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Research Paper

A Critical Investigation of the Behaviour Learning Theories

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Abstract
The study investigated the Behaviour Learning Theories by Pavlov (dog),Thorndike (cat) and skinner (rat) as well as their experiment and how it can be compared with human learning in Rivers State. The design for thisstudy is correlation. The target population of this study is 200,639 learners including animals with the help of some veterinarians. A samplesize of 300 students from each of the 3 levels of schooling (primary, secondary and tertiary) making a total of 900 students, as well as 3 breedsor species of each of the 3 animals was used for the study. For the dog (German shepherd, Cocaincian dogs and Rotraillers), cats (Siamese cat, Persian cat and British short hair) and rats (dwarf hamsters, serial hamsters and bush rats). These students were selected using the simple random sampling method while the animals were selected based on the different breeds and characters they exhibit, representing the different personality traits (extrovert, introvert and introvert-extrovert) as exhibited by humans. The Behaviour Learning Scale (BLS) was used to collect data for this study. The reliability of the instrument was .88. Threeresearch questions as well as three corresponding ***null*** *hypotheses were formulated to guide the study. One sample t-test was used to test* ***null*** *hypothesis 1, hypothesis 2 was analysed with Pearson Product Moment Correlation and One-way ANOVA was used to test hypothesis 3 at .05 level of significance. From the analyses, the learning behaviours exhibited by the animals when compared with humans, were significant at the secondary and tertiary levels, because it is believed that they havedeveloped insight to various concepts and happenings in the society. Butwhen compared with the pupils at the lower primary level especially thecrèche were the pupils have not developed proper spoken language like the animals, learning was 96% significant, notwithstanding the type of personality or breed of animals. Furthermore, the researcher found out that most of the issues on ground that led to the propounding the theory has been dealt with and our culture does not permit most of the issues discussed in the theory. The study also found out that the experiments used, in a way differs from what the theorist is saying. Based on the findings, recommendations and suggestions for further studies weremade, that further studies should be carried out in Nigeria and thecontending theorem should be put to practice. Hence, a contending theoryknown as the Syder's theorem of interest and cognition law (PLAT approach) was postulated.*

Keywords: *Learning, theory, interest, cognition and theorem.*

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I. INTRODUCTION

The various behavioural differences among learners in their academic work have disturbed teachers and psychologists in recent times, as a result, studies on learning of students have generated a lot of concern tomany interested individuals and governmental organizations. Learning is a relatively permanent change in behaviour as a result of experience and constant practice. It is worthy to note that the learning processes inthe three educational levels are not the same. The way a learner learns in the primary level is basically on pairing and conditioning of the learner, after much pairing; there will be a change in behaviour either positive or negative. If there is no change in behaviour, learning has notoccurred. Nwankwo (2013) defined learning as a relatively permanent change in behaviour as a result of experience. He also believed that maturation and reflex actions are not part of learning. Similarly, Eriega(2013) viewed learning as a change in behaviour that is relatively permanent and is caused by experience or practice.

The learning theories in the Nigeria setting were discovered in the war era when individuals were looking for hope in a state of hopelessness. The history of the learning theories can be traced back tothe 18th century, when individuals were devastated to have lost all theyhad in the war and were not interested in going back to

school. Presently, in our state of calmness, none of these theories can be applied the way it was applied in the past, except in a more complex and war like condition or setting of learning outside the classroom. Learning at lower primary level can be compared to be a warlike condition, becausethe learners are new to the learning environment and the proper skills needed for learning to take place are not fully developed. Also, learnersare unable to communicate freely with the learning environment; they solely depend on their teachers and classmates for everything.

Learning Behaviour Process of Animals

Dogs take drip, do x-ray and enter theatre like humans. They belong tothe carnivorous and omnivorous animal. They also fall sick like humansand are treated with human formulated drugs that have been successfully tried in rats. They belong to the canine family and they canbe used as pets or guard depending on the breed training. They consist of the toy breed and the larger breed. They cannot talk but can be trainedto understand what you want from them. They are vaccinated with the triple vaccine using a poly valet vaccine or anti rabbis' vaccine. Their learning process is restricted to obeying of simple commands. Their olfactory lobes which is situated at the nasal cavity, gives them a high sense of smell and hearing.

