and Social Science*, 2(22), 201-213.
- Asadi, S., Abdullah, R., Yah, Y., & Nazir, S. (2019). Understanding Institutional Repository in Higher Learning Institutions: A systematic literature review and directions for future research. *IEEE Access*, 7, 35242-3526
- Atatsi, E. A., Curşeu, P. L., Stoffers, J., & Kil, A. (2020). Leader-member exchange, organizational citizenship behaviours and performance of Ghanaian Technical University Lecturers. *African Journal of Business Management*, 14(1), 25-34.
- Atatsi, E. A., Stoffers, J., & Kil, A. (2019). Factors affecting employee performance: a systematic literature review. *Journal of Advances in Management Research*. 16 (3), 329-35 <https://doi.org/10.1108/JAMR-06-2018-0052>
- Barkhuizen, N., & Rothmann, S. (2008). Occupational stress of academic staff in South African higher education institutions. *South African journal of psychology*, 38(2), 321-336.
- Bervell, B., & Umar, I. N. (2017). A decade of LMS acceptance and adoption research in Sub-Sahara African higher education: A systematic review of models, methodologies, milestones and main challenges. *EURASIA Journal of Mathematics, Science and Technology Education*, 13(11), 7269-7286.
- Bigirimana, S., & Sibanda, E. N. (2016). The effects of working conditions on academic staff motivation at Africa University, Mutare, Zimbabwe. *Journal of Advance Management and Accounting Research*, 3(7). 162-173
- Bornmann, L. (2017). Is collaboration among scientists related to the citation impact of papers because their quality increases with collaboration? An analysis based on data from F1000Prime and normalized citation scores. *Journal of the Association for Information Science and Technology*, 68(4), 1036-1047.
- Burke, R. (1966). Are Herzberg's motivators and hygienes unidimensional? *Journal of Applied Psychology*, 317-321.
- Czerniewicz, L., & Brown, C. (2009). A study of the relationship between institutional policy, organisational culture and e-learning use in four South African universities. *Computers & Education*, 53(1), 121-131.
- Effendi, M. I., & Kusmantini, T. (2015). The moderating effect of contingency variables on the relationship between formal strategic planning and company performance. *Procedia-Social and Behavioral Sciences*, 211, 1132-1141.

- Chinamasa, E. (2012). Factors influencing lecturer research output in new universities in Zimbabwe. *Zimbabwe Journal of Educational Research*, 24(2)
- David, O. N., & Rahim, N. Z. A. (2012). The Impact of UTAUT Model and ICT Theoretical Framework on University Academic Staff: Focus on Adamawa State University, Nigeria. *International Journal of Computers & Technology*, 2(2b), 102-111.
- Enders, J. and Teichler, U. (1997). ‘A victim of their own success? Employment and working conditions of academic staff in comparative perspective’. *Higher Education* 34, 347–372
- Ewen, R. B. (1964). Some determinants of job satisfaction: A study of the generality of Herzberg’s Theory. *Journal of Applied Psychology*, 15 (8), 161-163.
- Dunnette, M. D. (1965). *Factor structure of unusually satisfying and unusually dissatisfying job situations for six occupational groups*. Paper read at Midwestern Psychological Association. Chicago, April May 1, 1965.
- Figg, W. D., Dunn, L., Liewehr, D. J., Steinberg, S. M., Thurman, P. W., Barrett, J. C., & Birkinshaw, J. (2006). Scientific collaboration results in higher citation rates of published articles. *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy*, 26(6), 759-767.
- Fourie, I. (2009). Learning from research on the information behaviour of healthcare professionals: a review of the literature 2004–2008 with a focus on emotion. *Health Information & Libraries Journal*, 26(3), 171-186.
- Garrett, R. M. (1999). Teacher Job Satisfaction in Developing Countries. *Educational Research Supplemental Series* (G). <https://files.eric.ed.gov/fulltext/ED459150.pdf>
- Goris, J. R., Vaught, B. C., & Pettit, J. D. (2000). *Effects of Communication Direction on Job Performance and Satisfaction: A Moderated Regression Analysis*. *Journal of Business Communication*, 37(4), 348–368. doi:10.1177/002194360003700402
- Hanaysha, J. (2016). Improving employee productivity through work engagement: Evidence from higher education sector. *Management Science Letters*, 6(1), 61-70..
- Herzberg, F. (1959) *The motivation to work*, New York: John,
- Horwitz, F. (2015). Human resources management in multinational companies in Africa: a systematic literature review. *The International Journal of Human Resource Management*, 26(21), 2786-2809. <http://dx.doi.org/10.1080/09585192.2014.934899>
- Huang, X., & Van de Vliert, E. (2003). Where intrinsic job satisfaction fails to work: National moderators of intrinsic motivation. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 24(2), 159-179.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), 14-26.

