



## Developing public administration education by focusing on difficult key concepts: The case of Nigeria and Ghana

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### ABSTRACT

Students' understanding of public administration (PA) plays an important role in ensuring the quality of human resources that African universities produce. Using a quantitative approach and sample  $N = 650$ , this paper draws on empirical evidences of students lived experiences of what they consider difficult in the study of PA in Ghana and Nigeria; establishing relations between selected variables and perceived difficulties. The study concludes that, African university students not having previous backgrounds in PA and syllabus being too wide accounts for difficulties in the study of PA; there is a statistically significant difference regarding bureaucracy, ethics, corruption, and arms of government between lower levels and upper level African university students on the perceived difficulty in the study of PA and there is a statistically significant difference between Bachelor of Business Administration and Bachelor of Science Public Administration among African university students in all concepts observed except government, public policy, politics and defining PA. We suggest teaching PA is remodeled as a study of classroom training that places students understanding at its core.

### 1. Introduction

The importance of African universities training of students in Public Administration (PA) to meet the changing demands of the public sector cannot be stressed enough. Aligning PA training with public sector needs will help ease the current skills mismatch troubling the public sector in Africa; especially where previous studies have established politics, bureaucracy and public policy as concepts found difficult to understand by African undergraduate students in the study of public administration (Awaah, 2020). Increasing the expansion of institutions teaching PA is not enough to support the industry's needs for a better labour force. Enriching PA training to meet industry needs is critical to producing a relevant workforce in each African country. This cannot be achieved without examining whether or not students understand the concepts being taught in African universities and the relationships influencing the difficulties in the understanding of these concepts. Many factors have accounted for poor public service performance in Africa. As training represents a key factor in Africa's public sector performance, other authors have identified different factors.

As Owusu (2005) puts it, generally, low salary levels and perceived

disparities in salary structure tend to create a culture of absenteeism, rent-seeking, employee involvement in alternate employment, and low productivity in poorly performing organizations, especially in the public sector. On the other hand, well-performing public sector organizations were found to have effective and motivated leadership capable of nurturing the development of a good performance culture through the recruitment practices, training and opportunities, goal setting, and imposing of sanctions when necessary (Owusu, 2005).

A legitimate question to ask is how are the human resources manning these public sector institutions trained? Did they understand their training while in school? Is their training reflecting the efficiency or otherwise of the public sector? These questions are particularly important in an era where the Covid 19 pandemic is changing the trends in teaching and learning with scholars attributing challenges like teacher capacity deficit for delivering online education, poor internet service, erratic power supply, and severe inadequacies in infrastructure for open and distance education in Africa (Okebukola et al., 2020).

While these questions remain unanswered, there is a need to unveil the underpinning reasons for the study of PA and to identify the influencing factors relating to breaking its difficulties for the understanding of

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students in a bid to influence an enhanced African public sector. A key reason why student study PA is to prepare them for careers in the public sector since the government is the largest employer in many economies with an array of positions that requires training in public administration. There is also the recurrent need for persons with specialized technical fields such as engineers to combine their technical skills with managerial skills since at sometimes in their careers, their job may involve management in the public sector. It is to be observed further that, some professionals may not have any interest in working in the public sector but at some point, may seek contracts in the public sector and therefore knowledge in PA may not only be helpful but essential.

Whiles this relevance of the study of PA abound, there are tendencies that, many students may not benefit from these advantages as a result of finding concepts in PA difficult to understand. In a survey of what makes physiology difficult to learn, Michael (2007) sought to understand what students meant when they say that physiology is hard? He agrees that it is difficult to know specifically without interviewing students but cites the Merriam-Webster on-line dictionary which offers several definitions of this word: "demanding the exertion of energy: calling for stamina and endurance and difficult to comprehend or explain." (This same site states that the synonym difficult "implies the presence of obstacles to be surmounted or puzzles to be resolved.") These definitions would seem to be apt descriptions of the task of learning a discipline like PA.

Michael (2007) further agrees that there is, however, another meaning that may also be relevant. The term hard is often used (by students, teachers, and the general public) to mean requiring a disproportionate effort to achieve a goal. It is also important to note that in judging how hard a task is, one must consider both the nature of the task and the capabilities of the person attempting to accomplish the task. In Ghana, these perceived subject difficulties and related factors have led to unethical practices including cheating in examinations (See Awaah, 2019).

