Instructional Competencies as Key Determinants in Improving Teaching and Learning Processes in Higher Learning Institutions in Tanzania

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Abstract

This study examined instructional competencies as key determinants in improving teaching and learning processes in Tanzania's Higher Learning Institutions (HLIs). Specifically, the study intended to examine perceived key determinants of instructors' instructional competencies and to establish the associations among the variables. Stratified proportional, simple random and purposive sampling techniques were used to generate data from 205 instructors. Thematic and logistic regression models were used to analyse data. The findings revealed that university instructors conceived several key determinants of their instructional competencies: mastery of the content, pedagogical competency, transactional competency, and classroom management skills. However, this study revealed that some instructors had limited knowledge and skills in classroom management. The study concludes that a lack of key instructional competencies may affect the instructor's teaching ability, thus making them fail to capture students' potential. This study, therefore, recommends that mandatory workshops and seminars be conducted for instructors who did not go through teacher education.

Keywords : Instructional competency, Higher Learning Institutions, key determinants, teaching and learning

Introduction

The increasing number of Higher Learning Institutions (HLIs) globally has led to competition among them, specifically for the services they offer to attract students (Knight, 2008). In this modern era of intense competition, dynamic, and challenging environments (Koslowski, 2006), the success and existence of any HLI depend on the quality of education they offer. A growing body of knowledge indicates that teaching and learning are inseparable entities towards students' achievement (Mishra & Koehler, 2006; Al Samman & Zitouni, 2017). Their relationships are at the core of many discussions in education today (Thakur & Shekhawat, 2014). Instructors are required to provide effective teaching and demonstrable student learning (Mishra & Koehler, 2006). Concerning this, instructors' competency should play a fundamental role in enhancing the teaching and learning processes (Tanguihan, 2016). Tanguihan (2016) further explains that a competent instructor must have knowledge and skills in the subject matter he/she teaches, innovative teaching strategies and techniques, personal and professional competencies, and the ability to use performance and authentic assessment skills to improve students' learning abilities.

Gupta (1999) defines competency as knowledge, skills, attitudes, values, motivations, and beliefs which people need to work effectively. According to Gupta (1999), teaching competencies have three main components. These are field, pedagogical, and cultural competencies. Kiymet (2010) explained the general framework for teaching competency. These are categorised into nine dimensions: field competency, research competency, curriculum competency, lifelong learning competency, and sociocultural competency. Other competencies include emotional,

communication, information and communication technology (ICT), and environmental competencies. Thakur and Shekhawat (2014) classify the instructor's instructional competency into four main categories, including professional, personal, social, and pedagogical competencies.

Several studies that have been conducted in the area of instructors' competency have discovered various themes that require emphasis. Kamaruddin and Ibrahim (2010) for example, pointed out the significance of personal attributes and general competency such as knowledge and skills on the subject matter content. Muzenda (2013) emphasises the instructor's subject knowledge and teaching skills as competency upfront requirement for effective teaching and learning processes. Furthermore, instructors need to be aware of the varieties of teaching pedagogies, tactics, and strategies for them to be able to transfer the knowledge to students, since students come to the universities with different backgrounds, interests, abilities, and orientations (Kamaruddin & Ibrahim, 2010). In that regard, the instructor needs to be aware of the varieties of assessment tools and how to conduct assessment activities during the teaching and learning process. Mishra and Koehler (2006) argue that instructional competency contributes to instructors' abilities to teach and to the academic improvement of students. In this context, Heard and Leprince-Ringuet (2008) rightly remarked that the likelihood of attaining desirable educational outcomes is substantial under the competent instructors.

Similarly, the Tanzania Commission for Universities (TCU) insists that every instructor should have communication skills to make students understand their course content effectively (TCU, 2019). Other skills stipulated by TCU as requirements of every instructor are pedagogical skills, where instructors need to know students' differences in learning and skills regarding competency in assessment (TCU, 2019). These are required to enable the instructors to make fair decisions regarding students' performance. Moreover, Harmonised Scheme of Services (HSS) for academic staff in public universities emphasizes on instructors to undertake an induction course in pedagogical skills for those who had none before (URT, 2022).

