

Employers' Perception and Expectations of Professional Competency of Distance Learning Graduates: A Tracer Study of Nursing Graduates of the National Open University of Nigeria (NOUN)

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Abstract

This tracer study was designed to track National Open University of Nigeria (NOUN) graduate nurses in their places of work with a view to ascertaining their level of professional competency and to explore employers' expectation of graduate competencies. The study employed the descriptive survey design. Participants included 222 NOUN *alumni* who graduated in nursing programme and a corresponding 222 heads/top-level managers of the organizations where the graduate nurses were employed. Multiple instruments were used to collect data including competency test, survey questionnaire, and direct observation. A number of remarkable findings emerged from this study, both expected and unexpected. Majority of sampled graduates appeared to possess high level of professional competency in all three competency dimensions measured. A significant proportion of employers seemed to hold high perception regarding the graduates. In matching the employers' perception of ODL graduates against actual competencies of NOUN graduate nurses with the use of quadrant analysis, the resulting values showed that a significant proportion of the graduates met and exceeded employer expectation.

Keywords: tracer study; NOUN; graduate nurses; professional competency; employer expectation

Introduction

The emergence of open and distance learning (ODL) has marked a turning point in the provision of educational opportunities for many people. Nigeria, as one of the world's developing nations, has embraced ODL as an emerging mode of educational delivery. One aspect of the contribution of ODL is the opportunity it affords the "work and learn" students who are not in a position to attend regular university since many people cannot afford to leave their work in order to study. Therefore, distance education plays a major role in upgrading the knowledge and skills of various categories of professionals such as teachers, accountants, and nurses.

The National Open University of Nigeria (NOUN) is the first full-fledged university in Nigeria that operates an exclusively open and distance learning (ODL) mode of education. The motto of the university "Work and Learn" epitomizes a shift in paradigm where learners are able to combine work and study in order to acquire quality education. By this form of learning, students enjoy the opportunity of working and learning at the same time without one activity negatively affecting the other (Jegede, 2005). NOUN has produced six sets of bachelor degree graduates since its inception in 2003/2004. It is believed that the true measure of the value of an institution of higher learning is the quality of its graduates. The quality of the graduates in turn is contingent upon the quality of the courses and programmes that are offered by the institution (Smiley, Bedford & Clark, 2010). Generally, graduates in various workplaces are expected to transfer the competencies acquired at the university, and their progress monitored through tracer study.

Researchers have identified the importance of tracer studies. A tracer study is an attempt to trace the activities of the graduates or previous students of an educational institution with the aim of establishing the relevance of the knowledge and skills graduates acquired at university to their places of work (Millington, 2007). Tracer studies of ODL graduates are important in providing the information needed to reform educational programmes to bring about the fit between the requirements of the employment world and study. The ODL provider is expected to make a complete assessment of how the educational process has impacted their graduates and then use the data to make modifications that could enhance their students' chances of achieving success. For instance, In Nigeria, a tracer study was conducted for the Nigerian Teachers' Institute (NTI), which launched its Nigeria Certificate in Education by ODL in response to urgent need to train more teachers. Based on the findings, the Institute is said to have improved its management and monitoring systems and efforts had been made to address inadequacies revealed in the study (Umar, 2006 cited in Millington, 2007).

In gauging the quality of ODL graduates, employers are seen as one of the primary stakeholders in quality assurance issues. According to Seyoum (2008), different people perceive the advantages of ODL differently and their perceptions have influenced their attitudes towards the acceptance and use of ODL in the system. Eggen and Kauchak (2001) see perception as the process by which people attach meaning to experiences. Therefore, the perception of employers regarding the quality of ODL graduates is critical. The study is based on the Haywood and Maki model (cited in Kamau & Waudu, 2012) in which they argue that quality exists when expectation matches perception. According to the model, the degree to which employers are satisfied with the skills and knowledge of their employees can be a measure of the extent to which the education and training system is responding accurately to the prior expectations of the employers. It therefore means that the employers' perceptions and expectations about the skills and competencies of their employees are a good measure of quality.