### 1.1. Public administration, challenges and benefits to students and Africa

In the past, the African continent relied on development frameworks that were not continent specific in its attempts to achieve the desired development for its higher education sector. Africa's higher education sector seems to be witnessing a paradigm shift towards a trusted framework that will drive the developmental aspirations of the continent (Awaah, 2019). At different stages of developments of different countries in Africa, the training in public administration has changed to meet the changing needs of the country. This is not only African specific. For instance, public sector reform has hardly been off the governmental agenda of Western countries, albeit the old craft skills of traditional public administration remain of utmost importance (Rhodes, 2016). The subsequent phases of reforms need to improve the traditional craft skills with the understanding that the question does not remain at traditional skills or new skills of New Public Management or New Public Governance but what works, of what skills fit in a particular context (Rhodes, 2016).

Ghanaian and Nigerian universities have a colonial history with both countries inheriting their educational systems from the British. This has been reflective in what students are required to study at the undergraduate levels in both countries. Specifically, in the area of public administration, students are required to study bureaucracy, politics, decentralization, public policy, ethics, governance, defining public administration. However, there exist variations in some instances reflecting the local needs of the given countries.

In an earlier study, Awaah et al. (2020) investigated the topics in public administration that students find difficult to learn with emphasis on the relationships between gender, future career choices and country of study. The study showed that bureaucracy (56.5%), decentralization (50.2%), public policy (49.5%) and politics (51.8%) are perceived as moderately difficult; furthermore a statistically significant relationship was found between (a) gender, (b) interested career and concept difficulty in the study of public administration in African universities at a

significant level of  $p < .05$ .

Public administration is popular within these countries with the course being a core for students at the lower levels of study. It is studied as a course for some universities while others have it as a full undergraduate programme. This makes it an almost compulsory subject for undergraduate students in both countries, although a few exceptions exist.

### 1.2. Benefits of studying public administration

The benefits of studying public administration are enormous. One key reason why student study Public Administration (PA) is to prepare them for careers in the public sector since the government is the largest employer in many economies with an array of positions that requires training in PA. There is also the recurrent need for persons with specialized technical fields such as engineers to combine their technical skills with managerial skills since at sometimes in their careers, their job may involve management in the public sector.

It is to be observed further that, some professionals may not have any interest in working in the public sector but at some point, may seek contracts in the public sector and therefore knowledge in Public Administration may not only be helpful but essential.

The study of the course propels job prospects for student after school. Usually, many formal public sector jobs will entail a basic qualification of a first degree; one with a degree in public administration is usually an advantage.

### 1.3. The need for graduates in public administration in Africa

The need for graduates in public administration in Africa is necessitated by the fact that over the years effective and efficient governance has been recognized as an important element in improving welfare and economic growth, yet many countries are plagued with incompetent bureaucracy, mismanagement and corruption that are harmful to education, particularly for years of schooling and the stock of human capital in a country (Duerrenberger & Warning, 2018).

Since the 1980s, African countries have been undertaking reforms in the public sector to establish effective and efficient public sector management and capacity (Agwanda, 2019). This is founded on the need to thrust Africa into sustainable growth through improved public management structures and good governance (Agwanda, 2019). The achievement of this is hinged on the level of training given to public sector institutions.

These reforms are usually borne on account of real or perceived public sector corruption, inefficiencies, weak decentralization systems, poor public policies, rigid bureaucratic processes, unethical and nonproductive public sector practices, conflict amongst the arms of government and ill-conceived politicking, violence among others (Sabic-El-Rayess & Mansur, 2016). While these criticisms are recorded in the public sector, many stakeholders attribute the causes to diverse factors.

Investigating initiatives aimed to increase the level of transparency and accountability in the petroleum sector in Nigeria during the past few decades, Meyer (2019) argues that, Nigeria has vast deposits of natural-resource wealth; however, harvesting these resources in order to provide an optimal financial return has often been challenging. He cites mismanagement of natural-resource wealth and a lack of transparency and accountability in the petroleum sector as the main causes of this. Others have attributed the lowering and inefficient performance of the public sector to different factors. In his study on how corruption influences public managers' communication in Ghana and Nigeria, Nwo-korie (2018) argues that corrupt values in these societies influence the official behavior of public sector managers adding that, due to corruption, networking functions make public sector managers vulnerable to unethical behavior.