It is from these observations, therefore, HLIs have been organizing continuing professional development programmes aimed at assisting instructors to acquire pedagogical and assessment skills that can guarantee effective student learning (Rubeba & William, 2019; Binde, 2014). However, a growing body of knowledge indicates that, despite the importance of these continuing professional development programmes and the emphasis placed by TCU and HSS, the trainings are insufficiently provided with limited time and sometimes lack focus (Rubeba & William, 2019; Namamba & Rao, 2017; Komba et al., 2013). For instance, Rubeba and William (2019), in their study on instructors' test construction competences and their implications on teaching and learning in Tanzanian universities observed that, sometimes, the training was given during high peak time, which is a few days before commencing examination. In that way, a few instructors were attending while others were busy finalizing the course work, and it was not obligatory to attend. At other times, the training was offered to new hires. It is imperative, therefore, for HLIs to create appropriate

mechanisms that enable all instructors to attend the trainings on teaching and assessment, and in turn, the teaching and learning processes would be improved.

Models of Teachers' Competency.

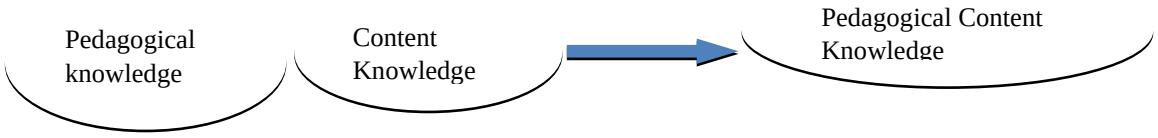
Various models have been developed to explain teachers' competencies. These include Shulman's pedagogical content knowledge model (1986), Leat's model of teacher competency (1993), and Westera's model of teachers' competency (2001). However, this study discusses the Shulman Pedagogical Content Knowledge (PCK) Model (1986) as the father of teachers' competency (see Figure 1 with its descriptions).

Pedagogical, Content Knowledge (PCK) Model

The Pedagogical, Content Knowledge (PCK) Model was innovated by Shulman (1986) with the argument that instructors can use this model to attain educational learning outcomes. The Model assumes that instructional competency is derived from pedagogical knowledge and content knowledge. To improve teaching and learning processes, instructors need to acquire and have knowledge of pedagogy and content to meet desirable learning outcomes.

Figure 1

Instructional Model for Improving Teaching and Learning



Source: Adopted from Shulman (1986)

Based on Figure 1, it is clear that instructors should be competent in the content of the subject matter. The instructors should capture and understand the knowledge of the facts, concepts, theories, and procedures of a given field (Kunter et al., 2013). Instructors should understand the subject matter they teach to create knowledge, skills, and values that have a direct relationship with students' learning. Moreover, instructors need to have the ability to define the prerequisite knowledge of the course, integrate information and communication technology in education, and motivate students to be creative in the courses they teach.

Basing on pedagogical knowledge, instructors are required to have full understanding of the cognitive, social, and developmental theories of learning and how these apply to students in the classroom (Hashweh, 2013; Kunter et al., 2013). Pedagogical competency means the art and science of teaching that include strategies, techniques, and assessment methods of various classroom activities (Nwaboku, 1996). For instructors to be competent in pedagogical

