Psychology

PERSPECTIVES IN HUMAN BEHAVIOUR

REVISED AND ENLARGED EDITION

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CHAPTER ONE

PSYCHOLOGY: A Historical Perspective

N. A. SHENGE & S.H. ICHEKE

There has been intense curiosity about the nature of human beings. One needs only examine current books, films, television and other media sources to see that most people are really much more interested in human nature than they are in Mother Nature. The interest of some people in human nature is motivated by curiosity. In exactly the same way that some people want to understand rocks or stars, others want to understand human beings. They want to increase their knowledge of the behaviour of human beings.

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The strongest practical interest in human nature comes from our intense curiosity about ourselves. We want to know the extent of our abilities and, consequently, make so many inquiries. In trying to find answers or gain insights into all these issues bordering on curiosity, human beings use a lot of techniques like observation, experiments or study of recorded events.

Moreover, men and women are interested in understanding their fellow human beings. They realize that in order to work and live as harmoniously as possible with others, they must know why people think and feel and act the way they do. There is also a business as well as a social angle to an interest of this sort. Thus employers want to know what kind of personalities are most likely to succeed in their jobs. Parents and teachers want to know what kind of children will likely benefit the most when subjected to some training.

All these interests in human nature led to the discovering of a body of knowledge called "Psychology". Defining psychology itself is no easy matter because of both the wide scope of its concerns and the philosophical differences among its practitioners. However, psychology is generally viewed as attempts to explain human and animal behaviour scientifically. In other words, psychology is the scientific study of human and animal behaviour. Behaviour in this respect includes anything a person or animal does that can be observed in some ways. From what is done or said, psychologists can and do make inferences about the feelings, attitudes, thoughts, and other mental processes of individuals, which may be behind the behaviour of such individuals.

THE ORIGINS OF MODERN PSYCHOLOGY

Psychology made a breakthrough from philosophy through the work of physiologists who sought to understand the operation of the nervous system and its role in perception. Psychology in the West reportedly started in 1879. This was marked by the establishment of the first psychology laboratory at the University of Leipzig in Germany. William James' widely used book "Principles of Psychology" was published in the United States of America in 1890. In 1898, Edward L. Thorndike conducted the first experiment on animal learning in the United States. While in Austria, Sigmund Freud introduced his psychoanalytic theory with the interpretation of dreams in 1900. John B. Watson in the United States started psychology as a science of behaviour in 1900. In contributing to the development of psychology, Watson, Thorndike, James and other early psychologists variously brought their knowledge of such disciplines as philosophy, and physiology to bear on psychological reasoning.

Many psychologists and philosopher-physicians from various schools of thought have continued to make great impact on the discipline of psychology till date. Each of the schools represented various ways through which behaviour can be studied. Although the different schools have different approaches, they all emphasize different areas through which we can perceive diverse behaviour.

The approaches used by different schools of thought in their historical order are:

The Structuralists: The founder of the structuralist school of thought is Wilheim Wundt. Wundt founded psychology as a separate science by setting up the first experimental laboratories in Europe and America. Wundt and his followers are called "Structuralists" because they claimed that complex mental experiences were really "structures" from simple mental states. Their primary approach was introspective analysis under controlled conditions.

The Functionalists: Being dissatisfied with the structuralistic emphasis on mental states, the functionalists came up in 1900. They wanted to study the way individuals used mental images in adjusting to their environment. Leaders in this group include William James, James R. Angell and John Dewey. They concentrated on the learning process. Thus, instead of asking, "What is consciousness?" as the structuralists did, they asked, "What is consciousness for?"

The Psychoanalysts: This school of thought came up within the same period that the functionalists started. In the beginning of 1900s the psychoanalytic movement came up with advances in the field of medical psychology and practices of the early school of hynosis. The leader of this group is Sigmund Freud, a psychiatrist and neurologist who essentially ignored the problems of "consciousness" and directed efforts to understanding description of what they psychoanalysts termed "the unconsciousness". Psychoanalysts developed a new specialized technique which is largely based on interpretation of the patient's "freely associated stream of thought" and dream analysis. They maintained that the primary source of conflicts and mental disorder was to be found in the "unconscious". As a result of this, the psychoanalysts emphasized that most abnormal behaviour are as a result of unresolved conflicts such as the *Oedipus* and *Electra* complexes, and unfulfilled wishes or childhood trauma.