Largely an inefficient public sector has serious consequences on the

daily lives of Africans especially so where the government is the largest employer in Africa.

#### 1.4. Why this study

It has become necessary to investigate the training processes that lead to individuals being churned out into Africa's public sector eventually tagged corrupt, unethical, unprofessional, unaccountable, etc. leading to the poor performance of the sector. The need for this probe is to identify the understanding or otherwise of key concepts in PA by students in African universities as a basis of recommending future policies on teaching and learning of PA to foster the desired levels of development in African.

Specifically, the study intends to achieve the following objectives (i) find out the reasons accounting for subject difficulty in the study of PA by African university students (ii) find out whether or not there is a statistically significant difference between lower levels and upper levels students concept difficulties in the study of PA in African universities; (iii) find out whether or not there is a statistically significant difference between the study of PA as a bachelor of business administration course and as a bachelor of science in PA program in African universities.

On the basis of the objectives, the study seeks to answer the following research questions:

- 1.2.1 What reasons account for the subject difficulty in the study of PA by African university students?
- 1.2.2 Are there statistically significant difference between lower levels and upper levels students' concept difficulties in the study of PA in African universities?
- 1.2.3 Are there statistically significant difference between the study of PA as a bachelor of business administration course and as bachelor of science in PA program in African universities?

#### 1.5. Theoretical underpinning

The behavioral theory has been found appropriate for this study. According to Allen (2007), behavioral learning theorists use objectives-centered instruction when creating learning opportunities. Behaviorists study current behavior and are not concerned with the past; proponents suggest that only that which can be measured and observed is important and specifying the desired results of instruction in measurable terms before it takes place.

#### 1.6. Relevant literature

Stegers-Jager, Themmen, Cohen-Schotanus & Steyerberg, (2015) found that previous academic record is important as past performance is a predictor of future performance in a subject. In addition, Phan et al. (2016) on students' patterns of engagement and course performance in a massive open online course found that students prior content knowledge allows them to better understand the course as compared to students without prior content knowledge.

Gannon (2018), posits that, syllabus create first impressions for students hence helping them to cope with a subject. This implies that students understanding of a course depends on the structure of the syllabus (Bennett, 2017). Denton and Veloso (2018), argues that, the nature of a syllabus has direct perception of the instructor as a friendly syllabus leads to students increased perceptions of instructor as being more approachable, more caring, and more motivating as compared to those receiving the unfriendly syllabus. Furthermore, Moosavian (2017), found that syllabus can bring about advantages to both students and teachers such as clarifying complex relationships, causing a better retention, needing less cognitive energy for interpretation, helping instructors identify any snags in their course organization, capability of being integrated easily into a course management system and engaging students with different learning styles.

Their study reveals that students' socio-political prior knowledge is comprised of awareness and understanding and it varies by topic of discussion. Further, college students' socio-political prior knowledge is informed by lived experiences and can relate to subject-matter content (Castillo-Montoya, 2017).

Contrary, Allen (2007), posits that, behaviorists study current behavior and are not concerned with the past, emphasizing that, previous learning experience has no bearings in current understanding of concepts.

Derewianka and Jones (2016) opines that, student's level of education has relations with their understanding with respect to language. The researchers argue that as students move through the years of schooling, it enable teachers to plan units of work that are sensitive to the language demands placed on students, design activities with a language focus, select texts for reading at an appropriate level, analyse texts to identify relevant language and visual features, create teaching materials that integrate an awareness of language, help students to access meanings created through a variety of media (written, spoken, visual, multimodal), provide explicit support in developing students' writing and composing; assess students' written work, and extend students' ability to articulate what they are learning.

In addition, Kleemans and Eggink (2016) found that student's educational level is a stronger predictor of the student's level of news media literacy than media literacy education itself. Finally, Hadenfeldt et al. (2016), suggests that students understanding progresses as they progress in their educational levels.

