

*Full Length Research Paper*

# **Determination of the interest of Federal University of Agriculture, Makurdi veterinary students in veterinary medicine and pharmacology: Implications for counselling**

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**The present study is carried out to determine the interest of veterinary students in veterinary medicine and pharmacology and the counselling implications. One hundred and thirteen students of veterinary college, Federal University of Agriculture, Makurdi were randomly sampled for determination of their interest in veterinary medicine and pharmacology using age, sex and levels of study. The results showed that the sex and age of the students do not depend on their levels of study ( $P > 0.05$ ). The students' choice of veterinary medicine is dependent on their interest in the course, which is motivated by lecturer/student relationship ( $P < 0.05$ ). Many students significantly agree ( $P < 0.05$ ) that they have interest in pharmacology and would want to advance in the knowledge in order to become pharmacology lecturers. There is a co-relation between the students' interest in veterinary medicine and pharmacology indicating that pharmacology is a core course of veterinary medicine.**

**Key words:** Veterinary medicine, pharmacology, interest, implications, counselling.

## **INTRODUCTION**

Veterinary medicine is the study of animal diseases including zoonotic diseases, their preventions, mitigations and cure. The study of veterinary medicine started about 250 years ago. The course is of 6-years duration. The mode of entry into university is either by Direct Entry (D.E., 5 years), University Matriculation Examination

(U.M.E., 6 years) and remedial programme (7 years). Regardless of the mode of entry, the students have privilege of completing the course in 8 years (D.E.), 9 years (U.M.E.) and 10 years (remedial) respectively. The study of veterinary medicine is broken into 3 phases. Phase I (preclinical) which includes Anatomy, Physiology

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and Biochemistry, whereas Phase II (paraclinical) comprising Pharmacology, Pathology, Microbiology and Parasitology. Phase III (clinical) comprising theriogenology, Medicine, Surgery, Public health and Preventive medicine. Animal production is taken at all the phases. However, general studies are taken between 100-300 levels of the study. Preparatory year (100 level) is not counted against veterinary students. Preclinical and paraclinical each last for 1½ years and clinical last for 2 years. Pharmacology, a Greek word comprising pharmaco, drug; logos-discourse in) is the science of drug. It deals with interaction of exogenously administered chemical molecules (drugs) with living systems (Tripathi, 2003). Pharmacology is the centre of medicine as it is a valuable asset for general practice of medicine, pharmacy and veterinary medicine. Many clinical pharmacologists have their enthusiasm sparked during the exposure to basic pharmacology in the paraclinical years. Others become interested in the use of drugs when they encounter specific therapeutic problems in the field. The main objectives of teaching pharmacology are: for academic jobs in medical schools; research jobs in pharmaceutical industries and drug regulatory bodies such as National Agency for Food and Drug Administration and Control (NAFDAC), National Drug Law Enforcement Agency (NDLEA) and for general practice (Ward et al., 1998). Education is defined as the process of initiation of the young ones into the culture of particular society (Chidobi, 2007). Interest is a tendency preference or engagement in a particular type of activity. Interest is a form of the manifestation of the cognitive need securing the orientation of a personality towards realizing the goals of activity, thus facilitating orientation and familiarization with new fact, a type of feeling experience, which might be called "worthwhileness", associated with attention to an object or course of action (Ramalingam, 2006).

## Interest

Intelligence is the ability to combine past experiences to solve new problem (Morris, 1991). To make any progress in a skill, the learner must be positively motivated, that is having some ambitions or aspirations connected with it. He will never be good at skill unless first of all, he really wants to. The greater his interest in achievement, the more rapid his progress will be likely. Students always show a much greater interest in courses which are associated with their own needs and experiences than in those which are not. Any lesson or learning activity must have some meaningful link with a student's experience if it is to be successful. Experience-link should be used to arouse interest to introduce a course. Discipline is training of the mind and soul in accordance with the laid down rules, regulations and the traditions of the society. Some students seem naturally enthusiastic about

learning, but may need or expect their instructors to inspire challenge and stimulate (Ogbonna and Lloyd, 2007).