Since research has found that competencies are acquired at different rates in different professions (Hatcher & Lassiter, 2005), it is essential to focus on one particular field at a time when conducting tracer study. Hence, the current study targets graduates from the B.Sc Nursing Programme, given the nature of the programme, which is competency-based.

The current study therefore is a tracer study designed to ascertain the level of professional competency of NOUN nursing graduates in their work place through an exploration of employers' expectations of these competencies so as to determine whether the graduates met those expectations. Since this is the first tracer study to be conducted on NOUN graduates, it is expected that the information obtained from the study will provide a useful insight into understanding the relationship between the requirements of the employment world and study, and also help NOUN management in an objective assessment of the relevance or otherwise of its programmes. In this study, attempts were made to answer the following questions:

1. What is the present level of professional competency among NOUN graduate nurses in their workplace as assessed by external assessors?
2. What significant changes have occurred in NOUN graduate nurses' attitude to work (from the time of enrollment through the completion of studies and thereafter)?
3. What proportion of graduates' professional competency is attributed to workplace experience and what proportion is attributed to the education received from NOUN?
4. What proportion of NOUN graduate nurses can meet employer expectations?
5. How do NOUN graduate nurses rate the quality of education provision in NOUN?

Methods and Procedures

Study Area and Design

For purposes of the study, Nigeria was divided into three regions according to her three dominant ethnic groups: Northern, South Western and South Eastern regions. The study was conducted in three metropolitan cities, one from each of the three regions, namely, Abuja, Lagos and Port Harcourt, respectively. This was in order to have a good representation of the geographical spread. The three cities were chosen due to their peculiar characteristics. The study employed the descriptive survey design.

Participants

Two sample groups were used in the study: They comprised 240 NOUN graduated nurses from the cohorts of 2012 bachelor degree graduates, as well as 240 heads of the organizations where these nurses were employed (herein referred to as employers. In choosing the graduate sample, certain criteria were considered, they include: graduates who were working while studying, who were in regular employment, who had remained in the same employment from the time they enrolled in NOUN through the time they completed their studies, who were working in private and public sectors. These considerations were meant to control for the effects of confounding variables. The graduates' list was obtained from NOUN academic records office from which the names of participants were compiled. Records showed that a total of 1,751 nurses graduated during the 2012 academic section. Purposive sampling was then applied to select 240 that met the inclusion criteria described above (222 was used in the analysis due to completion defects in data collection tools).

Instruments

Several measures were used in data collection as detailed below:

(1) Clinical competency assessment test for graduate nurses (CCATGN): It was designed to assess the level of professional competency of NOUN graduate nurses. The instrument had three sections. Section A tagged structured clinical observation guide (SCOG) contained a list of 48 competencies that were grouped into 10 domains. Each domain contains a set of performance criteria and their relevant indicators, which describe the competencies and attributes that graduate nurses must have in order to carry out their duties effectively. It was adapted from the Clinical Assessment for General/ Psychiatric Nurses, an instrument developed by the Nursing and Midwifery Council of Nigeria (1979), for assessing nursing competencies. The adapted version was structured in a 4-point scale (4= Excellent to 1=poor). The nurses were observed while performing their normal job task and assessed on their level of clinical performance. The maximum possible score was 192 and the minimum 48, higher scores indicating higher level of professional competency.

Section B was labeled nursing care plan assessment guide (NCPAG) and designed to assess the nursing documentation process. Documentation is an integral part of nursing practice (Bjorvell, 2002), and the quality of the care provided to patients can only be measured by the quality of nursing documentation. Therefore, the assessors had to critically examine and assess how NOUN graduate nurses documented the nursing care plan which covered the five phases of nursing process: assessment, nursing diagnosis, planning, implementation, and evaluation (White, 2003), using the following criteria: coverage, accuracy, sequence, clarity, presentation, which were rated on a 4-point

scale ranging from 4= excellent to 1=poor. Altogether, there were 25 items in the instrument. The possible score that each participant could make ranged from 100 to 25.