Klein et al. (2019) on student understanding of graph slope and area under a curve in comparing first-year physics and economics students found that physics students perform better than non-physics students. They also found that physics students have a higher ability to correctly judge their own performance compared to economics students. On similar subject area, Susac et al. (2018), found physics students had comparable scores on the qualitative and quantitative questions, whereas psychology students solved qualitative questions much better. They further found that physics students mostly relied on strategies learned in physics courses, with strong emphasis on the use of formulas, whereas psychology students mostly used common-sense strategies, as they did not know the physics formulas. The findings of the researchers stem from the reasoning that students understanding of a particular concept or subject may be as a result of the programme of study of the student. From this reasoning, public administration students studying the course for a four-year programme may have better understanding of the concepts as compared to other students studying concepts in a semester course.

## 2. Methodology

The study employed quantitative techniques, using questionnaires. This approach was adopted to analyse the relationships and to test the hypothesis between the dependent and independent variables.

Fifteen experts in education studies drafted, reviewed and validated the instrument within eight days before it was administered to participants.

At the University of Professional Studies – Accra, 50 participants were used for test-retest reliability over a period of two weeks to determine the consistency of participants' responses. The reliability test results showed an acceptable coefficient ( $r = 0.87$ ).

The population of the study was all bachelor students studying PA in African universities. Six hundred and fifty students responded to the questionnaires from five African universities; University of Professional Studies – Accra (345); University of Ghana (30); Ghana Institute of Management and PA (191); Lagos State University (74) and Crawford University Igbessa, Nigeria (10). Final-year, third-year and second-year students of the targeted universities participated in the study.

2.1. Methods of data analysis

Descriptive statistics and chi-square goodness of fit test at a level of significance  $p < .001$  were further used to enable the researchers determine how the variables related or differed.

3. Results

The participant’s demographic characteristics comprised individual, parental, institutional and country details. The participants’ demographic characteristics included their institution’s name, the program of study, and level of study, age, gender, parental educational background, and career interest. The institutions’ demographic covered the schools’ type and location. The parental statistics covered literate and non-literate while the career interests covered the public and private sectors.

The highest number of responses of  $n = 640$  (98.5%) were received from public schools while the lowest of  $n = 10$  (1.5%) were obtained from private schools. Crawford University and Ogun State were also within the lowest registered participation brackets of  $n = 10$  (1.5%). The participants’ gender was significantly skewed towards females with 334 females and 316 males. Concerning the age group of the respondents,  $n = 599$  (92.2%) were aged between 15 and 34 years whilst  $n = 51$  (7.8%) were aged 35 years and above. The majority of participants ( $n = 478$ ) had the public sector as their interesting future career while the rest ( $n = 172$ ) reported the private sector.

Institutionally, the University of Professional Studies - Accra had the highest number of participation (53.1%) with Crawford University being the least (1.5%). The rest were Ghana Institute of Management and PA (29.4%), Lagos State University (11.4%), and the University of Ghana (4.6%).

Most of the participants were from the Greater Accra Region of Ghana (87.1%), and the least from Ogun State (1.5%). The rest were from Lagos State (11.4%). The parental background was skewed towards literate parents (82.2%) while non-literate registered 17.8%.

A large number of participants ( $n = 566$ ) where Ghanaian students while the remaining participants ( $n = 84$ ) where Nigerian students. The distribution of student level of study was ( $n = 64$ ), ( $n = 115$ ) and ( $n = 471$ ) for levels 200,300 and 400 respectively. The program of study was skewed toward Bachelor of Business Administration ( $n = 364$ ) while BSc Administration at the least ( $n = 304$ ); (see Table 1).

3.1. Descriptive statistics

The first question of interest in the study is: what are the reasons accounting for the subject difficulty in the study of PA by African university students. African PA students surveyed indicated the reasons accounting for subject difficulty on a four-point scale of strongly disagree, disagree, agree and strongly agree. The percentage for each item in the reasons for the subject difficulty section of the questionnaire and on the four response scales are shown in Fig. 1.

Results of the descriptive analysis showed that over 70% of the students reported they do not have a previous background in PA, while 29.4% disagreed.

8.8% reported that lecturers lack the knowledge to teach the course, while the remaining percentage reported otherwise. Over 28% (they learn better in groups but there is no opportunity to do so in the course while 71% reported on the contrary); 11% (teacher does not allow time for questions while the remaining percentage disagreed).

On syllabus being too wide, over 50% reported they agreed while the remaining 49% disagreed; 11% reported that their teacher is not helpful or friendly while the remaining 89% disagreed; 28% agreed that Text-book/Slides are not easy to follow, while the remaining 72% disagreed (see Fig. 1).

