Perception of Nursing Students Towards Online Learning: A case Study of Lautech Open and Distance Learning Centre, Ogbomoso, Oyo State, Nigeria

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ABSTRACT

Getting quality University Education by Nigeria Nurses has over the year become a growing concern to all and sundry. While many Nurses found it difficult to actualize their dream of this higher education through face-to-face mode, online learning in institutions of higher education has come to be the preferred option. However, concerns about the quality of online nursing education have come to be the preferred option. Meanwhile, this study investigates the perception of nursing students in Lautech Open and Distance Learning Centre towards Online Learning. A descriptive cross-sectional survey design was adopted to investigate the perception of nursing students toward online education in LAUTECH Open and Distance Learning Centre (LODLC), Ogbomoso, Oyo State. Considering the number of nursing students in LODLC, random sampling technique was used to select three hundred and fifty six (356) respondents from 200 Level to 500 Level during their face to face facilitation in the centre out of which three hundred and forty one (341) questionnaires were retrieved. Meanwhile, 36 LODLC students in accounting, marketing and computer science were used for pilot study. The finding revealed that the difference between the perceived ease of use of e-learning platform and the students perception of it was not significant (t=1.81, df=49, P>0.001, two tailed). Also in one of the questions asked about perceived ease of use of E-learning platform, almost all the respondents (99.4%) agreed that E-learning is user friendly, 92.6% agreed that it is easier to become skillful with E-learning while 91.7% agreed that learners population does not affect learning. It was concluded that increased interest of registered nurses in e-learning and it growing acceptability by the nursing community has increased the number of applicants into the online nursing education of the university. The adoption of both synchronous and asynchronous mode of learning to run e-learning university education couple with the introduction of few numbers of face-to-face contacts have made the program so impactful with little or no difference from the traditional mode of learning.

Keywords: Perception, Nursing Students, Online Learning.

INTRODUCTION

As struggles to meet the alarming demands for evidenced based Nursing practice in Nigeria Health care industry becomes a necessity, it has become a duty band on all Nurses to improve on their expertise which can only be achieved through university education. This increase demand for higher education by nurses has placed various faculties and departments of Nursing in various universities in the country at the mercy of creating multiple means of entrance to complement the existing face-to-face mode of learning, the need for online learning has increased tremendously. However, considerable concerns and problems have developed, particularly as it relates to the quality of online education. Traditionally, learning has been assumed to take place in a classroom or face-to-face environment where the instructor and students is physically together (Young, 2002). But not all students learn the same way and for the sake of flexibility, the
traditional approach is not ideal for all students. Therefore, the notion that learning only takes place in face-to-face environments has since been challenged and overtaken by the use of the internet and network technologies to provide a means of communication to learners wherever they are located (Stacey et al, 2004).

Online education according to Harasim (1989) is a new domain of learning that combines distance education with the practice of face-to-face instruction utilizing computer mediated communication. Ascough, (2002) suggested that online education has the following features: (a) it provides a learning experience different than in the traditional classroom because learners are different, (b) the communication is via computer and World Wide Web, (c) participation in classroom by learners are different, (d) the social dynamic of the learning environment is changed, and (e) discrimination and prejudice is minimized.

Also, Paulsen, (2002) opines that online education is characterized by: 1. the separation of teachers and learners (which distinguishes it from face-to-face education), 2. The influence of an educational organization. (Which distinguishes it from self-study and private tutoring), 3. The use of a computer network to present or distribute some educational content. 4. The provision of two-way communication via a computer network so that students may benefit from communication with each other teachers, and staff. Bianca and Carr-chellman, (2002) affirmed that new technologies, the internet, streaming video, net meeting etc. now makes higher education more accessible and affordable for many students, and for those who would have been unable to pursue higher education in a traditional in-class setting. Consequently, online learning has now become an integral part of higher education institutions’ expanding curriculum.