They learn through the process of socialization, where dogs of different breeds come together to interact. They have three stages of training; which are the obedience stage, agility stage, and aggressive stage. The obedience stage is between the period of 6weeks to 8weeks after birth, and it is characterised by name calling and obeying of simplecommand language like sit down, stand up, bring something etc. They are 100% loyal to their master if they are given maximum love and care.In training dogs for agility, the German shepherds are generally intelligent and are trained for different purposes, like detection of bomb,cocaine, rescue and errands. They can serve dual functions; as a pet andas a guard. They have different signs and sounds when they are in need.Agility training starts from 9weeks to 1yr. Training dogs to be aggressive, they are trained to know the voice, sound and smell of theirowner and they react if there is any external person. They adapt to changes in the environment very easily. They guide their territory very jealously like humans. Their brain is highly developed up to 96% whencompared with babies and old adults, because of their limitation in speech and lack of proper insight to the environmental happenings especially those who are not schooling (preschool and post school age)and 25% when compared with adolescents and adults of schooling age, who have proper insight and understanding of the environmental happenings. In our present day society were we have babies in the crèche, it can be applied to them at that level.

Cats on the other hand, are royal pets and they belong to the feline family. They are of the domestic and wild breeds. The domestic breed is the scope of our study. Domestic cats are generally friendly andnot harmful unless when threatened they can become harmful. They have a glossy and shiny eye sight which is unique to them and possessedby some humans. They have very high flexible muscles that give them high physical balance like humans. They are of even temperaments andthey have varieties of colours and breeds. They are not flesh eaters, andthey eat cane food specially prepared for them. They have very high stimulus that enables them to be trained and obey commands. It cannottalk but are trained to understand what you are saying. They have high sense of smell and sound that helps them defend themselves in times ofdanger, and are not evil as people think. When they want to die, they goout of the house and die in the bush or along the street. They have veryshort life span. They have a generic and stereotyped behaviour that makes them focus and not easily distracted. From research findings 56%in terms of their behaviour can be likened to children and old adults outside school age, and 11% when compared with adolescents and young adults in primary, secondary and tertiary level.

Lastly, rats are experimental animals and belong to the class of animals called rodents. They have similar biogenetics with humans andmammals. They are used as laboratory animals to test the potency and efficacy of drugs before they are used on humans and other mammals. They transmit vector borne diseases such as Lassa fever and other hemorrhagic diseases. They can also transmit other bacterial diseases such as canine leptospirosis in dogs through the infected urine of rats.

They are kept as pets by various humans. Types of rats include; dwarf hamsters, serial hamsters and bush hamsters among others. In terms of its learning behaviour there is no continuity like in the case of humans.Rats are hyperactive and can only learn when kept under restriction, andhave very low ability to retain information. This behaviour may be likened to learners who are in the crèche who are hyperactive and old adults who are not of school age.

Research Questions

The following research questions were answered to obtain the results for the study;

1. To what extent do animals behave like humans in Rivers State?
2. To what extent do learning approaches in the animal sciences relateto those in human sciences in Rivers State?
3. To what extent does learning in the three stages (primary, secondaryand tertiary) relate to each other in Rivers State?

Hypotheses
The following **null** hypotheses are formulated to guide this study;

1. There is no significant relationship between the learning behaviours of animals with that of humans in Rivers State.
2. There is no significant relationship between the learning behavioursin animal sciences and human or behavioural sciences in Rivers State.
3. There is no significant relationship between the learning behaviours in the three stages (primary, secondary and tertiary) in Rivers State.

II. Methodology

This study adopted correlation design. Nwankwo (2006), defined correlation studies as those research which deals with the determinationof the extent of the relationship existing between two or more variables.The present study therefore meets all the requirements of a correlation study.

Population of the Study
The target population for this study was about 200,639 learners including animal doctors in different disciplines representing the dogs,cats and rats.

Sample and Sampling Techniques
A sample size of 300 students from each of the 3 levels of schooling (primary, secondary and tertiary) makes a total of 900 students, as wellas 300 animal doctors, who have a good knowledge of the three breedsof the different animals. 3 breeds or species of each of the 3 animals making 100 each and a total of 300 animals was used for the study. Forthe dog (German shepherd dogs, Cocaincian dogs and Rotraillers), cats(Siamese cat, British short hair cat and Persian cat) and rats (dwarf hamsters rat, serial hamsters' rats and bush rats) were used for the study.These students were selected using the simple random sampling methodwhile the animals were selected based on the different breeds and characters they exhibit, representing the different personality traits(extrovert, introvert and introvert-extrovert) exhibited by humans. These students were selected through balloting without replacement. With the use of a multi stage sampling technique, through stratified random sampling, a sample size of 100 learners were drawn to cover 3 educational levels. That is the primary, secondary and tertiary educational level making a total of 900 learners.