knowledge (Kamaruddin & Ibrahim, 2010), instructors should be able to use suitable teaching strategies that match the content and students' characteristics, be familiar with the mode of delivery of the subject matter (technique and styles), use different classroom organisations patterns that allow students' participation in class, and use suitable reinforcement methods that consider different learning abilities of students. Thus, in actual classroom teaching, evaluation should be done at every step of the teaching and learning processes to gauge students' understanding of the concepts being taught (Kamaruddin & Ibrahim, 2010). However, there has been a claim on the effective implementation of the instructional competencies and whether these competencies are reflected through their teaching (Namamba & Rao, 2017; Yeni, Hum & Surya, 2016). The revised Harmonised Scheme of Service for academic staff in public universities and constituent colleges in Tanzania (United Republic of Tanzania [URT], 2022) indicates general attributes of university lecturers whereby possession of sufficient breadth and depth of specialist knowledge in the relevant discipline and teaching methods as of paramount importance for university lecturers in terms of teaching at HLIs. This study was conducted in Tanzanian HLIs due to the fact that little study on instructors' instructional competencies as key determinants for improving teaching and learning processes were observed during the review of the literature and in those studies that were reviewed, most of them are focusing on secondary and primary school teachers' competency with little interest at HLIs. The findings of this study are essential to university instructors as standards to plan their instructions and other teaching and learning activities.

Problem Statement

The fact is that instructors in HLIs in Tanzania are employed based on a higher-Grade Point Average (GPA) of 3.5 and above (TCU, 2019) in their first degree rather than teaching experiences (Komba et al., 2013). According to the TCU regulations, the minimum qualification for the university academic staff to be recruited is bachelor degree with upper second class, which is equivalent to a GPA of 3.5 and above (TCU, 2019). For the assistant lecturers, it is a master degree with B+ average (URT, 2022; TCU, 2019). However, due to a shortage of qualified and experienced academic staff (Namamba & Rao, 2017), universities ought to recruit tutorial assistants and assistant lecturers of which all these posts are training posts. In addition, the Tanzania commission for Universities stresses the need for universities to have competent instructors in teaching and learning processes (TCU, 2019. Unfortunately, the practicality of the key determinants of the instructors' instructional competencies in HLIs in Tanzania, have not been explicitly established by the previous studies conducted in HLIs in Tanzania (Almas, Machumu & Zhu, 2021; Kisanga, 2016). These studies mainly focused on determinants of teachers' attitudes and competencies in the use of e-learning in teaching and learning processes in HLIs in Tanzania. Several studies have demonstrated that instructional competencies are key determinants for effective teaching and learning processes (Namamba & Rao, 2017; Yeni et al., 2016; Chalchisa, 2014). With regard to this importance, the provision of in-service training of instructors on the determinants of instructional competencies is minimal and lacks focus (Namamba & Rao, 2017; Komba et al., 2013). Namamba and Rao (2017) for example in their study on preparation and professional development of teacher educators in Tanzanian

HLIs, observed that seminars and workshops offered on teaching pedagogies and tactics for instructors were insufficiently provided with limited time. Despite much research being conducted in this area, the determinants of instructional competencies that improve the teaching and learning process in HLIs among instructors in Tanzania are still not comprehensively known. And to the studies conducted, most of these studies have their origin and when referring to public universities in Tanzania, their findings may not be suitable for generalisation. This situation posed questions such as, "What are the perceived key determinants of instructors' instructional competencies that would improve teaching and learning process in HLIs in Tanzania? Do perceived key determinants of instructors' instructional competencies differ from demographic parameters?" It is evident that unless instructors have a clear understanding of the key determinants of instructional competencies for improving teaching and learning processes, they cannot effectively demonstrate the required teaching competencies. Hence, the current study examines the perceived key determinants of instructional competencies towards improving the teaching and learning process among instructors in HLIs in Tanzania and whether or not the instructors' instructional competencies are reflected in their teaching.

Specific Objectives

The following specific objectives informed this study:

(i) To examine the perceived key determinants of instructors' instructional competencies in improving the teaching and learning process in HLIs in Tanzania.

(ii) To establish the relationship between demographic parameters and the perceived key determinants of instructors' instructional competencies that improve the teaching and learning process in HLIs in Tanzania.