## Factors motivating interest

Whatever level of motivation students bring to classroom will be transformed for better or worse by what happens in that classroom (Davis, 1999). Unfortunately there is no single magical formula for motivating students. Many factors such as interest in the subject matter, perception of its usefulness, general desire to achieve, self-confidence, self-esteem, patience and persistence could motivate interest. Quin (1995) defined motivation as the need and incentive that cause people to behave the way they do. It is the instigator and energizer of human actions. The motivating factors could come from inside or outside the organism, leading to achievement of goals. The factors could be in form of interest, need and aspiration (Omeje and Agu, 2004). Some students are motivated by approval of others, while some by overcoming challenges (Davis, 1999).

## Teacher's role

Teaching situation that can enhance students' motivation include giving positive feedback that supports students' belief that they can do well; ensure opportunities that the students can do well; help students find personal meaning and value in the material; create atmosphere that is open and positive; and help students feel that they are valued members (Lucas, 1990). Passivity dampens students' motivation and curiosity (Lucas, 1990). Characteristics of students' motivation include: teachers' enthusiasm; relevance of the material; organization of the course; appropriation of difficult level of the material; active involvement of students; variety; rapport between teachers and students; and use of appropriate, concrete and understandable examples on educational, vocational, family or personal problems (Ramalingam, 2006).

## Student's role

Therefore, students should be encouraged to focus on their continued improvement not just on their grade on any one test or assignment (McMillan and Forsyth, 1991). Competition produces anxiety, which can interfere with learning. The impact of student perceptions and characteristics also vary across the various dimensions of teaching performance with the potential bias being highest for evaluation questions relating to overall performance, and lowest for questions relating to formative assessment and deep learning outcomes (Worthington, 2001). Evaluations of teaching are now commonplace in most universities and the empirical

analysis of this student-based approach to appraisal proceeds apace. The focus of research has shifted more recently to methodological concerns and the study of specific background characteristics, which might harm validity (Wachtel, 1998). Put differently, there is the possibility that background characteristics [or factors that have nothing to do with the lecturers' behaviour or effective teaching] could bias student ratings. If this is the case, student evaluations as a valid indicator of teaching effectiveness, whether for formative (quality improvement) or summative (quality assurance) purposes, could be called into question. Some evidence on the biases introduced by background variables into student evaluations already exists. Four broad sets of factors are noted. To begin with, an extensive literature has developed concern with the characteristics associated with the administration of student evaluations (Chen and Hoshower, 1998; Wachtel, 1998). The second group of background variables posited to influence student evaluations of teaching are concerned with the characteristics of the course itself (Marsh and Dunkin, 1992; Braskamp and Ory, 1994; Anderson and Siegfried, 1997). This widespread literature now recognises the impact of electivity; level of course, subject area, and workload, amongst others, on teaching ratings. The third group of background variables relates to the characteristics of the lecturer, for which a large number of factors have been proposed and duly tested (Anderson and Siegfried, 1997; Wachtel, 1998). These include lecturer rank and experience, the reputation and research skill of the instructor, along with more base concerns of gender, minority status and physical appearance. The final group of background factors concerns the characteristics of students themselves and the biases introduced into student evaluations of teaching (Chen and Hoshower, 1998). Most of the existing work is largely 'generic' and has not focused on specific attributes of the teaching context. This is important because subject or discipline-specific analyses would provide greater empirical certainty on the role of background characteristics in teaching evaluations. Fourth, "a few background variables have not yet been sufficiently investigated as to whether there is a significant effect on student ratings. It is felt that the effect, if any, of the age of the students on ratings could be studied, provided that other characteristics such as course level, class size and prior student interest could be controlled for" (Wachtel, 1998). Despite evidence suggesting the bias of background characteristics represents "quite complex interactions between gender, teacher characteristics/behaviours and student perceptions and expectations" (Casey et al., 1997), rigorous empirical analysis would therefore facilitate greater certainty on the status of student background characteristics in teaching evaluations. Several dimensions of teaching performance are modelled, including aims and objectives, personal characteristics,