In line with the submission of (Beam, 1998; Micks, 2001), online learning offers several advantages over traditional classroom learning. Among these are the elimination of barriers of time and space. In online learning environment, learning takes place within a flexible timeframe that a student develops without the constraint of a pre-set classroom or organization’s schedule. In addition, web environments offer flexibility of instructional pace, and more control over which learning activities are more appropriate to engage in (Alenandra, 1996). Meanwhile, Bullen, (2003); Piskurich, (2003) stated that e-learning may lack real interaction between instructors and students. Stokes, (2004) affirmed that a significant relationship was reported between the degree to which students feel comfortable using the Internet and their overall feeling of satisfaction with the online experience. Specifically, Chu and Chu (2010) looked at adult learners over the age of 45 and found a positive correlation between Internet self-efficacy and satisfaction. Based on 295 responses from students enrolled in 16 online learning courses at two public universities in Taiwan, Sun, Tsai, Finger, Chen, and Yeh, (2008) identified seven critical factors that influence online learners’ satisfaction; instructor attitude, computer anxiety, course flexibility, perceived usefulness, course quality, perceived ease of use, and diversity of assessment. Sun et al. (2007) revealed that course quality is the most important concern and that technological design plays an important role in students’ perceived usefulness of a course. Moreover, the assessment strategy of any online course should include peers and/or students in addition to the instructor’s evaluations of student performance.

Online course delivery methods have the potential to transform the landscape of higher education by expanding educational opportunities, transforming student populations, and prompting the development of new pedagogical methods. The results of several meta-analyses by (Benoit, Millo, and Hansen, 2006; Bernard
et al., 2004; Jahng, Krug, and Zhang, 2007; Sitzmann, Kraiger, Stewart, & Wisher, 2006) suggests that online and face-to-face courses are relatively comparable in terms of learning outcomes. Students’ perception of online learning differs. However, students generally perceive online courses to be significantly more flexible. Schwartzman (2007), asserted that online courses offer students greater control over when and where they will complete their coursework, which makes them an attractive option for time-crunched, place-bound, and/or non-traditional students. In a survey conducted by Leasure, Davis, & Thievon, (2000) on the topic of online learning, students reported choosing to enroll in online classes for cost efficiency, convenience, and flexibility, to accommodate work demands. With increased flexibility and freedom, however, comes greater responsibility for setting deadlines and ensuring that one is making steady progress through the workload. For those who are not self-motivated learners, the tendency to procrastinate may have a negative impact on online course performance or completion (Deimann & Bastiaens, 2010). This tendency may be why some students cite having less flexibility, and thus fewer opportunities to procrastinate, as a major reason for choosing face-to-face courses over online courses (Leasure et al., 2000). Greater amounts of flexibility may also be associated with lower amounts of interaction with instructors and peers (Shedletsky & Aitken, 2001).

E-learning perceived usefulness
E-learning has been significant in Information and Communications Technology (ICT). It delivers knowledge to developing countries and it integrates many ICT capabilities in a noble cause. E-learning could dramatically increase access to education. It improves quality of education by accessing global academic resources and by offering training to academics. It also helps learners take an active role, work with their colleagues/instructors from a variety of locations. (Lorenzi and Riley, 2000)

E-learning is believed to take a competitive advantage over the conventional methods due to the speed and efficiency of the Internet, especially in making announcements. Moreover, e-learning could be the dream for people with work or family commitments; due to the high flexibility in time and place it offers. (Palloff and Pratt, 1999). E-Learning creates an interactive environment for teachers and students, as well as the opportunity for discussion and clarification of class content.(Rossiter, 1997). It also enables educational institutions to target learners who are unable to participate in traditional-learning environments. (Maddux and Johnson, 2001). The Internet provides a rich source of information with different perspectives in research, high speed and countless resources to improve student work. Students can undertake group work through the collaborative groupware. E-learning also enables participants to choose the course scope, appropriate time, access up-to-date content and even customize it. (Online Collaborative Learning in HE (2003)

It is thus observed that the tendency that nurses will prefer online mode of university education is dependent on their perception of the program and it acceptability to the nursing world. The present study was therefore designed to investigate the perception of nursing students towards Online Learning: A case Study of Lautech Open and Distance Learning Centre, Ogbomoso, Oyo State, Nigeria.