Method of Data Collection
Informed consent was obtained from the respondents after explaining the purpose of the study. The instrument was administered on the respondents through direct delivery method. 15 research assistants whowere trained as facilitators to guide and supervise the process of fillingthe questionnaires and administering the therapy were used. Collectionof filled copies of the questionnaires was done immediately by the researcher and her research assistants the same day. On the part of studying the animals, participant observation was used by the researcherwith the assistance of a Vertinerians (animal doctors).

Validity of the Instrument
The validity of the Behaviour Learning Scale (BLS) was established through critical observation made by some experts in the Department ofEconomics and Financial Accounting, University of Port Harcourt andRivers State University of Science and Technology. Furthermore, the content and construct validity of the instrument were determined usingexperts' judgment.

Reliability of the Instrument
To establish the reliability of the instrument, the Cronbach alpha method of internal consistency and the split half method were used. Thescale was pilot tested on 20 respondents who were not part of the studyand it has a reliability value of cronbach alpha r=.88 and that of split half was .73. This indicated that the items in the instrument have internal consistency.

Method of Data Analysis
The data collected were analysed with mean and standard deviation to answer the research questions. Multiple regressions were used to test **null** hypothesis 1, hypothesis 2 was analysed with independent samplest-test and Pearson's product moment correlation was used to test hypothesis 3 at .05 level of significance.

Data Presentation and Results

Research Question One: To what extent do animals behave likehumans in Rivers State?

Hypothesis One: There is no significant difference between the learning behaviours of animals with that of humans in Rivers State.

Table 1: One sample t-test showing the significant difference betweenthe behaviour learning of animals with that of humans

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Intervalof the Difference	
					Lower	Upper
LEARNING BEHAVIOUR IN ANIMALS & HUMANS	87.988	899	.000	1.46333	1.4307	1.4960

The results in table 1 shows that the mean difference of 1.46333 for behaviour learning in animals and humans with a t-value of 87.988 anda df of 899. These values were significant at .000 where the p-value is 0.05 in a 2-tailed test. The result is that there is a significant differencebetween the behaviour learning in animals and humans and the null hypothesis is rejected.

Research Question Two: To what extent do learning approaches in theanimal sciences different from those in human sciences in Rivers State?

Hypothesis Two: There is no significant relationship between thebehaviour learning in the animal sciences and human or behavioural sciences in Rivers State.

Table 2: Person Product moment correlation. showing the significant relationship between the behaviour learning in the animal sciences andhuman or behavioural sciences

Correlations

		LEARNING IN BEHAVIOURAL SCIENCES	LEARNING IN ANIMAL SCIENCES
LEARNING IN BEHAVIOURALSCIENCES	Pearson Correlation	1	.157**
	Sig. (2-tailed)		.000
	N	900	900
LEARNING IN ANIMAL SCIENCES	Pearson Correlation	.157**	1
	Sig. (2-tailed)	.000	
	N	900	900

**. Correlation is significant at the 0.01 level (2-tailed).

The results in table 2 show that there is a high significant relationship between behaviour learning in the animal sciences and human or behavioural sciences. This was obtained at .157 correlation level whichrepresents 54% acceptance at 0.01 significance level when compared using a 2-tailed test. Hence, the null hypothesis of no significantrelationship is rejected. The result is that there is a significant relationship between behaviour learning of animal science with that of social sciences in River State.

Research Question Three: To what extent does learning in the three stages (primary, secondary and tertiary) differ from each other in RiversState?

Hypothesis 3: There is no significant difference among the learning behaviours in the three stages (primary, secondary and tertiary) in Rivers State.

Table 3 One-way ANOVA showing the significant difference among the three educational levels in Rivers State.

Descriptives

LEARNING IN BEHAVIOURAL SCIENCES

	N	Mean	Std. Deviation
PRIMARY LEVEL	300	63.4433	15.2471
SECONDARY LEVEL	300	63.4500	15.3095
TERTIARY LEVEL	300	63.5867	15.3473
Total	900	63.4933	15.2845

ANOVA
LEARNING IN BEHAVIOURAL SCIENCES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.927	2	1.963	.008	.992
Within Groups	210017.03	897	234.13		
Total	210020.96	899			

From the above table, it shows that there is a significant difference among the three educational levels when it comes to learning. for the primary educational level, a mean score of 63.4433 with a SD of 15.2471 was obtained while in the secondary level a mean score of 63.4500 and a SD of 15.3095 was realized. At the tertiary level, a meanscore of 63.5867 and an SD of 15.3473 were realized. An F value of .008 was achieved which was not significant at .992 significant. The Null hypothesis is accepted, which indicates that the behaviour learningin the three stages of education are different from each other.