Research Methodology

This study was informed by pragmatism philosophy which believes in "what works" (Guba & Lincoln, 1994). The study employed this philosophical stance because it views the world in multiple realities (Rai & Lama, 2020). Thus, the study depended on the information from instructors who had different teaching experiences and understanding of the world that they are living in. Ex-post facto and transcendental phenomenological designs were used since the study adopted mixed research methods as it offers complimentary clarification, which could not be gained by using a single methodology. Three public universities were purposefully selected, two from Dar es Salaam Region and one from Morogoro Region. The main reason for the selecting these universities was their long experience in providing university education and the availability of instructors with long experience in teaching. The target population of the study was instructors found in the respective universities whereby the names of lecturers were obtained for sampling purposes. In order to establish sample sizes which, include demographic parameters such as sex, working experiences and professional ranks, stratified proportional random sampling, simple random sampling, and purposive sampling techniques were used to obtain the sample size of 205 out of 1384 instructors, heads of departments, and quality

assurance officers who were instructors as well. These instructors were categorised into four strata: 32 professors, 37 senior lecturers, 56 lecturers, and 80 assistant lecturers.

The study used questionnaires to collect quantitative data prepared through Likert scale with 5 scales, structured interview guide, and qualitative data were collected using a checklist observations guide Ten courses from undergraduate programmes, were randomly selected for classroom observation whereby the researcher was a non-participant observer. The aim of employing classroom checklist observations guide was to assess instructional competencies practised by instructors during teaching and learning processes and triangulate them with the findings obtained through questionnaires and interviews.

Descriptive (mean and standard deviation) and inferential statistics (Principal Component Factor Analysis and Logistic Regression Model) were used to analyse quantitative data using Statistical Package for Social Sciences (SPSS, version 20). In order to establish the associations among the variables (See objective number 2), the compliance of data for factor analysis was performed through Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test. The test was intended to determine whether data were suitable for factor analysis and that could be used to determine the content and construct validity. The KMO value beyond 0.5 indicates a high sampling adequacy for factors (Pallant, 2011). The Bartlett's test of sphericity, on the other hand, tests the null hypothesis that the original correlation matrix (R-matrix) of the test variables is an identity matrix, which implies that there is no correlation between test variables (Field, 2009a). The literature shows that for factor analysis to work, some relationships between test variables are required (Pallant, 2011). Thus, the obtained KMO value was 0.83 which indicates high sampling adequacy for factor analysis which is beyond the cut-off point of 0.5. On the other hand, the recorded significant value of Bartlett's tests at <0.001 implies that the original R-matrix was significantly different from an identity matrix. These findings suggest that there are some correlations between test variables of instructional competencies and that the data are suitable for factor analysis. The association was established through logistic regression model as explained herein. The general multiple logistic regression models for instructional competencies and demographic characteristics are given in equation 1:

$$\log it[\pi(x)] = \log\left(\frac{\pi(x)}{1-\pi(x)}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 \ldots\ldots(1)$$

Where, $\pi(x)$ is the chance of having high instructional competency; x_1 is sex, x_2 is the academic qualification, x_3 is educational ranks, x_4 teaching experiences and x_5 is teacher by profession and β_i's are their respective parameters. The strengths of association were interpreted using the odds ratio (OR) and p-value. The estimated OR was determined by taking the exponent of the regression parameter estimates which show an increase or decrease in the likelihood of high instructional competency for the respondents at a given level of the independent variables

compared to those in the reference category. An estimate of OR > 1 indicates the likelihood of having high instructional competency for respondents at a given level of the independent variable which is greater than that for the reference category. Similarly, an estimate of OR < 1 specifies that the chance of having high instructional competency for subjects at a given level of independent variable is less than that for the reference category. The significance level was taken at 0.05 with a confidence level of 95%. The findings obtained were presented in tables.