Research Objectives
The following objectives were set for this study
To examine the perception of students towards online learning
To assess the perceived benefits derived by students from online mode of learning
To investigate the perceived challenges student’s encounters when using e-learning platform

Research Questions
The research will investigate into:
What is the perception of students towards online learning?
What are the perceived benefits derived by students from online mode of learning?
What are the perceived challenges student’s encounters when using e-learning platform?

**Research Hypotheses**
The following hypotheses were formulated to be tested:

H_01: There is no significant relationship between perceived ease of use and perception of students towards using e-learning platform.

H_02: There is no significant relationship between student’s perceived benefits and perception towards e-learning platform.

**MATERIALS & METHODS**
**Design:** A descriptive cross-sectional survey design was adopted to investigate the perception of nursing students toward online education in LAUTECH Open and Distance Learning Centre (LODLC), Ogbomoso, Oyo State. Self-designed questionnaire was administered

**Sample Size Determination**
The sample size for the study will be calculated using Taro Yamane’s formula

\[ n = \frac{N}{1+Ne^2} \]

Where
- \( n \) = sample
- \( N \) = population size
- \( e \) = error limit (0.05)

Since a total of 3214 undergraduate Nursing students are in 200 Level to 500 Level of LAUTECH Open and Distance Learning Centre.

\( N = 3214 \)

Hence \( n = \frac{3214}{1+3214(0.05)^2} \)

\( n = \frac{3214}{1+3214(0.0025)^2} \)

\( n = \frac{3214}{1+8.035} \)

\( n = 355.73 \)

Since the sample size is calculated at 356, a total number of 356 questionnaires was administered to the students.

**Sampling Technique:** Considering the number of nursing students in LODLC, random sampling technique was used to select three hundred and fifty six (356) respondents from 200 Level to 500 Level during their face to face facilitation in the centre out of which three hundred and forty one (341) questionnaires were retrieved. Meanwhile, 36 LODLC students in accounting, marketing and computer science were used for pilot study.

**Inclusion Criteria:** All nursing students in LAUTECH Open and Distance Learning Centre that have successfully completed minimum of a semester of both online and face to face facilitations were employed.

**Exclusion Criteria:** All nursing students that were not students of LAUTECH Open and Distance Learning Centre.

**Data Collection**
Participants were notified orally during their face to face facilitation regarding the objectives of the study. The notification described the voluntary nature of participation and the confidentiality of all data gathered throughout the research period. All participants agreed to answer the questionnaire before being administered. Questionnaires were distributed to all participants, and 96% response was achieved. A pilot test was carried out prior to administering the questionnaire to participants among 36 open and distance learning students of Lautech from three different departments, namely: Computer Science, Marketing and Accounting.

**RESULT**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heard of e-learning before enrolling course</td>
<td>259(76)</td>
<td>82(24)</td>
</tr>
<tr>
<td>Use computer before enrolling for course</td>
<td>327(95.9)</td>
<td>14(4.1)</td>
</tr>
<tr>
<td>I don’t know anything about computer before enrolling for the course</td>
<td>58(17.0)</td>
<td>283(83.0)</td>
</tr>
</tbody>
</table>
Table 1 above shows the student’s awareness on e-learning platform, majority of the respondents (76%) have heard of e-learning before enrolling for the course while 95.9% had used computer before enrolling for the course.