III. SUMMARY OF RESULT

From the analysed result, the following findings were made:

1. There is a significant relationship between behaviour learning of animals with that of humans in River State.
2. There is a significant relationship between behaviour learning of animal science with that of social sciences in River State.
3. Behaviour learning at primary and secondary levels is similar, while those at tertiary level differ from learning in the primary andsecondary levels in River State.

IV. DISCUSSIONS FINDINGS

No study has been carried out investigating the behaviour learning theories within the researcher's reach; hence it is a novel area and cannot be compared with other studies.

IMPLICATIONS OF THE STUDY

Based on the findings, the following implications were observed. One of the implications of the study is that learning behaviours in humans isdifferent from that of animals, so when comparing human learning behaviour with animals, caution should be given. Behaviour learning isdifferent at every stage of educational functioning, be it tertiary, secondary and primary level, hence when educating learners, special consideration should be given to these stages, and teaching should be done based on the educational level of the learner. Another implicationof the study is that learning behaviours exhibited by the animals involved may be likened to learners who are not of school age and do not possess the ability of insight to the learning materials; such learners may include babies and aged adults (grand ma/ grand pa). An implication also gotten from this study is that, not all learners have the same personality traits; hence, the classroom teacher should understandthe personality traits of the individual learners. Lastly, this learning theory is very effective in a give and take relationship usually were sexis involved.

V. RECOMMENDATIONS OF THE STUDY

Based on the findings of the study, the following recommendations aremade. That the findings of this study should be applied to the study of learning, and same study should be carried out by other researchers in other states of Nigeria, also, they should focus more on the public secondary schools in Rivers State to compare findings.

VI. SUGGESTIONS FOR FURTHER STUDIES

The sample size should be increased to be able to make more generalized findings. The area of study should be limited to selected schools, so as to promote more precise findings. Gender differences should be more investigated on how psychological factors influence earning in animals and humans. Efforts should be made by further researchers to develop standardized instruments on these variables for the Nigerian population as most of the available instruments are foreign.

VII. CONCLUSION

The current study investigated the relationship between the behaviour of humans and the relationship between the behaviour learning in the pure sciences and that of the social sciences. The behaviour learning atthe three stages of educational functioning mainly in the private sector was also investigated. Since the behaviour learning theories cannot be applied in our Nigerian setting, to properly understand and operate, the stated behaviour learning a broad and extensive literature review was conducted. The literature was reviewed along three research questions and corresponding null hypotheses. The correlation research design wasused for the study, while the sample size of 900 learners was used witha population size of 200,687 learners in Rivers State. The study utilizesthe one sample t-test; Pearson's product moment correlation one-way ANOVA was used for the hypotheses testing.

Result indicated that the behaviour learning theories cannot be applied in our Rivers State settings; the researcher propounded the Syder's Theorem of Interest and Cognition Law (PLAT approach). This theorem looks at the importance of Parents (P), Learner (L), Administrator (A) and Teacher (T). These four persons must be considered before teaching and learning can be effective. The feelings and interest of each and every one of them is of ultmost importance foreffective learning to take place. Each and every one of them has their roles to play which cannot be played by any other person.

Syder's Theorem of Interest and Cognition Law (PLAT approach = learning)

Reference

[1]. Nwankwo, O.C. (2006).psychology of learning 2nd ed. Port Harcourt.Golden Publishers.
[2]. Nwankwo, O.C. (2007). Practical Guide to research writing 2nd .ed. Port Harcourt. Golden Publishers.
[3]. Nwankwo, O.C. (2007). Psychology of Learning: The Human Perspective, Pam Unique Publishers, Choba, Port Harcourt.
[4]. Nwankwo, O.C., (2013). A Practical Guide to Research Writing for Students of Research Enterprise. (Rev. 5th ed.).Port Harcourt: University of Port Harcourt Press Ltd.

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CERTIFICATE OF ATTENDANCE **0018**

This is to certify that

MRS. SYDER EMILY INUADUME DANIEL participated in a research and training on the general behavior and learning process of Rats, Dogs and Cats in relation to human beings for a period of eight (8) weeks as part of requirement for the improvement of ~~his~~/her professional knowledge and skills.

Date: - From 25th of June – 24th of August 2018.

Dr. Nathaniel Bakura
MD: - Krystal Veterinary Clinic Limited