curriculum design, commitment to improvement and an overall performance ranking. Teaching is the central task colleges and universities perform for students. Policy administrators often emphasize teaching as the key determinant to a college student's academic experience and successful transition into the labour force. Many university and college mission statements declare that graduates should leave with strong analytical abilities, communication skills, and be primed for fulfilling careers. Students, on the other hand, often complain distinctively in teaching evaluations about how ineffective some lecturers have been in helping them meet these goals. "I would rather eat glass," for example, is one student's response to whether he or she would take one of our colleague's courses again. As post-secondary school enrolment continues to increase along with tuition, colleges and universities face renewed demands for better teaching and student experience. Several more recent meta-analyses, however, suggest that teacher quality does in fact lead to higher test scores, but the mixed conclusions across studies may indicate that the size of the influence may depend on the circumstance (Hedges et al., 1994). Studies that examine the relationship between teacher quality and longer-run outcomes, such as earnings, find more consistent evidence that teacher quality matters. Teacher quality may differ in many ways not captured by observable qualifications or experience. Test score improvement differs substantially for students with different teachers, but in the same school and grade. Although explanations for these differences are not readily captured by common measures of teacher quality, they nevertheless indicate teachers play an influential role (Watkins, 1994).

### **Role of culture**

Mogbo (2001) reported that cultural practices in society usually result from ingrained prejudices, attitudes, customs and behavioural effects which discriminate against and bridge human's legal rights and access to otherwise commonly owned resources and educational opportunities. Ajayi (1989) described culture as the totality of the people, their complex beliefs, laws, customs and habits which determine the values, rites and behaviour of the individual members of the society. Maduabum (1995) reported that teaching strategies employed for the science subjects are not different from the conventional methods.

### **Accreditation of veterinary college**

Students depend on the quality and integrity of the accreditation process as a means to verify the worth of their financial, time and personal investment (Simmons, 2004). Accreditation is one way of assuring that the study

of veterinary medicine is credible and competent. The standard of accreditation is reviewed from time to time (Leist, 2003). Accreditation is a process used to assure quality in higher education and to encourage and promote improvement and advancement in education. It is a process valued by professions, educators, trade association colleges, governments, industries, employers and societies (AVMA, 2004). Veterinary schools are assessed for accreditation to complement other evaluation activities (Craven and Strous, 2004). Veterinary curriculum has been changed from time to time to meet the academic needs of the world (Jefferies, 2003). Preliminary assessment indicates mostly positive reaction to problem-based learning, while identifying areas of concern (Howellet al., 2002). Changes are unavoidable in order to train veterinarians who are qualified for meeting the increasingly stringent demands of different areas of profession (Simoens et al., 2004). Collaboration between students was fostered by tablet computer use, which offers possibilities for future development of collaborative learning environments. The electronic learning means has flexibility with the way in which it is evolving to meet the changing needs of the teaching programme (Ellaway et al., 2005). Veterinary students and graduates' feelings of competence in technical skills increased in parallel with curriculum support (Ozen et al., 2004) which focuses on academic and scientific training, active learning and problem solving training communication, professional behaviour and lifelong learning (Van Beukelen, 2004). Although, curriculum varies between schools, they all aim to produce a generalist veterinary-specialization, which occurs after graduation (Collins and Taylor, 2002).

### Statement of the problem

A number of veterinary students are being withdrawn at the end of every academic session, most especially those in undergraduate IV going to V and many also repeat UG IV and V while others drop out. There is need to find out the causes of the students failure in their professional examinations with a view to proffering lasting solution bearing in mind that lack of interest, inability, age and sex are some of the factors that may affect student's performance at the professional examination.

### Purpose of the Study

The specific objectives of the study are:

- (i) To determine the interest of veterinary students in veterinary medicine and pharmacology;
- (ii) To identify factors responsible for lack of interest in pharmacology and veterinary medicine;
- (iii) To determine student/lecturer relationship with a view to improving performance, so that the students can

complete the programme in good time.

### Research questions

Some of the questions the research is seeking solutions for are: at 300 levels some veterinary students opt out of veterinary medicine, while at 400 some are withdrawn based on academic incompetence. Therefore the current system is in trouble. So the research questions are:

- (i) How will the interest of veterinary students in veterinary medicine and pharmacology be motivated?
- (ii) What are the factors responsible for lack of interest in veterinary medicine and pharmacology?
- (iii) Can student/lecturer relationship improve performance and therefore encourage the students to hold grip to the course and if possible complete the course in good time?

### Research Hypotheses

- (1) The null hypothesis states that all 300-600 levels of veterinary students have interest in veterinary medicine and pharmacology.
- (2) The null hypothesis states that there are no factors responsible for lack of interest in veterinary medicine and pharmacology.
- (3) The null hypothesis states that student/lecturer relationship cannot improve performance and guarantee graduation in good time.