Thematic analysis was used to analyse qualitative data whereby themes and quotations were established in the study. Member and peer checking was performed to maintain consistency, whereas the researcher's personal experiences would not inflate instructors' lived experiences on teaching. Thus, bracketing of the researcher's bias and prejudices was important in order to ensure that the data and findings are authentic and consistent during data collection, analysis, report writing and publishing the results. Again, informants' numbers were used instead of their names to maintain privacy. Furthermore, the steps necessary to carry out the study were followed to maintain the validity, reliability, and trustworthiness of the study findings. Validity and reliability of the instruments were ensured through expert review and pilot testing of the instruments. Cronbach's alpha was used to determine the consistency of the responses obtained during pilot testing and the results obtained was 0.78 which is high consistency.

Findings and Discussions

The study findings were obtained through triangulation of various data collection methods such as questionnaires, interviews, and observation checklists. The analysis and discussion were done by focusing on the stated specific objectives of the study, as shown in the subsequent sections.

Perceived key Determinants of Instructors' Instructional Competencies that Improve Teaching and Learning Process in HLIs

To examine the determinants of instructors' instructional competencies; questionnaires, interviews, and observation checklists were used. Table 1 summarises the determinants of the instructors' instructional competencies for improving the teaching and learning process as obtained through the instructors' questionnaire.

Table 1

Summary of the Key Determinants of the Instructors' Instructional Competencies in Improving Teaching and learning process in HLIs

Determinants	Mean	Standard deviation
Mastering the subject matter	12.80	1.54
Knowledge of students' characteristics	11.25	2.94
Transactional competency	10.07	2.25
Knowledge of teaching strategies	8.90	2.36
Classroom management skills	7.80	1.63
Instructors' emotional management skills	7.30	1.97
Competency in using media and instructional technology	7.25	1.67

Language competency	6.49	1.90

Source: Field Survey.

The analysis shows that most of the HLIs instructors who participated in this study considered mastering the subject matter as the leading determinant of the instructors' instructional competencies with a score mean of 12.80 while language competency scored the lowest mean of 6.49. This suggests that HLIs instructors considered mastering the subject matter, instructional competency, and transactional competency as the most critical determinants of the instructors' instructional competencies in HLIs. Tiwari, Das, and Sharma (2015) agree with this argument when they suggest that "some teachers may demonstrate consistently high or low levels of expertise from one classroom situation to another. Others may show quite a dramatic change. They add that "stability of expertise cannot be assumed" (p. 142). Tiwari et al. (2015) views are contrary to what was suggested by Darling-Hammond (2010) in that, teachers must not only be competent in the subject matter. However, they must also demonstrate competencies in other areas. Other studies (see Thakur & Shekhawat, 2014; Muzenda, 2013; Mishra & Koehler, 2006) restate the problem. These studies found that most of the HLIs instructors emphasise subject matter competency more than other instructional competencies. However, Muzenda (2013) emphasises that instructors should have a broad and deep knowledge regarding their courses. They should also possess the practical experience to make lessons more attractive.

The findings obtained from the questionnaires were triangulated through interviews and classroom observations conducted in the selected universities as follows:

(i) Subject matter competency

Based on interviews' data, it was unveiled that instructors should be competent in their subject matter. The interviewees explained that the instructors should have skills to understand concepts and themes in the textbooks, which are presented in different forms. They should also demonstrate the ability to divide the content into different teaching points, and they should keep themselves updated to current information along with the subject. Other instructors said that the instructor should demonstrate ability to teach students of different backgrounds and abilities. Emphasising this, one instructor said:

> *To me, if an instructor understands his/her subject very well, he or she is competent. This is why most universities use GPA to recruit new academic staff. The aim is to ensure that they only employ someone with a thorough understanding of his/her subject matter* **(*Interview with Professor 1*).**

However, the study found that not all university instructors met this requirement. One senior lecturer with a teacher education background unveiled that; "not all instructors have the required subject matter competency of their teaching subject…nowadays, it is normal to find an instructor reading notes or a book to teach students…to the extent that he/she cannot go beyond his/her notes or text". Furthermore, the views from the quality assurance coordinator

showed that some instructors were teaching without thorough preparation for their subject matter. Consequently, they were only reading notes from the books. This made their teaching unprofessional.