Table 2: Perceived ease of use of E-learning platform

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-learning is user friendly</td>
<td>165(48.4)</td>
<td>174(51)</td>
<td>2(0.6)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Easier to become skillful with it</td>
<td>114(33.4)</td>
<td>202(59.2)</td>
<td>18(5.3)</td>
<td>7(2.1)</td>
</tr>
<tr>
<td>Easy to enjoy lesson on e-learning</td>
<td>86(25.2)</td>
<td>226(66.3)</td>
<td>20(5.9)</td>
<td>9(2.6)</td>
</tr>
<tr>
<td>Ease sharing ideas with colleagues</td>
<td>57(16.7)</td>
<td>252(73.9)</td>
<td>29(8.5)</td>
<td>3(0.9)</td>
</tr>
<tr>
<td>Learners population does not affect learning</td>
<td>157(46)</td>
<td>156(45.7)</td>
<td>28(8.2)</td>
<td>0(0)</td>
</tr>
</tbody>
</table>

Table 2 shows the perceived ease of use of E-learning platform, almost all the respondents (99.4%) agreed that E-learning is user friendly, 92.6% agreed that it is easier to become skillful with E-learning while 91.7% agreed that learners population does not affect learning.

Table 3: Perceived usefulness of e-learning platform

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has improved my performance</td>
<td>131(38.4)</td>
<td>200(58.7)</td>
<td>10(2.9)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Enable me to accomplish task fast</td>
<td>105(30.8)</td>
<td>229(67.2)</td>
<td>7(2.0)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I find e-learning system easy to use</td>
<td>116(33.4)</td>
<td>219(64.2)</td>
<td>6(1.8)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Are simple and easy to use</td>
<td>122(35.8)</td>
<td>211(61.9)</td>
<td>8(2.3)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Can get feedback from others</td>
<td>62(18.2)</td>
<td>267(78.3)</td>
<td>9(2.6)</td>
<td>3(0.9)</td>
</tr>
</tbody>
</table>

Table 3 shows the perceived usefulness of e-learning platform, 97.1% agreed that e-learning has improved their performance, 97.7% agreed that e-learning is simple and easy to use

Table 4: Perceived challenges in using e-learning platform

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irregular Internet access</td>
<td>265(77.7)</td>
<td>76(22.3)</td>
</tr>
<tr>
<td>Low participation of other students</td>
<td>257(75.4)</td>
<td>84(24.6)</td>
</tr>
<tr>
<td>Lack of feedback from the instructor</td>
<td>151(43.3)</td>
<td>190(55.7)</td>
</tr>
<tr>
<td>Lack of feedback from peers</td>
<td>131(38.4)</td>
<td>210(61.6)</td>
</tr>
<tr>
<td>Single students dominating</td>
<td>88(25.8)</td>
<td>253(74.2)</td>
</tr>
<tr>
<td>Lack of group mentor</td>
<td>202(59.2)</td>
<td>139(40.8)</td>
</tr>
<tr>
<td>Lack of technical know-how</td>
<td>165(48.4)</td>
<td>176(51.6)</td>
</tr>
</tbody>
</table>

Table 4 shows the perceived challenges in using e-learning platform as: irregular internet access (77.7%), low participation of other students (75.4%) and lack of group mentor (59.2%)

Table 5: Student levels of Access to Technology

<table>
<thead>
<tr>
<th>Technology access</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership of laptop</td>
<td>292(85.6)</td>
<td>49(14.4)</td>
</tr>
<tr>
<td>Ownership of android or other types of phone</td>
<td>332(97.4)</td>
<td>9(2.6)</td>
</tr>
<tr>
<td>Have Internet access</td>
<td>324(95)</td>
<td>17(5)</td>
</tr>
</tbody>
</table>

Table 5 shows the student level of access to technology as: ownership of android or other types of phone (97.4%), have internet access (95%) and ownership of laptop (85.6%)

Table 6: There is no significant relationship between perceived ease of use and perception of students towards using e-learning platform.

<table>
<thead>
<tr>
<th>Perceived ease of use of e-learning platform</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>t-value</th>
<th>Sig.</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>293</td>
<td>32.0</td>
<td>5.85</td>
<td>49</td>
<td>1.81</td>
<td>0.070</td>
<td>0.13</td>
</tr>
<tr>
<td>Negative</td>
<td>48</td>
<td>11.3</td>
<td>5.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 above shows that the difference between the two groups was not significant (t=1.81, df=49, P>0.001, two tailed).
Table 7: There is no significant relationship between student’s perceived benefits and perception towards e-learning platform.