Section C of the instrument is titled probing questions (PQ). This section was designed to assess knowledge and understanding of nursing practice following the strategy employed by Levett-Jones et al. (2011). Following the observation period, participants were requested to explain and defend their actions through the use of probing and open ended questions that were used to elicit the intentions, reasons, and rationales underpinning their behaviors and actions. The intent was to assess the nurses' ability to explain why they chose a particular procedure. In probing the nurses, the assessors were also looking for evidence of critical thinking and clinical reasoning, as well as content knowledge and oral communication skills, which are key attributes of a professional nurse. The assessors rated the nurses on these attributes on the basis of 4-response scale: above average, average, below average, and poor. The scores obtainable by each participant ranged from 16 to 4.

The maximum and minimum composite scores obtainable in the three sections (A, B, and C) ranged from 308 to 77. *Data generated from the three sections was used to answer research question 1.*

(2) Employer Perception of NOUN Graduates Nurses (EPGN): This instrument was designed to determine employer perception of ODL graduates, the purpose of which was to find out how well the employers felt about NOUN graduates. The employers were requested to indicate their level of satisfaction with NOUN graduates nursing competency. *Data generated from EPGN was used to answer research question 4.*

(3) Employer Assessment of Graduates Attitude Towards Work (EGATW). This instrument was completed by the employers. It was designed to assess the frequency of occurrence of critical incidents (e.g. absenteeism, lateness, number of queries and warnings) prior to and after completion of studies. The idea was to determine whether or not there has been any significant change in NOUN graduates' attitude to work. *Data generated from EGATW was used to answer research question 2.*

(4) Graduate Assessment Questionnaire (GAQ). This instrument was completed by graduate participants. The instrument was divided into four sections. Section A covered demographic and personal information. Section B was titled workplace training provision (WTP) designed to assess workplace experiences acquired by the graduates. *Data generated from section B was used to answer research question 3.* Section C was titled scale of attitude toward work (SATW). It contained 10 items rated on a 4-point response scale (4=strongly agree to 1= strongly disagree), designed to assess graduates' attitude to work. The idea was to determine whether or not there had been any significant change in the graduates' attitude to work before and after graduation. *Data generated from section C was used to answer research question 2.* Section D contained 10 items designed to assess the quality of education provision in NOUN from graduates' perception. All items were rated on a 4-point scale ranging from 4= excellent to 1=poor. *Data generated from section D was used to answer research question 5.*

Validity and Reliability

The face and content validity of the various instruments were determined through experts' judgment comprising a panel of three experts in the nursing profession. Their suggestions and recommendations were effected to produce a final draft. The internal consistency reliability based on the Cronbach's alpha was calculated for CCATGN, EPGN, EGATW, and GAQ with respective coefficients of 0.81, 0.78, 0.85, and 0.88 obtained. All reliability coefficients were well above the acceptable range of 0.70 level (Burns & Grove, 2005) therefore was found to be reliable.

Procedure and Data Analysis

The study was conducted with careful consideration to ethical standards of research and rights of the participants. A pool of 12 field assistants/external assessors were recruited and trained on the data collection procedure. Each field assistant visited 20 organizations. The graduate participants were contacted on phone and then traced to their places of work. After obtaining their consents and those of the hospital authorities involved in the study, participants were assured that information collected would be treated with the utmost confidentiality. Direct observation of graduate nurses was carried out by external assessors using the approved guides (SCOG, NCPAG and PQ), followed by the completion of a questionnaire package that included EPGN and EGATW. The graduate nurses were observed at their office stations while performing their normal job task. Observations were conducted by the external assessors twice a week each lasting for 30 minutes over three consecutive weeks, totaling three hours of observation per graduate participant and a total of 180 observation sessions for all graduate participants combined. During these observations, event-recording method was used to record instances of the target behaviors as they occurred by putting a mark in specific columns of the observation data sheet. Altogether, 222 graduate nurses were observed. The data collection process lasted three weeks. Data collected were analyzed using basic descriptive statistics such as frequency counts, percentages, mean, standard deviation and quadrant analysis.