The quotation above suggests that the change in the recruiting system (TCU, 2019) and the expansion of universities in the country are two major causes of employing instructors with insufficient subject matter competency. Arguably, the system of using deans to identify the best students in the faculty and recommend them for universities was the best practice.

Furthermore, when asked about how to ensure competency in teaching among instructors, one internal quality assurance officer said:

> *Not all instructors are perfect and competent in every concept they teach in their subject. However, what we usually do is to get feedback from students at the end of the course, and whoever instructor is found to have this challenge, we discuss, and in the next semester, we request him/her to seek assistance from another lecturer as per the advice obtained from the head of department* **(*Quality Assurance Coordinator 2).***

Another quality assurance officer stated that seminars and workshops on teaching and assessment have been the best solution for instructors with limited knowledge of teaching and assessment skills.

(ii) Classroom Management Competency

The study revealed that classroom management skills were other determinants of instructors' instructional competency. Based on the interviews, it was unveiled that instructors should be able to handle classroom events, build rapport with their students, maintain clear direction in the lesson, teach at a steady pace, maximise the quantity of instructional time and control discipline. During interviews, one instructor with the teaching profession summarised the instructors' classroom management skills by saying:

> *Instructors should demonstrate ability by designing effective classroom instruction…Ability to respond to students' individual needs… They should also possess ability to use instructional methods that facilitate optimal learning by responding to the academic needs of individual students* **(*Interview with Professor 3*).**

This assertion shows that instructors are expected to demonstrate a wide array of classroom management skills, such as creating positive teacher-student relationships and responding to students' needs. However, during interviews, some senior lecturers unveiled that most instructors did not have sufficient classroom management skills. In this regard, one senior lecturer noted:

> *The problem is that most instructors are experts in their subjects, but they never attended any training on classroom management. Hence, they just use experience in classroom management. That is why*

> *you may find someone teaching, but students continue talking or do other business in the class. Others don't attend class and seminars* **(*Interview with Senior Lecturer 2*).**

The above quotation shows that some instructors were using their mere teaching experience to manage students. This was noted to cause classroom indiscipline problems as students tended make noise and were not attending lectures or seminars. It was also found that there was a negative relationship between instructors and students. This made students afraid of seeking further academic advice from their instructors. Commenting on this, one lecturer remarked :

> *One would expect instructors to have the ability to build rapport with their students to have a good and healthy atmosphere in classrooms…where students are free to talk and share their views…but some of the instructors are too harsh to students during lectures. Some prohibit students from asking questions during lecture hours* **(*Interview with Lecturer 1*).**

This assertion shows that some of the instructors were not able to build rapport and, hence, creating unfavourable classroom environment that would not foster the teaching and learning process. In addition to interviews, classroom observation was conducted to explore classroom management competency among university instructors. The observations unveiled that most instructors were not able to manage their classrooms effectively. During the lecture, many students were talking, chatting with their smartphones, and some attended their classroom late. Furthermore, the researcher noted that, in some seminar and tutorial rooms, instructors did not move around the room to see what students were doing as the presentation went on. Writing on the importance of classroom management in higher learning institutions, Marzano (2009) argues that classroom management has been a primary concern of higher learning institution lecturers as they are responsible for delivering knowledge to their students. Effective teaching and learning cannot occur in a poorly managed classroom (Berger et al., 2018). In contrast, a well-managed classroom provides an environment where teaching and learning can flourish (Goh, 2005). Brophy and Evertson (1976) (as cited in Grapragasem, et al, 2015. p.139) stressed that classroom management skills are of primary importance in determining teaching success. A university instructor who is grossly inadequate in classroom management skills will probably not accomplish much.