### Significance of the study

The study will enable us to know the intrinsic and extrinsic factors that may be responsible for students dropping out and withdrawing from veterinary medicine with a view to counselling the affected students. Both the students and the lecturers would know why the students fail exams and so can be advised on how to improve on their performance. Government can also use the findings with a view to reviewing curriculum whenever need arises. Parents of the students can also be advised on how to handle such type of students so that their academic problems do not lead to suicide. The centre for Guidance and counselling of the University can use the findings to guide and counsel the students in order to improve on their performance.

### Scope and limitation of the study

The study covered 300- 600 undergraduate levels comprising male and female students of College of Veterinary Medicine, Federal University of Agriculture Makurdi. Since Veterinary students start pharmacology

from 300 level and end the course in 2nd semester of 400 level. However, the students apply the knowledge of pharmacology in the clinical levels (500 and 600).

## METHODOLOGY

### Research design

This work was set out to examine the interest veterinary students of Federal University of Agriculture, Makurdi in veterinary medicine and pharmacology. Based on the nature of the work, quasi research design was adopted. The justification of the research design is real in the sense that not all undesirable variables can be excluded from the experiment, even though some of them can be controlled by the researcher. There was no random assignment of participants to the interventions in order to estimate the causal impact of the intervention in the studied population.

### Area of the study

The area of the study was University of Agriculture, Makurdi, located about 20 km from Makurdi town which is about 250 km away from Federal Capital Territory Abuja. The centre is located at the Southcore campus of the University, Eastward of River Benue.

### The Population of study

A total of 113 sampled students from College of Veterinary Medicine, Federal University of Agriculture Makurdi, participated in the study. The students who were Nigerians came from various states of the Federation and belong to different ethnic groups comprising both Christians and Muslims. They were of either sex, age range between 16 and 43 years and between 300 and 600 levels of the study.

### Sample and sampling technique

Veterinary students of Federal University of Agriculture Makurdi in 300, 400, 500 and 600 levels were randomly selected for the study. Levels 100 and 200 were excluded, because they did not take pharmacology course. The designed questionnaires were administered to 113 out of 173 students of veterinary medicine who voluntarily participated and have taken at least a course in pharmacology. The questionnaires were filled and returned. The adopted random sampling technique was based on the belief that the technique has the ability to ensure that each element in the population has a chance of being sampled.

### Instrumentation

The instruments used were questionnaires, students and Federal university of Agriculture Makurdi as centre of the study. The interest of students in veterinary medicine and pharmacology was determined based on principle of "agreement" or "disagreement" with reference to sex, age and level of their studies.

### Validation of instruments

The questionnaire contained 6 itemized questions constructed by

the researchers and given to Dr. (Mrs) E.G. Egbe-Okpenge and Prof. C.O. Iji who are experts in the field for validation. They recommended that the statements in the questionnaire should be based on principle of agreement or disagreement.

### Method of data collection

All the questionnaires filled by respondents were collected and sorted out according to age, sex, levels and interest based on the principle of agreement or disagreement.

### Method of data analysis

The results were presented in tabular form and the data analysis was based on the method of Howell (2007) Chi. Square was used to analyse the data at 5% level of significance.

## RESULTS

Table 1 shows levels and sex distributions of students that were admitted into veterinary medicine. Out of the 113 respondents, 79 students were males while 34 students were females. But 300, 400, 500 and 600 levels students recorded 15, 20, 24 and 20 male students respectively. Whereas the total numbers of the students in each level were: 300 (17), 400 (24), 500 (41) and 600 (31) with 2, 4, 17 and 11 female students respectively. The variables are independent of each other ( $P > 0.05$ ).

However, a total of 67 male students were within the age range of 16 – 29 years and 12 male students (30 – 43 years) respectively. Whereas 27 female students within the age range of 16 - 29 years and 7 (30 – 43 years) were also recorded (Table 2). The variables are independent of each other ( $P > 0.05$ ). Table 2 shows age and sex as factors responsible for interest or otherwise of it. Ninety six out of 113 veterinary students chose to study veterinary medicine as against 17 students that were given the course against their will. However, 108 out of 113 respondents developed interest in the course during the study period as against 5 students who had no interest in the course. Although 84 out of 113 respondents believed that lecturer/student relationship was cordial and has motivated their interest contrary to the belief of 29 students who disagreed that lecturer/student relationship was cordial and motivating (Table 3).

