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An Analysis of Listening Skills of Healthcare Students in Nigeria

Une analyse de l'écoute des compétences des élèves de soins de santé au Nigeria

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ABSTRACT

BACKGROUND: **Listening is a primary communication skill essential for human learning and reported to be positively correlated with school achievement. It enables the healthcare professional to explore fully the ideas and concerns of the patient during a healthcare encounter. It is especially needed by healthcare students and professionals in light of the study showing that the typical physician will interrupt a patient after about 18-23 seconds.**

OBJECTIVE: **The objective of this study was to measure the listening skills of the undergraduate health sciences students in a Nigerian setting and to attempt to explain different levels of individual listening skills.**

METHODS: **Selected undergraduate students in medicine, dentistry, nursing and physiotherapy who volunteered to complete a self-administered questionnaire were studied. The questionnaire contained seventeen items, ranked on a 5-point Likert scale on the various habits people adopt when listening to others and the students' three most recent academic test scores.**

RESULTS: **The mean (SD) score for the seventeen items was 2.72 (1.14) out of 5. Seven items had mean scores greater than 3.00, eight items had mean scores between 2.00 and 3.00, and two items had mean less than 2.00. The students had a minimum score of 27 and a maximum score of 67 compared with a possible 17 and 85. The mean (SD) score for the listening scale by the students was 46.87 (7.33). Eighty percent of the respondents had good listening skills. There were no statistically significant associations between the listening skills scores of the students and several possible explanatory variables - age, gender, course being studied and test scores.**

CONCLUSION: **The findings indicate that neither males nor females are the better listeners. It showed impressively high levels of listening skills among the respondents. There was the absence of explanatory variables which were significant in explaining differences between individual listening skill scores. WAJM 2010; 29(2): 104-108.**

Keywords: **Listening skills, healthcare students, Nigeria.**

RÉSUMÉ

CONTEXTE: *L'écoute est une compétence de communication primaire essentielle pour l'apprentissage humain et signalé à être positivement corrélée avec la réussite scolaire. Il permet de professionnel de la santé pour explorer toutes les idées et les préoccupations du patient au cours d'une rencontre de soins de santé. Il est particulièrement nécessaire pour les étudiants et les professionnels des soins de santé à la lumière de l'étude montrant que le médecin typique interrompre un patient après environ 18-23 secondes.*

OBJECTIF: *L'objectif de cette étude était de mesurer la capacité d'écoute des étudiants de premier cycle en sciences de la santé un cadre nigérian et de tenter d'expliquer les différents niveaux de capacité d'écoute individuelle.*

METHODES: *Sélection des étudiants de premier cycle en médecine, médecine dentaire, les soins infirmiers et de kinésithérapie qui s'est porté volontaire pour remplir un questionnaire d'auto-administrés ont été étudiés. Le questionnaire contenait dix-sept articles, classés sur une échelle de Likert 5 sur les habitudes différentes les gens à adopter lors de l'écoute des autres et les élèves trois des plus récents résultats des tests scolaires.*

RÉSULTATS: *La moyenne (SD) score pour les articles dix-sept ans 2.72 1.14) sur 5. Sept articles (avait des scores moyens plus de 3,00, huit articles avaient des scores moyens entre 2,00 et 3,00, et deux articles avaient moyenne inférieure à 2,00. Le étudiants avaient un score minimum de 27 et un score maximum de 67 par rapport à un 17 et 85 possible. La moyenne (SD) score de l'échelle de l'écoute par les élèves a été 46.87 (7.33). Quatre-vingts pour cent des répondants avaient une bonne capacité d'écoute. Il n'y avait aucune association statistiquement significative entre les scores capacité d'écoute des élèves et plusieurs variables explicatives possibles - âge, sexe, bien sûr à l'étude et les résultats des tests.*

CONCLUSION: *Les résultats indiquent que ni mâles ni femelles sont les auditeurs de mieux. Elle a montré impressionnant des niveaux élevés de compétences d'écoute parmi les répondants. Il a été l'absence de variables explicatives qui ont été importants pour expliquer les différences entre les scores de compétences d'écoute individuelle.* ***WAJM 2010; 29 (2): 104-108.***