(iii) Teaching Strategy Competency

Apart from classroom management practices, observation was used to identify teaching strategies competency among university instructors. The study unveiled that instructors ought to have sufficient knowledge regarding teaching strategies. It was noted that instructors should be able to deliver lessons and make students understand them. They ought to have the ability to engage students in various activities at different levels of learning using various innovative teaching strategies. These would be such as inquiry-based learning and problem-solving-based learning, which improves student engagement. However, the findings from the classroom observations show that the lecture method

was the most dominant approach used by lecturers during the teaching and learning process. Showing the importance of teaching strategy competency, one professor said:

> *Instructors need to have teaching strategies competency. This can be possible if there is regular training on instructional competency. Some changes are happening in our education today, especially in higher learning institutions that need some refresher courses/ seminars. Therefore, if we keep on providing training or seminars, it is likely that we will improve the quality of education in universities* **(*Interview with Professor 2*).**

The above quotation emphasises the need to help instructors to have the necessary competency in teaching strategies. However, as it was noted, only instructors in the teaching profession had sufficient knowledge of teaching strategies and even universities which attempted to organise seminars to improve their teaching capacity, the attendance of stakeholders in those seminars was not encouraging. On this, one experienced Lecturer said:

> *I have attended a university-wide training programme which is under Extension and Continuing Education Unit. The training was much concerned with teaching pedagogies in general and assessment of learning outcomes. The training was intended for instructors who are not teachers by profession. It is kind of tailor-made. The university encourages instructors to attend it as a mandatory course, but few attend. No sanction is imposed on those who do not attend* **(*Interview with Lecturer 3*).**

The findings above show that, despite the universities organising seminars to improve instructors' teaching strategies skills, only a few of the instrutors were attending the seminars. As a result, many instructors instruct out of their own experience. Consequently, most students do not learn because of poor teaching strategies and activities that do not contribute to building students' competency. During interviews, another lecturer noted:

> *Most of the instructors lack teaching strategy skills. What they only know is lecturing. They use the lecture method from the beginning to the end of the semester. They never employ different teaching strategies because they do not know how to do it differently. They teach the way their professors taught them…This is a problem…something needs to be done. One-day seminars are not sufficient and sustainable. I think we need more appropriate ways of addressing this problem* **(*Interview with Lecturer 1*).**

The quotation above suggests that university instructors have mainly been using the lecture method as a sole teaching strategy. They never use other teaching strategies. Speaking on the same, another experienced instructor and former head of the department noted:

> *In this university, some instructors use only lecture methods. It is only in the seminars that students have a chance to use the group discussion method. They do not even know how to select teaching strategies that may suit their students' needs. They keep using the lecture method without considering whether the students are learning. In fact, some instructors read notes to students* **(*Interview with Senior Lecturer 2*).**

Interviews with instructors also revealed that most instructors faced challenges in modifying instructional strategies to accommodate all students' needs. It should be borne in mind that students are unique individuals with different needs, backgrounds, and skills. There is no single strategy that fits all. In such a situation, instructors are required to use differentiated teaching strategies to suit diversity among students. Furthermore, interviewees maintained that unfavourable teaching and learning strategies were the leading causes of some students' poor academic progress in their departments.

Comparison of Instructional Competency Based on the Selected Demographic Parameters

The results of the fitted model presented in Table 2 revealed that instructional competency was significantly associated with educational qualifications (p=0.0041), professional rank (p=0.0081), teacher by profession (p<0.0001), and teaching experience (p=0.0344). The odds of having high instructional competency among subjects with PhD was 2 times that of subjects with master degrees (OR=2.29, p= 0.0041). With respect to professional rank, senior lecturers (OR=4.5, p=0.0068) and professors (OR=5.00, p=0.0195) had significantly greater odds of having high instruction competency compared to assistant lecturers. This means that senior lecturers and professors were significantly more likely to have high instructional competency than assistant lecturers. Though not significant (p=0.1393), lecturers were also more likely to have a high level of instructional competency in comparison to assistant lecturers (OR=1.59). Participants who were not teachers by profession were significantly less likely to have a high level of instructional competency than instructors who were teachers by profession (OR=0.19, p=0.0344). In addition, Participants with 5-9 years of experience (OR=3.4, p=0.0326) and those with 10 or more years of experience (OR=4.01, p=0.0094) were also significantly more likely to have high instructional competency level in comparison to those with 0-4 years.