The overall translate to 288 veterinary students choosing the course with interest further motivated by lecturer/student relationship. But a total of 51 students were given the course against their interest and they believed that unfriendly and ill-motivating lecturer/student relationship has further demoralized their minds (Table 3). The variables are dependent on each other ( $P < 0.05$ ). Table 4 shows the distribution of veterinary students who had interest in pharmacology with intent to advance the knowledge in order to become pharmacology lecturer. The variables are dependent of each other ( $P < 0.05$ ).

**Table 1.** The distributions of levels and sexes of veterinary students.

Sex	Levels of studies				Grand total
	300	400	500	600	
Male	15	20	24	20	79
Female	2	4	17	11	34
Grand total	17	24	41	31	113

**Table 2.** Age and sex distributions of veterinary students.

Sex	Age		Grand total
	16 - 29 years	30 - 43 years	
Male	67	12	79
Female	27	7	34
Grand total	94	19	113

**Table 3.** The distributions of veterinary students who chose to study vet medicine with interest and believed in cordiality of lecturer/student relationship as a motivating factor.

Status	Parameter			Grand total
	Choice of veterinary medicine	Interest in veterinary medicine	Lecturer/student relationship as motivational factor	
Agree	96	108	84	288
Disagree	17	5	29	51
Grand total	113	113	113	339

**Table 4.** The distributions of the population of veterinary students who had interest in pharmacology and wished to advance the knowledge and become lecturer in the field.

Status	Parameter			Grand total
	Interest in pharmacology	Interest to advance knowledge in pharmacology	Interest to become pharm lecturer	
Agree	74	56	34	164
Disagree	39	57	79	179
Grand total	113	113	113	339

Seventy-four (74) out of 113 veterinary students had interest in pharmacology as against 39 that lacked interest in the course. Although 56 students had intention to advance the knowledge, the remaining 57 had no interest for postgraduate studies in pharmacology. Furthermore, 34 out of 113 students had interest to become pharmacology lecturers after their postgraduate studies in pharmacology. The overall translated to 164 out of 339 that have interest in pharmacology with intention to advance the knowledge and become lecturers in the field, as against 175 students who did not have interest in pharmacology and so would not want to

advance in the field because of lack of interest to become pharmacology lecturers.

## DISCUSSION

The lack of significant difference ( $P > 0.05$ ) between the number of veterinary students in clinical years (500 and 600 levels) and preclinical years (300 and 400 levels) shows that the ability to move from preclinical to the clinical years doesn't depend on the level of students (Table 1) but instead on the ability of individual students.

However, the less number of students in preclinical years may suggest low number of students' intake, high number of drop out and or withdrawal from the programme based on academic incompetence. Therefore, students should be counselled to learn together (Michaelsen, 1992). Since learning acquired as a group would confer performance advantages on students analysing future evaluations, either as part of a group or as individuals. This improved learning is reflected in improved student ability to understand and retain content (Pickrell et al., 2002). Students ability to monitor and improve his or her progress by formulating an argument or constructing a new product, demonstrates evaluation and metacognition activities (Mansilla and Gardner, 1998). Functioning groups can share resources to enhance each member's performance. Specifically, groups can share information, skills, and understanding of implications, enabling the members to predict the outcomes (Chang et al., 1998). The programme of veterinary medicine in Federal University of Agriculture Makurdi allows a maximum credits of 24 units up till 400 level, hence 400 level used to be the "break point" between preclinical and clinical years of veterinary programme of the University. Many students usually repeat or are withdrawn at this level. Then, at 300 level, some students that envisage problems and who think they cannot cope with the system usually drop out to take an option in College of Science or Animal science. The increased number of male veterinary students (79) over female students (34) which gives the ratio (10:3) in favour of male students connotes low level of enrolment of female candidates in veterinary medicine. Education is a key factor in human development and social transformation. The problem of women development in Nigeria traced its root to type of education and low female enrolment in schools during the missionary era and British Colonial administration (Okonkwo and Eze, 2008). One of the first critical issues, perceived by many as a threat, that was identified by the "Mega Study" and supported by the Brake report was the economic impact of the feminization of veterinary profession. The fact is that the income of women in veterinary profession seriously lags behind that of men and that men's income is already grossly standard (Brakke, 1999). The finding shows that the sex of students studying veterinary medicine does not depend on the age of the students. That is, the age ranges considered in this study cut across all the sexes. However, 94 out of 113 students were within the age range (16 – 29 years) indicating the possibility of going for youth service if they are able to complete their programme before the age of 30 years (the limit set by NYSC). However, 19 students were already above 30 years indicating the possibility of exemption from National Youth Service programme. That translates to 2 in every 10 veterinary students of University of Agriculture Makurdi are due for exemption from youth service. More so, 3 in every 10 female