Results

The findings of the study are presented according to the research questions raised in the study.

Present level of professional competency of NOUN graduate nurses

To answer research question 1, data gathered from CCATGN were analyzed at three levels. At the first level, the responses on the 48 items on the Clinical Observation Guide were analyzed with the use of frequencies and weighted mean scores. The cut-off point for judging the significance/non-significance of scores was set at 2.5. Since the 48 items were grouped into 10 domains of competency each measuring different competency attribute, scores were obtained by summing the scores of all items within a domain yielding a mean score for that domain category. The result is presented in Table 1a.

Table 1a revealed that all the variables put together yielded an overall competency mean score of 3.20, which was above the cut-off point of 2.50 indicating a high level of competency in clinical performance amongst sampled participants. Table 1a further shows that the 10 competency domains had mean scores ranging from 2.93 to 3.41. Each mean was above the cut-off point of 2.50. It is therefore evident that the nurses' level of competency in clinical performance was high.

At the second level, the responses on the 15 items on the Nursing Care Plan Assessment Guide were analyzed with the use of frequencies and weighted mean scores. The result is presented in Table 1b.

Table 1b revealed that all the variables put together yielded an overall documentation mean score of 3.17, which was above the cut-off point indicating a high level of competency in the way in which graduate participants documented their clinical report. The mean score on each of the phases of nursing process ranged from 3.04 to 3.32. It is therefore evident that the level of competency in nursing documentation was high.

Data for the third dimension of competency were gathered from Probing Questions (PQ). The mean scores and standard deviation were computed and ranked. The result is presented in Table 1c.

Table 1a: Descriptive Analysis of NOUN Graduates Level of Competency in Clinical Performance (N=222)

S/N	Domain competency	Response categories				Total	Mean score	Cut-off point
		Excellent	Good	Fair	Poor			
1	Comportment and appearance	324	300	80	1	705	3.17	2.50
2	Approach to patients	380	252	86	0	718	3.23	2.50
3	Preparation	316	309	74	3	702	3.16	2.50
4	Procedure	396	348	14	1	758	3.41	2.50
5	Speed and accuracy	264	243	138	6	651	2.93	2.50
6	Finishing	328	297	80	1	706	3.18	2.50
7	Understanding of purpose	332	333	60	2	727	3.27	2.50
8	Awareness of total situation	384	273	70	0	727	3.27	2.50
9	Approach to people	356	270	81	3	709	3.19	2.50
10	Teaching ability	376	261	74	4	715	3.22	2.50
	Average	345.6	288.6	68.6	2.2	641.8	3.20*	2.50
Overall clinical performance mean score = 3.20* (significant)								

Table 1b: Descriptive Analysis of NOUN Graduates Level of Competency in Nursing Documentation (N=222)

S/N	Phases of nursing process	Response categories				Total	Mean score	Cut-off point
		Excellent	Good	Fair	Poor			
1	Assessment	348	354	34	0	736	3.32	2.50
2	Nursing diagnosis	376	303	46	4	729	3.28	2.50
3	Planning	292	264	118	2	676	3.04	2.50
4	Implementation	300	282	106	0	688	3.10	2.50
5	Evaluation	325	270	98	2	694	3.13	2.50
	Average	328.2	294.6	80.4	1.6	704.6	3.17*	2.50
Overall documentation mean score = 3.17* (significant)								

Table 1c revealed that both the overall mean score as well as the mean scores for each of the variables examined were above the cut-off point of 2.50. The ranking of the scores shows that the participants demonstrated highest competency in clinical reasoning, followed by content knowledge with oral communication and critical thinking ranking the least.

Overall, from the analysis presented in Tables 1a, 1b and 1c, it could be inferred that the level of professional competency of majority of NOUN graduate nurses was high.