The second research question sought to find whether or not there is a statistically significant difference between lower levels and upper levels

Table 1  
Presentation of demographic data.

		Frequency	(%)
Type of School	Private	10	1.5
	Public	640	98.5
	Total	650	100.0
Sex	Female	334	51.4
	Male	316	48.6
	Total	650	100.0
Age Group	Between 15 and 34 years	599	92.2
	35 years and above	51	7.8
	Total	650	100.0
Interested Career	Private Sector	172	26.5
	Public Sector	478	73.5
	Total	650	100.0
Name of School	Crawford University	10	1.5
	Ghana Institute of Management and PA	191	29.4
	Lagos State University	74	11.4
	University of Ghana	30	4.6
	University of Professional Studies - Accra	345	53.1
	Total	650	100
	Region/State	Greater Accra	566
Lagos State	74	11.4	
Ogun State	10	1.5	
Total	650	100	
Country	Ghana	566	87.1
	Nigeria	84	12.9
	Total	650	100
Level	200	64	9.8
	300	115	17.7
	400	471	72.5
	Total	650	100.0
Parent Educational Background	Literate	534	82.2
	Non-Literate	116	17.8
	Total	650	100.0

students concept difficulty in the study of PA in African university. The results are shown in Table 2.

On comparing between level 200/300 and level 400 African university students on the perceived difficulty in the study of PA; African university students despite their levels perceive some concepts to be difficult (Table 2). The result of the study showed a statistically significant difference regarding bureaucracy, ethics, corruption, and arms of government ( $p < .001$ ).

The third research question sought to establish whether or not there is a statistically significant difference between the study of PA as a bachelor of business administration course and a bachelor of science in PA program in African universities. These were subjected to cross-tabulation and chi-square. The results are shown in Table 3.

Concerning the comparison between BBA and BSc PA African university students on the perceived difficulty in the study of PA; bachelor of business administration students perceives most of the concepts to be difficult (Table 3). The result of the study showed a statistically significant difference in all concepts observed except government, public policy, politics and defining PA.

4. Discussions

The first objective of in the study was to find out reasons accounting for the subject difficulty in the study of PA by African university students. We found that African university students not having previous backgrounds in PA and syllabus being too wide accounted for concept difficulties in the study of PA (see Fig. 1).

The current finding support the works of Phan, et al., (2016), Stegers-Jager et al. (2015), Gannon (2018), Bennett (2017). Denton and Veloso (2018) and Moosavian (2017), while the work of Allen (2007) contradicts it.

Stegers-Jager et al. (2015) found that previous academic record is important as past performance is a predictor of future performance in a



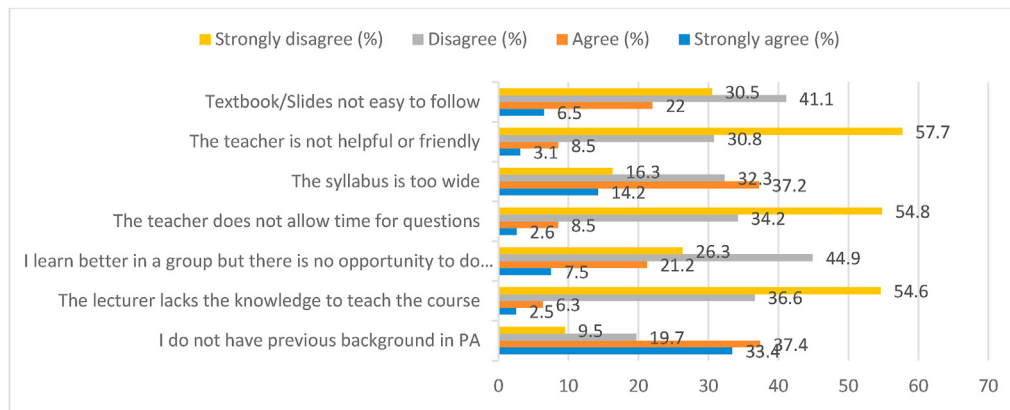


Fig. 1. Reasons accounting for the difficulty in the study of PA by African university students.