veterinary students of Federal University of Agriculture Makurdi are also due for exemption as 2 in every 10 male vet students are due for the exemption.

The findings show that the students' choice of veterinary medicine is dependent on their interest, which is motivated by lecturer/student relationship. Many students (96) of veterinary medicine from Federal University of Agriculture Makurdi chose the course by themselves signifying high level of interest by the students (108) in the course as justified by cordial and motivating relationship between the vet students and their lecturers as claimed by 84 out of 113 students. Therefore, translating to 288 out of 339 veterinary students having chosen and developed interest in the course as motivated by cordial relationship between students and their lecturers. This may be attributable to teaching methods adopted by teachers and readiness of students to learn. Knowles et al. (1998) have described teaching methods as being either teacher centred with dependent learning (Pedagogy) or learner centred with independent learning underpinned by the learners' experience and intrinsic motivation (andragogy). Nevertheless, 51 out of 339 students had no interest in the course which translates to 3 in every 10 students getting repeat, withdrawal or drop out based on lack of interest. That is why some students have either dropped out or withdrawn from the course (Table 3), because of lack of interest. Interest being an element or item in individual's make up, either congenital or acquired because of which he tends to have this feeling of "worthwhileness" in connexion with certain objects, or matters relating to a particular field of knowledge (Ramalingan, 2006). School curricula of today are replete with materials that furnish numerous possibilities for interest to develop. A teacher should know the interests of his students early in the school year. Instruction should begin at the point of interest (Skinner, 2009). One external measure of the quality of a teaching programme is the success of its graduates on examinations. In trying to provide the best education possible in a limited amount of time, the goal of veterinary faculty is not simply or necessarily a high pass rate in these examinations. A high pass rate on these examinations combined with abundant job opportunities for graduates can increase students' interest in the course (Bristol, 2002). Defining a set of attributes expected of veterinary graduates is a key step in obtaining an effective outcome assessment of a professional educational programme (Walsh et al., 2002). Table 4 shows the distributions of the population of veterinary students who had interest and wish to advance the knowledge in order to become lecturers in pharmacology. The findings show that 74 out of 113 students have interest in pharmacology that is intended to be advanced by 56 students from which only 34 wanted to become lecturers in pharmacology translating to 3 in every 10 students developing interest in pharmacology with intention to advance the knowledge

and become lecturer in the field. However, 4 in every 10 veterinary students have no interest in pharmacology despite the cordial and motivating relationship between the students and their lecturers. The factors that may be responsible for lack of interest in pharmacology are the bulky nature of the course that involves cramming, some strange terms in addition to having a lot of calculations. Although the students were not asked for the reasons of lack of interest in pharmacology, but some complained of lack of adequate practical, others requested for lecturing/practical pedagogy to make them acquainted with strange terms and procedures. Some complained that some lecturers do not give adequate explanations during lecturing and that the hand-outs/lecture notes are bulky and so tossing interest in the course. Interest is the central force that derives the whole machinery of the leading learning process (Mangal, 2010).

Autonomy-supportive teacher behaviour can be effective in fostering intrinsic motivation in students. Students' sense of belonging is fostered by an instructor that demonstrates warmth, openness and encourages student participation. He is enthusiastic, friendly, helpful, organized and prepared for class (Freeman et al., 2007; Reeve and Jang, 2006). High-achieving students pursued the extra credit work, while students who were earning poor grades did not. This behaviour is tied to student motivation. Students who were motivated to succeed in the course made the choice to do the extra credit work, which was consistent with the other choices they had made, such as to attend lectures and help sessions. Reading ability impacts the achievement levels of students in academic settings (Onwuegbuzie et al., 2001; Zhu, 1999). Therefore, one response is affected by consequences associated with concurrently available responses (Williams, 1994). Similarly, students who earned poor grades typically demonstrated a low commitment to several components of the course, including the extra credit work (Moore, 2005).