<https://doi.org/10.3102/0013189X033007014>

- Kaliisa, R., & Picard, M. (2017). A systematic review on mobile learning in higher education: The African perspective. *TOJET: The Turkish Online Journal of Educational Technology*, 16(1).
- Kamoche, K., Chizema, A., Mellahi, K., & Newenham-Kahindi, A. (2012). New directions in the management of human resources in Africa. *The International Journal of Human Resource Management*, 23(14), 2825-2834.
- Kaplan, R.S. & Norton, D.P. (2004). *Strategy Maps: Turning Intangible Assets into Tangible Results*. Boston, MA: Harvard Business School Press.
- Kelle, U. (2006). Combining qualitative and quantitative methods in research practice: purposes and advantages. *Qualitative research in psychology*, 3(4), 293-311.
- Khalid, M. S., & Pedersen, M. J. L. (2016). Digital exclusion in higher education contexts: A systematic literature review. *Procedia-Social and Behavioral Sciences*, 228, 614-621.
- Kiplangat, H. K., Momanyi, M., & Kangethe, N. S. (2017). Dimensions of Kenyan University Academic Staff's Job Satisfaction in View of Various Managerial Leadership Practices. *Journal of Education and Practice*, 8(3), 120-129.
- Kolk, A., & Rivera-Santos, M. (2018). The state of research on Africa in business and management: Insights from a systematic review of key international journals. *Business & Society*, 57(3), 415-436.
- Lee, S., & Bozeman, B. (2005). The impact of research collaboration on scientific productivity. *Social studies of science*, 35(5), 673-702.
- Leibowitz, B., Bozalek, V., Van Schalkwyk, S., & Winberg, C. (2015). Institutional context matters: The professional development of academics as teachers in South African higher education. *Higher Education*, 69(2), 315-330.
- Linnenluecke, M. K., Marrone, M., & Singh, A. K. (2020). Conducting systematic literature reviews and bibliometric analyses. *Australian Journal of Management*, 45(2), 175-194.
- Maina, M. K., & Nzuki, D. M. (2015). Adoption determinants of e-learning management system in institutions of higher learning in Kenya: A case of selected universities in Nairobi metropolitan. *International Journal of Business and Social Science*, 6(2).
- Munyengabe, S., He, H., & Yiyi, Z. (2016). The analysis of factors and levels associated with lecturers' motivation and job satisfaction in University of Rwanda. *Journal of Education and Practice*, 7(30), 188-200.
- Nyambegera, S. M., & Gicheru, C. N. (2016). Extrinsic and intrinsic factors influencing employee motivation: Lessons from AMREF Health Africa in Kenya. *International Journal of Business and Social Research*, 6(9), 20-31.
- Nur-Awaleh, M. A., & Mtegha, D. M. (2005). Shared governance and leadership in African universities: Experiences from Mzuzu University, Malawi and Amoud University, Somaliland. *Africa Development: A Quarterly Journal of CODESRIA*, 30(1-2), 34-52.

- Pekuri, A., Haapasalo, H., & Herrala, M. (2011). Productivity and performance management–managerial practices in the construction industry. *International Journal of Performance Measurement*, 1(1), 39-58
- Robbins S (2001). *Managing Today*. Prentice Hall, New Jersey
- Rothmann, S., & Jordaan, G. M. E. (2006). Job demands, job resources and work engagement of academic staff in South African higher education institutions. *SA Journal of Industrial Psychology*, 32(4), 87-96.
- Santrock, J. (2009). (Ed.) *Educational Psychology*. New York, NY: McGrawhill
- Ssesanga, K., & Garrett, R. M. (2005). Job satisfaction of university academics: Perspectives from Uganda. *Higher Education*, 50(1), 33-56.
- Schmidt R.A, Lee T.D. (1999). *Motor control and learning: A Behavioral emphasis*. (Ed). Champaign, IL: Human Kinetics,
- Smart, J., & Bayer, A. (1986). Author collaboration and impact: A note on citation rates of single and multiple authored articles. *Scientometrics*, 10(5-6), 297-305.
- Ssesanga, K., & Garrett, R. M. (2005). Job satisfaction of university academics: Perspectives from Uganda. *Higher education*, 50(1), 33-56.
- Tehseen, S., Ramayah, T., & Sajilan, S. (2017). Testing and controlling for common method variance: A review of available methods. *Journal of Management Sciences*, 4(2), 142-168.
- Tizikara, M.K. (1998). Correlates of Academic Staff Satisfaction in Universities in Uganda. Unpublished Master's dissertation, Makerere University.
- Tonhäuser, C., & Büker, L. (2016). Determinants of transfer of training: A comprehensive literature review. *International journal for research in vocational education and training*, 3(2), 127-165
- Torraco, R.J. (2005). Writing integrative literature reviews: guidelines and examples. *Human Resource Development Review*, 4 (3), 356-362.
- Van Aalst, J. (2010). Using Google Scholar to estimate the impact of journal articles in education. *Educational researcher*, 39(5), 387-400.
- Vigan, F. A., & Giauque, D. (2018). Job satisfaction in African public administrations: a systematic review. *International Review of Administrative Sciences*, 84(3), 596-610. 10.1177/0020852316651693
- Wuchty, S., Jones, B.F. & Uzzi, B. (2007). The increasing dominance of teams in production of knowledge, *Science*, 316 (5827), 1036-1039.
- Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature review. *Journal of Planning Education and Research*, 39(1), 93-112.
- Yusoff, W. F. W., Kian, T. S., & Idris, M. T. M. (2013). Herzberg's two factors theory on work motivation: does it work for today's environment. *Global Journal of Commerce and Management*, 2(5), 18-22.