**Table 2**  
Difficult concepts in PA between lower levels and upper level African university students.

Topics	Lower levels		Upper level		Chi-square
	Difficult	Not difficult	Difficult	Not difficult	
1 Bureaucracy	105	74	341	130	11.37*
2 Ethics	80	99	160	311	6.40*
3 Corruption	83	96	167	304	6.53*
4 Arms of Government	64	115	210	261	4.15*
5 Government	92	87	251	220	.19
6 Decentralization	106	73	299	172	1.00
7 Public Policy	114	65	297	174	.02
8 Politics	120	59	319	152	.03
9 Public Personnel Administration	80	99	238	233	1.77
10 Defining PA	53	126	157	314	.82

\* significant at less than 0.5.

**Table 3**  
Difficult concepts in PA between BBA and BSc PA African university students.

Topics	BBA		BSc PA		Chi-square
	Difficult	Not difficult	Difficult	Not difficult	
1 Bureaucracy	256	90	190	114	9.92*
2 Ethics	115	231	125	179	4.32*
3 Corruption	110	236	140	164	13.90*
4 Arms of Government	163	183	111	193	7.45*
5 Government	189	157	154	150	1.02
6 Decentralization	239	107	166	138	14.43*
7 Public Policy	230	116	181	123	3.35
8 Politics	243	103	196	108	2.45
9 Public Personnel Administration	184	162	134	170	5.36*
10 Defining PA	119	227	91	213	1.47

a\* significant at less than 0.5.

subject, and also revealed the importance of a student’s background as a predictor of good performance in a course. In addition, [Phan et al. \(2016\)](#) on students’ patterns of engagement and course performance in a massive open online course found that students prior content knowledge allows them to better understand the course as compared to students without prior content knowledge.

To [Gannon \(2018\)](#), a syllabus create first impressions for students hence helping them to cope with a subject. This implies that students understanding of a course depends on the structure of the syllabus ([Bennett, 2017](#)). [Denton and Veloso \(2018\)](#), argued that the nature of a

syllabus has direct perception of the instructor as a friendly syllabus leads to students increased perceptions of instructor as being more approachable, more caring, and more motivating as compared to those receiving the unfriendly syllabus. Furthermore, [Moosavian \(2017\)](#), found that syllabus can bring about advantages to both students and teachers such as clarifying complex relationships, causing a better retention, needing less cognitive energy for interpretation, helping instructors identify any snags in their course organization, capability of being integrated easily into a course management system and engaging students with different learning styles.

The study reveals that students’ socio-political prior knowledge is comprised of awareness and understanding and it varies by topic of discussion. Further, college students’ socio-political prior knowledge is informed by lived experiences and can relate to subject-matter content ([Castillo-Montoya, 2017](#)).

Contrary, [Allen \(2007\)](#), posits that, behaviorists study current behavior and are not concerned with the past, emphasizing that, previous learning experience has no bearings in current understanding of concepts.

The reason for PA students not having previous knowledge can be as a result of the course not being a core like Mathematics, English, and Science at the lower levels of African education such as senior secondary and junior secondary schools. Also, it can be attributed to the very technical and perceived governmental nature of PA which does not expose many students at earlier stages of their education to what pertains to the public sector either in practice or in teaching.

The second research objective of the study was to find out whether or not there is a statistically significant difference between lower level and upper level students in their difficulties in the study of PA in African university.

We found a statistically significant difference regarding bureaucracy, ethics, corruption, and arms of government ( $p < .001$ ). This implies that the understanding of PA in African universities relates with the educational levels of the students.

In support of this finding, [Derewianka and Jones \(2016\)](#) states that student’s level of education has relations with their understanding with respect to language. The researchers argued that as students move through the years of schooling, it enable teachers to plan units of work that are sensitive to the language demands placed on students, design activities with a language focus, select texts for reading at an appropriate level, analyse texts to identify relevant language and visual features, create teaching materials that integrate an awareness of language, help students to access meanings created through a variety of media (written, spoken, visual, multimodal), provide explicit support in developing students’ writing and composing; assess students’ written work, and extend students’ ability to articulate what they are learning.

In addition, [Kleemans and Eggink \(2016\)](#) found that student’s educational level is a stronger predictor of the student’s level of news

media literacy than media literacy education itself. Finally, Hadenfeldt et al. (2016) suggests that students understanding progresses as they progress in their educational levels.