The fact that 70 male students participated in the study in comparison with 34 female students may suggest higher male enrolment in veterinary medicine, perhaps as a result of increased interest the males have in the course. However the observation of 65 students within the age range of 16 to 29 years who are studying veterinary medicine at UGIII to VI levels may suggest that the majority of students in the Nigerian veterinary school are within this age bracket. Many students graduate from veterinary schools at about 30 years of age may be, due to academic problems such as repeating one or more levels of study. In some Nigerian Vet schools like A.B.U. Zaria where prerequisite policy is adopted some students study veterinary medicine for about 12 years. In Usman Danfodiyo University Sokoto, the study lasts for less than or equal to 9 years. In Federal University of Agriculture Makurdi where students do carry over courses to year IV, many students graduate within or equal to eight years.

However, in Sokoto, cases of withdrawal are more

rampant than any other Vet School in Nigeria, because there is neither carryover nor spill over. The method considered as best by some veterinary professionals in the country, unlike other disciplines where students graduate at the age of 20 or little above 20. Many veterinary students interviewed in this study want to continue with pharmacology and even want to become lecturer in the field, simply because they chose to study the course. Veterinary students are in between top flyers and averagers since the pass mark in veterinary medicine is 50% those who cannot cope up are usually withdrawn to study other options. Therefore, weaklings and bandwagoners have no opportunity to continue in veterinary medicine.

However, based on the level of intelligence students can be categorized into 4 categories; Top-flyers rank among the best and brightest. They dream big and work really hard and would seldom fall below grade B; they develop exceptional mastery of their courses and always stand out from the rest. The averagers constitute the average students who are neither at the top nor at the bottom. They are reluctant to try something extraordinary and are content with C grade. Averagers can migrate to the top-flyers' group when they put in extra-academic effort and they can slip to the weakling's category. The weaklings are academically weak students who struggle to make an E grade and are happy with it. Any grade above E comes to them as a pleasant surprise. Their major concern is how to escape carryover and spill-over. The bandwagoners strayed into academics, enrol for the programme just to make themselves feel good, default in class attendance, test, assignments and sometimes exams. They never hurry to graduate and remain at bottom of academic ladder (Ndubueze, 2010). Therefore, the decision to intervene in terms of lack of interest must be based on the presenting problem and whether the students like the intervention as relevant to stated goals. The teacher can identify patterns of thinking and assumptions indulged by students which may be hindering their progress in the study of veterinary medicine. Not only that, the focus on historical background of families of veterinary students may reflect on significant experiences that may stimulate natural ability of students to change (Hanna and Brown, 1991).

The study has shown that more males study veterinary medicine than females and those within the age range of 16 -29 years are more. Many vet students find the course less difficult but experience has shown that only a few make distinctions in pharmacology. This shows that older people can improve their performance on intelligence tests. Instruction in test-taking methods and in problem-solving strategies can improve the cognitive performance of older subjects (Schaie, 1990). Counselling is the practice of applying psychological theories and communication skills to clients' personal problems, concerns, or aspirations. Some forms of counselling also include advice-giving, but the dominant ethos is one that provides facilitation without directive guidance (Colman,



2003). Both positive and negative comments make feedback and success. Praise builds students' self-confidence, competence, and self-esteem (Lucas, 1990). Teachers' expectations have a powerful effect on students' performance. If a teacher acts as though he expects his students to be motivated, hardworking and interested in the course, they are more likely to be so. Failure to attain unrealistic goals can disappoint and frustrate students (American Psychological Association, 1992). Students who learnt under a teacher who made adequate preparations for the lesson had higher achievement than those who learnt under a teacher who did not prepare for the lesson (Ajayi-Dopemu, 1986). Chu (1997) and Naka (1998) have discussed link between various aspects of cognition – particularly attention, memory, and language-and-handwriting skill. It is suggested that good handwriting can make the student ready to benefit from class room instruction.