Table 1c: Analysis and Rank Order of Means of NOUN Graduates Level of Competency in Knowledge and Understanding of Nursing Practice

S/N	Variables	Mean	SD	Standard Error	Rank
1	Clinical reasoning	3.36	.583	.039	1 st
2	Critical thinking	3.16	.653	.044	4 th
3	Oral communication	3.23	.621	.042	3 rd
4	Content knowledge	3.25	.679	.046	2 nd
Overall knowledge and understanding mean score = 3.25* (significant)					

Significant changes that occurred in NOUN graduates attitude to work (from the time of enrollment through the completion of studies and thereafter)

To answer research question 2, data were gathered from two instruments - employer assessment of graduates' attitude towards work (EGATW) and graduate assessment of attitude toward work (GATW). Table 2 analyzed the data derived from EGATW while Table 3 analyzed the data derived from GATW.

Table 2: Descriptive Analysis of NOUN Graduates Attitude to Work Before and After Graduation as Assessed by Employers

Indicators	N	Before Graduation			After Graduation			MD
		Mean	SD	Std Error	Mean	SD	Std Error	
1. Absenteeism	222	.49	.906	.061	.17	.440	.030	.32
2. Lateness	222	.81	.956	.064	.30	.564	.038	.51
3. Number of complaints against the employee	222	.56	.775	.052	.20	.465	.031	.36
4. Number of queries and warnings	222	.37	.673	.045	.17	.408	.027	.20
5. Number of work related accidents	222	.36	.691	.046	.17	.408	.027	.19
6. Use of mobile phone while at work	222	.36	.649	.044	.18	.476	.032	.18
Key: SD = Standard deviation, MD = Mean difference								

Table 2 revealed that the calculated mean values obtained for the six indicators before graduation ranged from .36 to .81 while the mean values obtained after graduation ranged from .17 to .30. The mean scores of 'after graduation' were less than those 'before graduation' in all the indicators examined. Because the indicators portrayed negative attributes, a reduction in scores indicates a significant change in the positive direction. Therefore it could be deduced that the rate of absenteeism, lateness, number of complaints, number of queries, number of work-related accidents, and use of mobile phone, dropped after graduation.

Table 3: Descriptive Analysis of NOUN Graduates Attitude to Work Before and After Graduation as Assessed by Own Self

S/N	Attitude items	N	Before Graduation			After Graduation			MD
			Mean	SD	Std Error	Mean	SD	Std Error	
1	I am very interested in this work, it is very important for me	222	3.60	.490	.033	3.60	.490	.033	00
2	Sometimes I absent myself from duty	222	2.96	.815	.055	2.96	.805	.055	00
3	I don't like the kind of job I do	222	3.62	.565	.038	3.62	.565	.038	00
4	I accept assignments without complaints	222	3.32	.494	.033	3.18	.665	.033	.14
5	I arrive on time prepared to work	222	3.52	.527	.035	3.52	.527	.035	00
6	I feel very dissatisfied about my job	222	3.55	.620	.042	3.55	.620	.042	00
7	I would be better off working under different environment	222	3.28	.885	.059	3.28	.885	.059	00
8	I take much pride in my job	222	3.59	.546	.037	3.59	.546	.037	00
9	Sometimes I feel bored about my job	222	3.20	.716	.048	3.20	.716	.048	00
10	I participate in all clinical activities when on duty	222	3.20	.543	.036	3.20	.543	.036	00
11	Taking care of patients makes me fulfilled	222	3.57	.496	.033	3.57	.496	.033	00

Key: SD = Standard deviation, MD = Mean difference

As displayed in Table 3, the calculated mean values obtained for all 11 indicators before graduation ranged from 2.96 to 3.60 while the mean values obtained after graduation had a similar range except for item number 4 "I accept assignments without complaints" which recorded a difference of .14, indicating that graduates' attitude to work remained relatively the same before and after graduation, indicating a positive attitude to work.