<table>
<thead>
<tr>
<th>Perceived benefit of e-learning platform</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>t-value</th>
<th>Sig.</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>275</td>
<td>24.0</td>
<td>8.11</td>
<td>33</td>
<td>2.48</td>
<td>0.110</td>
<td>0.25</td>
</tr>
<tr>
<td>Negative</td>
<td>66</td>
<td>19.8</td>
<td>6.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7 above shows that the difference between the two groups was not significant (t=2.48, df=33, P>0.001, two tailed).

**DISCUSSION**

Traditionally, learning has been assumed to take place in a classroom or face-to-face environment where the instructor and students is physically together (Young, 2002). But not all students learn the same way and for the sake of flexibility, the traditional approach is not ideal for all students. Therefore, the notion that learning only takes place in face-to-face environments has since been challenged and overtaken by the use of the internet and network technologies to provide a means of communication to learners wherever they are located (Stacey et al, 2004).

The first null hypothesis which stated that there is no significant relationship between perceived ease of use and perception of students towards using e-learning platform was accepted. The finding revealed that the difference between the perceived ease of use of e-learning platform and the students perception of it was not significant (t=1.81, df=49, P>0.001, two tailed). Also in one of the questions asked about perceived ease of use of E-learning platform, almost all the respondents (99.4%) agreed that E-learning is user friendly, 92.6% agreed that it is easier to become skillful with E-learning while 91.7% agreed that learners population does not affect learning. This finding was supported by the work of Stokes, (2003) who affirmed that a significant relationship was reported between the degree to which students feel comfortable using the Internet and their overall feeling of satisfaction with the online experience. Also, it is in line with the report of Chu and Chu (2010) who specifically looked at adult learners over the age of 45 and found a positive correlation between Internet self-efficacy and satisfaction.

The second hypothesis which states that there is no significant relationship between student’s perceived benefits and perception towards e-learning platform was accepted based on the finding that shows that the difference between the two groups was not significant (t=2.48, df=33, P>0.001, two tailed). This is consistence with the submission of Lorenzi and Riley, (2000) who opines that E-learning has been significant in Information and Communications Technology (ICT). It delivers knowledge to developing countries and it integrates many ICT capabilities in a noble cause. E-learning could dramatically increase access to education. It improves quality of education by accessing global academic resources and by offering training to academics. It also helps learners take an active role, work with their colleagues/instructors from a variety of locations. Corroborating the benefit of e-learning, Online Collaborative Learning in HE, (2003) affirmed that the Internet provides a rich source of information with different perspectives in research, high speed and countless resources to improve student work. Students can undertake group work through the collaborative groupware. E-learning also enables participants to choose the course scope, appropriate time, access up-to-date content and even customize it.

The result of this study goes contrary to the belief that nurses are less computer literate and they are not likely going to take the option of E-learning. Because of the high positive perception of the nursing students in E-learning, there is likelihood that many of them in the future will continue to influence their colleagues in their places of work to equally take the option of online nursing education. This
invariably may affect the high turnout of nurses to the direct entry programme of face to face mode of university nursing education.

CONCLUSION

Increased interest of registered nurses in e-learning and its growing acceptability by the nursing community has increased the number of applicants into the online nursing education of the university. This extension has gradually been removing the barriers of university education eluding the nurses.

The adoption of both synchronous and asynchronous mode of learning to run e-learning university education coupled with the introduction of few numbers of face-to-face contacts have made the program so impactful with little or no difference from the traditional mode of learning.

Implication of the Study for Nursing Practice

Online nursing education will allow more registered nurses who have found it difficult in the past to further their nursing education the opportunity of doing so.

With more nurses bagging their Bachelor of Nursing Science Degree, improvement in service delivery to the patients will be guaranteed.

More opportunities for nurses to bag their first degree in nursing means more chances for nurses to be at par with their colleagues in health profession and guaranteed career advancement.

The more the nurses goes through the route of bagging their degrees via E-learning, the more technologically inclined they become.

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