Table 2

Results of Logistic Regression Model for Demographic Parameters and Instructional Competencies

Variable	OR (95%CI)	P-value
Sex		**0.9658**
Female	Reference	
Male	0.99(0.53, 1.82)	
Educational Qualification		**0.0041**
Master degree	Reference	
PhD	2.29(1.30, 4.05)	
Professional rank		**0.0081**
Assistant lecturer	Reference	
Lecturer	1.59(0.86, 2.92)	0.1393

Senior lecturer	4.50(1.52, 13.36)	0.0068
Professor	5.00(1.30, 19.30)	0.0195
A Teacher by professional		**<0.0001**
Yes	Reference	
No	0.19(0.11, 0.36)	
Teaching experience		**0.0344**
0-4 years	Reference	
5-9 years	3.40(1.11, 10.44)	0.0326
10 and above years	4.01(1.41, 11.68)	0.0094

Source: Field Data Survey

The existing research informs the association between some demographic factors and instructional competency. Among these, teaching experience and qualifications have been investigated in several previous studies (Wolff et al., 2014; Casey & Gable, 2012). Concerning teaching experience, the majority of the existing research, report a positive association between teachers' experience and instructional competency. Casey and Gable (2012) in their study showed that there was a significant difference between instructional competency and teaching behaviour based on teachers' experience. The difference was evident between those in the first year of teaching and those who had already worked for more than one year. Besides, Wolff et al.(2014) maintained that instructors with ten years and above in teaching are likely to perform better in their teaching compared to instructors with less than ten years of teaching experience. Also, instructors' educational qualifications play a significant role in teaching (Kamaruddin & Ibrahim, 2010). Surprisingly, some instructors lack the qualifications to teach in universities though they were assumed to be competent depending on their area of expertise (TCU, 2019; Komba et al., 2013).

In addition, it is well known that the roles of Higher Learning Institutions, including universities, are to provide consultancy services, research, and teaching and community services. In such a situation, instructors with high academic qualifications and promotional ranks might likely be more competent depending on their experiences in performing the roles mentioned. Instructors with bachelor's degrees and master's degrees, apart from teaching, their level of education is considered to be a training post, and for that case, they are likely to devote less time to conduct research and consultancies. As a result, they find themselves having less instructional competency as revealed by this study.

Conclusions and Recommendations

The study concludes that instructors perceive several key determinants of instructional competencies such as mastering subject matter, pedagogical competency, transactional skills, assessment skills, language competency, classroom management skills, instructor emotional management skills, and knowledge of students' characteristics. Instructors have varied perceptions towards key determinants of instructional competencies that improve the teaching and learning process. They perceive higher on subject matter competency and low in teaching language competency. Their perception differences may be due to varied educational backgrounds, experiences, interest in learning, work

performance and job-related environment. Furthermore, some instructors possess low instructional competencies. The lack of key instructional competencies affects their ability to teach and capture students' potential as revealed by this study. Furthermore, the study concludes that instructors' demographic parameters associate with instructors' instructional competencies, but their competency levels vary among the instructors observed. However, based on this conclusion, the study recommends that mandatory workshops and seminars be conducted to the instructors who did not go through teacher education. Also, universities should conduct seminars from time to time for all instructors to update their background knowledge and skills on teaching. Furthermore, a similar study should be conducted in private Higher Learning Institutions to determine the extent to which instructors perceive instructional competencies towards improving teaching and learning and how these competencies are practised in those private universities.

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