Research about the connection between teacher quality and student outcomes at the post-secondary level is virtually non-existent. A few studies focus on the effect of particular types of graduate assistants, but these studies rely on relatively small samples and do not have much information on student background. For example, Borjas (2000) analyzed the impact of foreign teaching assistants on economics students' performances at Harvard University. More recently, Ehrenberg and Zhang (2005) examined the effects of adjuncts (part-time faculty) on student dropout rates using institutional-level data from a sample of U.S. universities. Bettinger and Long (2004, 2005), estimated from an administrative dataset of public four-year universities in Ohio, the effects of adjunct professors on course selection and dropout rates using year-to-year and class-to-class variation in first year instructors. They estimate that adjuncts had very small positive effects on students' picking similar subject courses in subsequent years (relative to full-time faculty), but adversely increased the likelihood that students drop out in the second year. Using administrative data from a large Canadian university between 1996 and 2005 suggest that whether an instructor teaches full-time or part-time, does research, has tenure, or is highly paid has no influence on a college student's likelihood of dropping a course or taking more subsequent courses in the same subject. What does matter is instructors' perceived effectiveness and related subjective measures of quality evaluated by students (Bettinger and Long, 2005). Hence, teachers with an autonomy supportive style rely on different instructional behaviours to motivate their students than do teachers with a controlling style (Reeve and Jang, 2006). Class grade distributions and dropout rates differ across college instructors teaching the same course, but less so compared to class grade distributions across elementary and secondary school instructors. Standardized effects from a change in instructor quality are about half the size or lower for college instructors than for elementary and secondary teachers (Kane et al., 2006). Perhaps by the

time students enter college, cognitive ability and motivation are less malleable than in early childhood and, consequently, teachers have less impact. When students claim they are not interested in anything, educators must help them discover what actually does interest them. Furthermore, another way to help youth expand their repertoire of interests is by arranging systematic opportunities for them to interact with community members who are engaged students and have a wide variety of life experiences (Brozo, 2005). Students are able to engage in scientific discourse, hold competing hypotheses, look for supporting evidence, communicate their ideas with supportive arguments, and propose possible empirical studies to further their understanding (Yang, 2007). Contracting involves a learning agreement between students and teachers, and it offers the opportunity for independent thinking (Mar et al., 1993).

Therefore more teaching staff should be employed to handle available programmes. Academic staff from senior lecturer position be given administrative training and lecturers be motivated through incentive and promotion to ensure effectiveness and achievement of set goals and objectives to move university education forward (Omirin and Ajayi, 2011). Duke (1990) sees teaching as intentional transfer of knowledge whereas counselling is an interactional relationship designed to facilitate the personal development of information leading to effective decision taking and awareness of self. The concept of guidance and counselling in the Nigerian educational system is a thing of recent origin (Nwonye, 1999). Before this time, guidance and counselling was something informal and incidental and was carried out by teachers in their daily association with students (Amali, 2007). Shertzer and Stone (1980) listed appraisal, information, counselling, planning, placement, follow up and evaluation services as the responsibility of counsellor.

## Summary

The students' choice of veterinary medicine is dependent on their interest in the course, which is motivated by lecturer/student relationship. However, the sex of the students studying veterinary medicine does not depend on their age and levels of study. Many students significantly agree that they have interest in pharmacology and would want to advance in the knowledge in order to become pharmacology lecturers. Therefore the students' interest in veterinary medicine is correlated to their interest in pharmacology signifying that pharmacology is a centre of medicine.

## Conclusion

The choice of veterinary medicine by veterinary students is as a result of students' interest both in veterinary medicine and pharmacology, 5 in every 10 students want

to advance the knowledge in pharmacology and 3 in every 10 students want to become pharmacology lecturers.

## Recommendations

It is recommended that the students should be further motivated and encouraged by way of counselling to study harder in order to succeed in their professional examinations. More so, pedagogical methods aimed at making veterinary medicine more appealing should be adopted. Lecturer/students relationship should be further strengthened in order to increase motivating role in students' performance in professional examinations. It is suggested that another study be carried out to compare the interest of students of various veterinary schools in veterinary medicine and pharmacology. More so, both intrinsic and extrinsic factors that could motivate interest in veterinary medicine and pharmacology should also be studied independently.

## CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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