Proportion of graduates' professional competency that is attributed to workplace experience and the proportion attributed to education received from NOUN

In order to answer research question 3, the scores gathered from Clinical Competency Assessment Test for Graduate Nurses were analyzed with the use of frequencies and percentages. Graduate nurses' level of competency was classified into two -high and low. It was found that 173 (77.9%) constituted participants with high professional competency while 49 (22.1%) represented those with

low competency. Participants under the high competency group (173) were considered for analysis in attempt to answer the research question. Again scores gathered from responses on Workplace Training Provision (WTP) was used to group participants into two - participants who had spent several years on the job and had attended many training courses, seminars, conferences and workshops relevant to their work, and participants who had spent few years on the job and had received limited training programmes. Since the maximum and minimum score obtainable for each participant was 36 and 0 respectively, any participant that scored 18 and above was considered to have received many workplace training programmes while those that scored below 18 were considered to have received limited training programmes. Since both groups belonged to the high competency group, the competencies of those participants who had received limited exposure to training programmes could be attributed to the education received from NOUN. Table 4 shows the results.

Table 4: Descriptive Analysis of Proportion of Graduate Competency Attributed to Workplace Experience and Education in NOUN

Competency category	Frequency	%	Mean	SD	Standard Error
Workplace experience	108	62.4	4.54	3.66	.086
Education	65	37.6	3.62	3.01	.032

Table 4 reveals that 108 (62.4%) of NOUN graduate nurses appeared to have acquired competencies that could be attributed to workplace experience, while 65 (37.6%) had acquired competencies that could be attributed to education received from NOUN.

Proportion of NOUN graduate nurses that meets employer expectations

To address the fourth research question relating to the proportion of NOUN graduate nurses that meets employer expectations, a quadrant analysis based on perception–competency dimension was performed in order to classify graduate participants in terms of whether they met employer expectation, exceeded expectation, fell below expectation or met no expectation at all. The quadrant analysis was established using a 2x2 matrix, with one dimension represented by graduate competency level and the other by employer perception. Rather than the mean score used in previous studies in plotting the 2x2 matrix, (see Lim et al., 2011), frequencies and percentages were used in the present study. First, graduate nurses' level of competency was grouped into two. Since the maximum and minimum rated competence score for each graduate nurse was 308 and 77, a score of 200 was considered the average level. Hence, any graduate nurse that scored an average of 200 and above was considered to have high competency while those that scored below 200 were considered having low competency. Similarly the same procedure was applied to the perception dimension. The maximum and minimum obtainable scores were 90 and 30 with an average score of 60. Thus any employer with a score of 60 and above was considered as having high perception about ODL graduates while those that scored below 60 were considered having low perception. Therefore, in the quadrant analysis, the overall score value for employer perception was plotted against the overall scores for graduates' competency. The interpretation for each of the four quadrants is as follows:

- If the score values fall in the upper left quadrant (low perception and high competency), the graduates competency level has exceeded expectation

- If the score values fall in the lower left quadrant (low perception and low competency), the graduates competency level was considered to fall at zero level
- If the score values fall in the lower right quadrant (high perception and low competency), the graduates competency level was considered to fall below expectation
- If the score values fall in the upper right quadrant (high perception and high competency), graduates competency level has met/matched expectation.

From the analysis of data gathered and on the basis of the above interpretation, the following findings emerged as displayed in Figure 1.