This means that students understanding of a subject relates to their educational level. Factors such as the teaching of the concepts not being practical may account for this trend. This reasoning is hinged on the researchers' experience that, most of the teachings on these concepts are done strictly in the classroom, without opportunities for students to observe how these concepts are practiced in the ministries, departments, and agencies. However, there are exceptions to this in instances where students move to the higher levels (300 and 400); there are opportunities for internships thus exposing them to the practical aspects of the stated concepts. This may account for the relationships.

The third research objective was to establish whether or not there is a statistically significant difference between the study of PA as a bachelor of business administration course and a bachelor of science in PA program in African universities. We found a statistically significant difference in all concepts observed except government, public policy, politics and defining PA ( $p < .001$ ).

This implies that students understanding of public administration in African universities is related to their programme of study.

The works of Klein et al. (2019) and Susac et al. (2018), support the current finding.

Klein et al. (2019) on student understanding of graph slope and area under a curve in comparing first-year physics and economics students found that physics students perform better than non-physics students. They also found that physics students have a higher ability to correctly judge their own performance compared to economics students. On similar subject area, Susac et al., 2018, found physics students had comparable scores on the qualitative and quantitative questions, whereas psychology students solved qualitative questions much better. They further found that physics students mostly relied on strategies learned in physics courses, with strong emphasis on the use of formulas, whereas psychology students mostly used common-sense strategies, as they did not know the physics formulas. The finding of this study may stem from the reasoning that students understanding of a particular concept or subject may be as a result of the programme of study of the student. From this reasoning, public administration students studying the course for a four-year programme may have better understanding of the concepts as compared to other students studying the concept as a semester course.

## 5. Conclusion

Based on the findings of our study, we conclude that African university students not having previous backgrounds in PA and syllabus being too wide accounts for difficulties in the study of PA.

We conclude that, there is a statistically significant difference regarding bureaucracy, ethics, corruption, and arms of government between lower levels and upper level African university students on the perceived difficulty in the study of PA.

We further concluded that there is a statistically significant difference between BBA and BSc PA amongst African university students in all concepts observed except government, public policy, politics and defining PA.

Based on these conclusions the study, recommends that as a matter of policy, African university teachers in PA lecture/teach or instruct students in concepts with student's previous background in mind to reduce difficulties related to students not having previous backgrounds in the study of PA. This is important to enhance student understandings, especially lower-level PA students. This can be achieved through policy directives from the various ministries of education, with the individual universities playing supervisory roles. Such policy initiatives will be new and will enhance student understanding which directly will feed into quality human resources of the public and civil service of the continent.

Also, African university teachers should be sensitive to different levels of public administration students and their levels of understanding

of concepts in the study of the course. This will help mitigate the statistically significant difference regarding bureaucracy, ethics, corruption, and arms of government between lower levels and upper level African university students on the perceived difficulty in the study of PA. This should be done using less complex examples and demonstrations in lower classes to aid students understanding.

Finally, the course structure for BBA should be increased from a semester to a two semester course to aid comparable understanding of concepts with their colleagues studying public administration as a programme.

### 5.1. Implications

The implication of this study is that, higher education managers in the area of public administration would identify the reasons accounting for difficulties in the course and establishing mediating measures to curb same in Ghanaian and Nigerian universities.

The study also exposes educational managers to the different challenges related to the study of public administration as a subject and also as a course.

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### Credit author statement

**Fred Awaah:** Conceptualization, **Peter Okebukola:** Methodology, **Solomon Yeboah:** Literature Review, **Alfa Atiah Alpha:** Discussions, **Kingsley Anagba:** Generation of Graphs, **Helen Arkorful:** Editing.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ssaho.2021.100136>.