Mots-clés: *compétences d'écoute, de soins de santé des étudiants, au Nigeria.*

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INTRODUCTION

Communication takes up about 80% of the waking hours of the average person. Listening accounts for about 45% of the time spent communicating. But, the typical adult is reported to be better at reading, speaking or writing than at listening as he/she only listens at "no better than 25% efficiency".[1]

The process of listening recognizes that the attainment of effective communication requires connectivity. It also offers insight into the motivation of others.[2] The relationship between the healthcare professional and the patient is greatly enhanced by active listening. It is a communication skill that enables healthcare professionals the opportunity to recognize and explore patients' ideas, concerns, expectations and clues about their illness symptoms. A deficiency or absence of this communication skill could mean that healthcare professionals will fail to recognize or explore the "clues" offered by their patients. Hence, the real concerns of the patients may go unaddressed.[3] Active listening is very much needed in the healthcare setting where, it has been reported that the typical physician takes control of the content and direction of the medical interview very quickly. It has been reported that the typical physician will only listen to a patient for about 18 to 23 seconds before they interrupt the patient and try to explain the patient's problems.[4,5] Wilkins (2006) also posited that listening "aids efficient, accurate diagnosis and healing" and that "blocking listening blunts clinical acumen".[6] In addition, the literature on listening skills in the healthcare setting has focused on the qualified healthcare professionals to the exclusion of the students and trainees in these professions.

Listening has been recognized as a primary communication skill essential for human learning. But, it is interesting to note that the available research evidence shows that listening is the "most neglected of the language arts".[7] The emphasis in the curriculum of undergraduate students in the healthcare professions has been on the training, acquisition and demonstration of communication skills in general and not listening skills.[8,9] Research evidence has also shown that listening skills could be taught or enhanced through specific instructions.[6,7]

But, Pearce *et. al.* has reported both "limited and dated" evidence about the involvement of higher education in listening skill training. They found that tertiary institutions have devoted little time and effort to building listening proficiency in their students.[1] It is therefore extremely important to study and know how well healthcare students listen.

SUBJECTS, MATERIALS, AND METHODS

Subjects: Five hundred and eighty-four undergraduate students studying medicine, dentistry, nursing and physiotherapy in the College of Health Sciences, Obafemi Awolowo University, Ile-Ife, Nigeria were invited to participate in the study between 8 February and 2 May, 2006. Ethical approval was obtained for the study and verbal consent was obtained from the invited students after the study had been explained to them. The students were assured that their identities would remain anonymous and the data from the study would be reported as group data.

Instrument: The instrument used for data collection in this study was a self-administered questionnaire. The questionnaire was adapted from the listening skills survey instrument by Kinicki and Kreitner.[10] It was designed to evaluate the habits adopted by the students when listening to others. It contained seventeen statements reflecting such habits that are adopted when we are listening to others. The responses to the statements were measured on a 5-point Likert scale, from 1=strongly disagree to 5=strongly agree. The respondent's scale score was calculated by adding the scores for all the responses to the seventeen statements. The questionnaire also collected demographic data such as age, sex, course of study, current year of study and scores of the students on their last three tests. No personal identifiers such as names and student registration numbers were collected.

Statistical analysis: SPSS for windows version 14.0 was used for the data analysis. Missing values were imputed by the linear trend at point method. The data were analysed by using both descriptive and inferential statistics. The demographic data were analysed for frequency distributions and percentage of respondents. Descriptive statistics are used to present the frequency of occurrence of the listening skills variables. The strength of the relationship between the respondent's listening scale score and the respondent's sex, course of study and average test score were analysed using Pearson correlation. A p-value of ≤ 0.05 is considered to be statistically significant.

The Kolmogorov-Smirnov Z test was used as a measure of normality for the distribution, a significance level of less than 0.05 being considered as an indication that the distribution is probably not normal.

RESULTS

Four hundred and seventy-nine of the 584 undergraduate students accepted the invitation to participate in the study thereby giving a response rate of 82.02%. The demographic characteristics of the students, including mean (standard deviation), median (inter-quartile range) of variables are shown in Table 1. The mean (SD) age of the students was 22.79 (3.03) years. There were more male students (60%) than female students. Medical students were in the majority (71%) amongst the respondents' studied, while 90% of the students were in their second, third and fourth years of study for their respective courses.