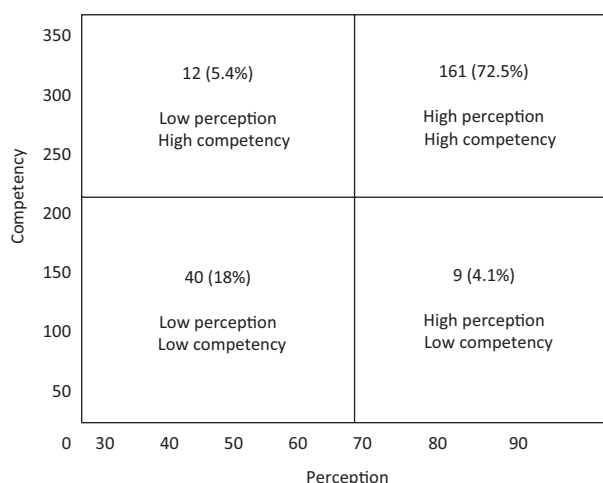


Figure 1: Quadrant analysis by competency and perception dimension

As observed in Figure 1, the upper left quadrant had 12 graduate participants (5.4%) that exceeded employer expectation as the employers had expressed low perception about ODL as against graduate participants' high-level competency. The lower left quadrant had 40 graduate participants (18%) who met no expectation, as the employers' perception was low and graduate participants level of competency also low. Very few graduate participants 9 (4.1%) fell below expectation at the lower right quadrant following employers' high perception and low level competency of graduate participants. A significant proportion of graduate participants (161) representing 72.5% lie at the upper right quadrant that met employer expectation, since employers' high perception matches with graduates' high level of competency.

From the data in Figure 1, it can be seen that a majority of sampled employer participants 170 (76.6%) seem to hold high perception regarding ODL as against 52 (23.4%) with low perception. Also, amongst graduate participants, 173 (77.9%) exhibited high level of competency as against 49 (22.1%) with low level competency. Judging from these data, it could be deduced that a significant proportion of NOUN graduates nurses met and exceeded employer expectation.

Perception of NOUN graduate nurses on the quality of education provision in NOUN

In answer to research question 5, the mean scores were computed and ranked and the results displayed in Table 5.

The analysis in Table 5 reveals that all of the variables analyzed met the cut-off point of 2.50 as the mean scores on each variable ranged from 2.79 to 3.16, indicating that the quality of

Table 5: Analysis of Means and Rank Order of NOUN Graduates Nurses' Responses on the Quality of Education Provision in NOUN (N=222)

S/N	Variables/Items	Mean	Rank order	Cut-off point
1	Availability of course materials	2.99	5 th	2.50
2	Quality of course content /modules	3.16	1 st	2.50
3	Level of practical learning activities in course modules	3.05	4 th	2.50
4	Conduciveness of learning environment	2.80	8 th	2.50
5	Provision of clinical practicum exercise	2.79	9 th	2.50
6	Quality of clinical practicum experience	2.91	7 th	2.50
7	Quality of Infrastructural facilities	2.79	9 th	2.50
8	Quality of nursing degree programme	3.07	3 rd	2.50
9	Level of interaction /contact with fellow students	3.14	2 nd	2.50
10	Provision of facilitation	2.95	6 th	2.50

education provision in NOUN was high. The ranking of the mean scores shows that quality of course content received the highest rating, followed by level of interaction with fellow students and next quality of nursing degree programme. Level of practical learning activities in course modules ranked fourth. Availability of course materials, provision of facilitation, quality of clinical practicum experience, conduciveness of learning environment ranked fifth, sixth, seventh and eighth, in that order. Two items tied for ninth position - provision of clinical practicum exercise and quality of Infrastructural facilities.

Judging from the analysis, it would appear that the quality of education provision in NOUN with respect to B.Sc Nursing programme was highly rated by majority of sampled participants.

Discussion of Findings

The main purpose of this study was to determine how NOUN graduate nurses were performing in their various places of work to confirm or refute the notion that ODL graduates are 'inferior' to their counterparts from conventional universities.

The finding from this study indicates that contrary to general perception and skepticism against ODL graduates, a majority of sampled NOUN graduate nurses were found to possess high level of professional competency in all three competency dimensions measured as reflected in the results of their clinical performance, nursing documentation, and knowledge and understanding of nursing practice. Again, the result of this study showed that a significant proportion of employer participants held high perception regarding ODL graduates. This finding is contrary to expectation, as employers were often perceived as people who are unfavorably disposed to distance education.