### References

- Agwanda, B. (2019). Public sector reforms and contemporary reform challenges to sustainable development in Africa. *Uluslararası Ekonomi İşletme ve Politika Dergisi*, 3(2), 271–288.
- Allen, S. J. (2007). Adult learning theory & leadership development. *Leadership Review*, 7(1), 26–37.
- Awaah, F. (2019). *Sexually transmitted grades and the culture of silence: Will female students blow the whistle?*. Selected Papers For, 55.
- Awaah, F. (2019). AFRICA: Shifting the focus towards an Africa-born HE strategy. *University World News*, 249.
- Awaah, F. (2020). Indigenous (Cultural) Knowledge Related to the Concept of Politics as a Difficult Topic in Public Administration. In Peter A. Okebukola (Ed), *Breaking Barriers to Learning: The Culturo Techno-Contextual Approach (CTCA)*. (pp. 182–192). Slough, UK and Delhi: Sterling Publishers.
- Awaah, F., Okebukola, P. A., Ebisin, A., Agbanimu, D., Peter, E. O., Ajayi, O. A., ... Ademola, I. (2020). Influence of gender and career interest on African university students' perceived difficult concepts in the study of public administration. *Teaching Public Administration*, 0144739420968870.
- Bennett, J. (2017). *On campus, failure is on the syllabus*. The New York Times.
- Castillo-Montoya, M. (2017). Deepening understanding of prior knowledge: What diverse first-generation college students in the US can teach us. *Teaching in Higher Education*, 22(5), 587–603.
- Denton, A. W., & Veloso, J. (2018). Changes in syllabus tone affect warmth (but not competence) ratings of both male and female instructors. *Social Psychology of Education*, 21(1), 173–187.
- Derevianka, B., & Jones, P. (2016). *Teaching language in context*. New York, NY 10016: Oxford University Press. 198 Madison Avenue.

- Duerrenberger, N., & Warning, S. (2018). Corruption and education in developing countries: The role of public vs. private funding of higher education. *International Journal of Educational Development*, 62, 217–225.
- Gannon, K. (2018). *How to create a syllabus* (pp. 1–48). The Chronicle of Higher Education.
- Hadenfeldt, J. C., Neumann, K., Bernholt, S., Liu, X., & Parchmann, I. (2016). Students' progression in understanding the matter concept. *Journal of Research in Science Teaching*, 53(5), 683–708.
- Kleemans, M., & Eggink, G. (2016). Understanding news: The impact of media literacy education on teenagers' news literacy. *Journalism Educator*, 5(1), 74–88.
- Klein, P., Küchemann, S., Brückner, S., Zlatkin-Troitschanskaia, O., & Kuhn, J. (2019). Student understanding of graph slope and area under a curve: A replication study comparing first-year physics and economics students. *Physical Review Physics Education Research*, 15(2), Article 020116.
- Meyer, Y. (2019). Initiatives aimed at ensuring transparency and accountability in the Nigerian petroleum industry: A critical appraisal of the Nigeria extractive industry transparency initiative (NEITI), the NEITI act and the petroleum industry governance Bill (PIGB). *Southern African Public Law*, 34(1), 28–28.
- Michael, J. (2007). What makes physiology hard for students to learn? Results of a faculty survey. *Advances in Physiology Education*, 31(1), 34–40.
- Moosavian, S. A. Z. N. (2017). Using the interactive graphic syllabus in the teaching of economics. *American Journal of Business Education*, 10(2), 45–64.
- Nwokorie, E. C. (2018). *Effects of corruption on managers communication and networking behaviours: Implications for Nigeria and Ghanaian public sector effectiveness*.
- Okebukola, P. A., Suwadu, B., Oladejo, A., Nyandwi, R., Ademola, I., Okorie, H., & Awaah, F. (2020). Delivering high school Chemistry during COVID-19 lockdown: Voices from Africa. *Journal of Chemical Education*, 97(9), 3285–3289.
- Owusu, F. (2005). Livelihood strategies and performance of Ghana's health and education sectors: Exploring the connections. *Public Administration and Development: The International Journal of Management Research and Practice*, 25(2), 157–174.
- Phan, T., McNeil, S. G., & Robin, B. R. (2016). Students' patterns of engagement and course performance in a massive open online course. *Computers & Education*, 95, 36–44.
- Rhodes, R. A. (2016). Recovering the craft of public administration. *Public Administration Review*, 76(4), 638–647.
- Sabic-El-Rayess, A., & Mansur, N. N. (2016). Favor reciprocation theory in education: New corruption typology. *International Journal of Educational Development*, 50, 20–32.
- Stegers-Jager, K. M., Themmen, A. P., Cohen-Schotanus, J., & Steyerberg, E. W. (2015). Predicting performance: Relative importance of students' background and past performance. *Medical Education*, 49(9), 933–945.
- Susac, A., Bubic, A., Kazotti, E., Planinic, M., & Palmovic, M. (2018). Student understanding of graph slope and area under a graph: A comparison of physics and nonphysics students. *Physical Review Physics Education Research*, 14(2), Article 020109.