The mean (SD) number of years in the university was 3.54 (1.5) years. The range of the number of years in the university was 10 years. This long duration of study for a number of students was partly due to the fact that some of the students had changed from other courses like Microbiology and Zoology to study Medicine and Dentistry. Others had also lost some years because they had had to repeat classes.

The responses to the attitudinal statements were scored from 1 to 5. The number of respondents, mean, standard

Table 1: The Demographic Characteristics of the Respondents

Variables	Percent
Age in years	**(N = 470)**
15 – 19	8.9
20 – 24	69.1
25 – 29	19.1
≥30 and above	2.8
Sex of respondent	**(N = 479)**
Male	59.5
Female	40.5
Course of study	**(N = 477)**
Medicine	70.6
Dentistry	18.9
Nursing	6.1
Physiotherapy	4.4
Year of study	**(N = 475)**
1st year	2.3
2nd year	45.3
3rd year	20.4
4th year	24.2
5th year	1.5
6th year	6.3
Years spent in University	**(N = 468)**
1 year	2.6
2 years	34.2
3 years	18.4
4 years	7.5
5 years	26.7
≥ 6 years	10.7

deviation, median and inter-quartile range for the seventeen items asking for the students responses on their listening skills are shown in Table 2. Item 6 "I have a hard time paying attention to boring people" had the highest mean of 3.55 (1.08). Item 16 "I do not pay attention to the visual aids used during lectures" had the lowest mean of 1.50 (0.70). Seven items had mean scores greater than 3.00 and eight items had mean scores between 2.00 and 3.00. Only two items had mean scores less than 2.00. The pooled mean (SD) score for the seventeen items on the listening scale was 2.72 (1.14) out of 5.

The scores on all the items were added together to obtain the listening scale score. The minimum and maximum scores possible on the listening scale were 17 and 85 respectively, giving a range of score of 68. The students had a minimum score of 27 and a maximum score of 67. The listening scale score for the students was found to be normally

Table 2: Descriptive statistics for the individual listening skills items

No.	Item	N	Mean	SD	Median	Interquartile Range
1.	I day dream or think about other things when listening to others	466	2.68	1.29	2	4 – 2
2.	I do not mentally summarise the ideas being communicated by a speaker	466	2.03	0.98	2	2 – 1
3.	I do not use a speaker's body language or tone of voice to help interpret what he or she is saying	458	2.34	1.17	2	3 – 1
4.	I listen more for facts than overall ideas during classroom lectures	461	3.35	1.20	4	4 – 2
5.	I tune out during uninteresting lectures	469	3.25	1.29	4	4 – 2
6.	I have a hard time paying attention to boring people	465	3.55	1.08	4	4 – 3
7.	I can tell whether someone has anything useful to say before he or she finishes communicating a message	471	3.31	1.24	4	4 – 2
8.	I quit listening to a lecturer when I think he or she has nothing interesting to say	470	2.70	1.16	2	4 – 2
9.	I get emotional or upset when lecturer make jokes about issues or things that are important to me	472	2.62	1.24	4	4 – 2
10.	I get angry or distracted when lecturer use offensive words	470	3.16	1.19	4	4 – 2
11.	I do not expend a lot of energy when listening to others	463	3.36	1.14	4	4 – 2
12.	I pretend to pay attention to others even when I am not really listening	468	3.01	1.20	4	4 – 2
13.	I get distracted when listening to others	469	2.57	1.15	4	4 – 2
14.	I deny or ignore information and comments that go against my thoughts and feelings	456	2.77	1.21	4	4 – 2
15.	I do not seek opportunities to challenge my listening skills	462	2.31	1.11	3	3 – 1
16.	I do not pay attention to the visual aids used during lectures	469	1.50	0.70	2	2 – 1
17.	I do not take notes on handouts when they are provided	473	1.75	1.09	2	2 – 1
Total Listening Scale Mean Score			**2.72**	**1.14**		

distributed (Kolmogorov-Smirnov Z test was 1.203, P≥ 0.05). The mean (SD) score on the listening scale was 46.87 (7.33). Male students had a mean score of 47.08 (the range was 46.34, 47.81) on the listening scale and female students had a mean score of 46.54 (the range was 45.60, 47.48).