Another major finding is the change in the attitude of graduates toward work during and after their studies in NOUN. The rating of the employers showed significant changes in graduates' attitude to work as reflected in the reduced rate of absenteeism, lateness, number of complaints, number of

queries and warnings, number of work-related accidents, and use of mobile phone. The findings based on graduates' assessment of themselves corroborated those of the employers. The findings showed that NOUN graduates demonstrated a positive attitude to work both before and after graduation.

Also, the finding of the study showed that a high proportion of NOUN graduate nurses 108 (62.4%) appeared to have acquired competencies that could be attributed to workplace experience while 65 (37.6%) had competencies that could be attributed to education received from NOUN. This finding came out in the expected direction as many of the sampled graduates had spent several years in service before their enrollment in NOUN. This means that the education they acquired coupled with years of experience spent on the job may have added to the high level of competencies experienced by the graduate nurses.

The study also revealed that the quality of education provision in NOUN with respect to B.Sc Nursing programme was highly rated by NOUN graduate nurses. The quality of course content topped the list of ten indicators that received highest rating while the provision of clinical practicum exercise as well as the quality of infrastructural facilities was rated the least. This finding supports that of Ofoha and Awe (2011), which found that NOUN course materials were highly rated and comparable in content to those offered in conventional system. However, attention needs to be directed at improving the platform for clinical practicum exercise and provision of other infrastructural facilities in NOUN aimed at exposing learners to more practical experience.

Limitations

Although care was taken to assure rigor of the study design, several limitations can be identified. The first limitation is in relation to the sample. This study was conducted using a single, purposive sample of selected graduate nurses who met study criteria. They are certainly not a true representation of all NOUN graduate nurses. The study is therefore limited in terms of generalization of the research finding. Another major limitation was the time frame. The time was very short to cover a study of this nature. For instance, the effort made at contacting all 1,751 graduate nurses on phone, compiling the list of selected ones based on study criteria, and tracking each one of them in their places of work was a time consuming exercise considering the allotted time frame for submission of the report. Another limitation has to do with our choice of nursing profession, which is outside our areas of specialization. Consequently, we had to research widely and studied the nursing literature in order to acquaint ourselves with basic knowledge of the nursing process. In spite of these limitations, our study makes an important contribution to research on a most vital issue of concern, which, to the best of our knowledge, has not been reported in the literature.

Conclusion

The purpose of education has been to equip graduates with the necessary skills and competencies needed for optimal performance in the world of work. This study has demonstrated that NOUN graduate nurses are equipped with such skills and competencies needed for the nursing profession. This study would help to refute the stereotyped negative view regarding the quality of ODL programme and graduates. Also, the information gained from this study could be used by NOUN and indeed other distance education stakeholders as a point of reference in curriculum development and reform in distance education.

Recommendations and Directions for Further Studies

This study has provided a useful insight on how NOUN educational process has impacted their graduate nurses, and as such the following recommendations are proffered:

1. This study represents a useful source of information for NOUN on the need to enhance the provision of clinical practicum exercise and improve infrastructural facilities important for the nursing programme in order to expose learners to more practical experience.
2. It is suggested that NOUN should consolidate on existing nursing programme to sustain the high level of competency that the graduate nurses sampled in this study have exhibited.
3. NOUN needs to conduct more tracer studies in other areas of professional fields and their findings utilized in the decision-making process of the institution. It would therefore be desirable to set up a tracer study unit in NOUN that would coordinate such tracer studies.
4. Direction for future research should include investigation of the level of professional competency of NOUN graduates in other professional fields.
5. Further research could be a comparison of professional competency of NOUN graduates with graduates of conventional universities in specific professional fields.
6. Although the results of this study cannot be generalized past the participants involved having used purposive sampling, future work could build on these results by using a larger and more representative sample that would ensure generalization of results across all graduate nurses.

Acknowledgments

This research was supported by funding from the Commonwealth of Learning (COL) through the Regional Training & Research Institute for Open & Distance Learning (RETRIDAL), NOUN.

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