The listening scale score for each student was further classified into very good listening skills for scores of 17 to 34, good listening skills for scores of 35 to 53, and poor listening skills for scores of 54 to 85. Using this classification, only 5% of the students have very good listening skills, 80% of the students have good listening skills and 15% of the students have poor listening skills.

The proportion of students with very good to good listening skills was similar for both male (85%) and female (84.6%) students. Table 3 shows that the distribution of very good to good listening skills was similar for all the students; medical students (85%), dentistry students (84%), nursing

Table 3: Course of study and listening skills

Course of Study	Very Good Listening Skills	Good Listenings Skills	Poor Listenings Skills
Medicine	21	266	50
Dentistry	1	74	15
Nursing	1	24	4
Physiotherapy	0	16	5
Total	23	381	73

$\chi^2 = 4.336$, p = 0.631, df = 6

students (88%) and physiotherapy students (78%).

An attempt was made to identify possible determinants of listening skills by calculating Pearson correlation coefficients between individual listening skills scores and age, gender, course of study and academic performance; the last was measured by the average of the individual's last three academic test scores. There was no significant difference between male and female listening skill scores (r=0.04, p>0.05), age and listening skill scores (r=0.006, p>0.05), nor between course of study and listening skill scores.

The average of the three test scores of each student was computed, and compared with the individual listening skill score. This was used in a Pearson's correlation analysis to analyse the relationship between the student's average test score and the listening skill scale score. There was no statistically significant correlation between the average test score and the listening skill scale score (r=0.04, P>0.05).

DISCUSSION

There is the absence in the literature of an unequivocal recommendation of an instrument for the evaluation of general or specific listening skills.[7] This study therefore adapted an existing instrument and a self reporting format.[10] Self report has been reported to be a reliable and standard method for assessing people's abilities and performance.[11] In a study on the "Self-report versus performance-based activities of daily living capacity among heart transplant candidates and their caregivers", Putzke *et. al.* concluded that the "results did not support the hypothesis that transplant candidates tend systematically to overestimate their ability level on self-report instrumental activities of daily living (IADL) measures".[11]

This study found no evidence to suggest whether male or female students were the better listeners using the listening skills classification and Pearson's correlation. This finding is in agreement with the report by Palmatier and McNinch (1972) that there is inconclusive evidence as to whether males or females are the better listeners.[7]

The mean score of 2.72 by the students on the seventeen items in this study was better than the mean rating of 1.97 on a 5-point scale reported by Pearce *et. al.,*[1] as the rating by training directors in Fortune 500 companies for their managers and subordinates.[1] Also, 85% of the students in this study had very good to good listening skills unlike the fair to poor listening skills effectiveness reported by Pearce *et. al.*[1] It is possible that the better results obtained in this study are indicative of the fact that this study was a self-assessment by the student unlike the study reported by Pearce *et. al.*[1] which, reported the rating of managers and subordinates by their training directors.

The listening skills classification was similar for all the four different courses of study. We did not find any association between the students' course of study and listening skills scale score.

The published literature on listening skills in the healthcare setting has tended to focus mostly on the medical professionals to the exclusion of other healthcare professionals like dentistry, nursing, physiotherapy and pharmacy.[4–6] While this present study has reported on the other healthcare professionals hitherto unreported, the findings may be a pointer to the fact that assessed listening skills may be independent of professions where such skills have not been taught or enhanced through specific instructions.

The study noted that there is no significant correlation between the examination results and the listening skills. This may not be surprising as examinations test students' understanding of subject matters which may be quite independent of their ability to pay attention in class. The exams tests may therefore not serve as a good judgment criteria for assessing the impact of student's listening skills on their proficiency. A more sensitive measure may therefore be needed

Conclusion

This study has further confirmed some of the previous findings on listening skills such as that indicating no differences based on sex. It showed impressively high levels of listening skills among the respondents. There was the absence of explanatory variables which were significant in explaining differences between individual listening skill scores.

There is the limitation imposed by self report on the listening skills of the respondents as a proxy for actual performance. This has been compensated for in the study by triangulating with the actual test scores of the students. It would be interesting to study the perception of the listening skills of these students by patients, their lecturers and tutors. Is there a relationship between the listening skills and clinical procedural skills of the students? Further research would be required to address this and similar questions.

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