The Gestaltists: The Gestalt school of thought came up in 1912 during the First World War. A German Psychologist Wolfgang Kohler carried out certain experiments on the learning process of apes named "sultan". This experiment was of great importance and provided so much insight into learning. Kohler's work confirm the theories of Max Wertheimer that the whole pattern of an experiment is more important than its individual parts in detecting its meaning and even in appearance. The school thought founded was called Gestalt school. Gestalt in German means "pattern". More contributors to the gestalt school are Koffka and Lewin. Their main topics are perception and memory, while their methods of study are introspection, observation and experiment.

The Behaviourists: This school of thought originated from the United States of America in 1913, about the time of the First World War. John B. Watson, whose initial interest had been on animal experimentation, led adherents to this school. As far as behaviourists were concerned, the traditional "unconsciousness" and "introspection" approaches of the early psychologists were of no practical value. The behaviourists transferred their techniques of studying animal behviour to the study of human behaviour. They leaned heavily on physiology and their great contribution to behaviourism was later challenged. The most precise example of this form of learning was provided by the famous conditioned

response experiments of the Russian physiologist, Ivan Pavlov which he called 'Classical Conditioning'.

The Humanistic Approach: This is the most recent school of thought which came up in 1951. This arose as a reaction on the one hand, to the psychoanalytic view, which sees people as driven by unconscious internal forces, and on the other hand, the behaviourist view that sees people as being shaped by the external environment. Humanistic psychologists emphasize the human capabilities to choose desired life patterns and to grow to greater maturity and fulfillment in pursuit of life goals. Humanists seek to understand behaviour more subjectively in terms of its meaning to the individual. Psychologists who belong to this group are Abraham Maslow and Carl Rogers. While Maslow emphasizes the concept of "Self-actualization" and "the positive aspect of human nature", Rogers on the other hand adopts a counseling approach called "client-centered therapy".

HISTORY OF PSYCHOLOGY IN AFRICA

Scientific psychology is the brainchild of the Western culture. As a discipline of study, psychology arrived on the continent of Africa in the early 1960s following the attainment of independent nationhood by many African nations as observed by Abdi (1975). Jacobson and Reinert (1980) listed the number of psychologists in Africa from the information supplied to them during the period 1974-1975. Table 1 displays the number of psychologists in some of the African countries, the highest degree possessed by these psychologists and where they obtained their degrees.

Apart from Nigeria, the country in Africa with the second largest number of psychologists is Egypt which, more than twenty years ago, had a total number of 29 psychologists. The number is presumed to have increased more than threefold. Ten of the twenty-nine psychologists in Egypt during the period 1974-1975 obtained Ph.Ds, three had masters degrees, nine the bachelor's degree and seven had diplomas in psychology. Most Egyptian psychologists were educated in Cairo.

Within the same period (1974-1975) under review, twenty-one psychologists were in Tunisia and eleven in Senegal. Of the twenty-one psychologists in Tunisia, three had Ph.Ds, another three had masters while the remaining number had diplomas. Seventeen Tunisian psychologists were educated in Tunis and the rest in France. Like Tunisia, Senegal had eleven psychologists. One of the psychologists was educated at Dakar while ten studied in France. Other details are displayed on Table 1.

Generally, the Universities in Algiers, Morocco and Tunisia had been under the influences of the French educational system, and more of their psychologists were French educated. The development of departments of psychology for the training of professional psychologists had not received any priority attention. The University of Algiers offers courses in general psychology and a diploma in child psychology.

Egypt leads the way among the North African countries in the development of psychology as a discipline of study. This is probably due to the effort of the departments of psychology in Egyptian universities to increase the production momentum of psychologists. Way back in the period 1974-1975, four universities in Egypt offered training in psychology. During the same period, there were departments of psychology at the Universities of Cairo and Alexandria as well as at Ein-Shams University and Girls College. With the exception of Girls College, the psychology departments in these universities are housed in the Faculty of Arts of

each university. The universities of Cairo and Ein-Shams offer postgraduate diplomas in applied psychology and psychological services respectively (Wolman, 1979). A Bachelor of Arts degree in psychology is accepted as a sufficient qualification for work as a psychologist in Egypt. The Egyptian National Assembly passed a law regulating private practice by psychologists in 1956. The law requires psychologists who wish to go into practice to be licensed by the country's Ministry of Health.

Several West and Central African countries such as Cameroon, Central African Republic, Congo, Gabon, Ivory Coast (Cote d'Ivoire), Senegal, Chad as well as Malagasy inherited the French System of education. The universities in Tananarive (Malagasy) and Dakar (Senegal) also offer psychology as academic disciplines. Both institutions offer certificate courses in psychology, while only the University of Dakar grants a doctorate degree in psychology.

Most East African countries: Malawi, Zimbabwe, Tanzania and some central African states, such as Uganda and Zambia inherited the British system of education. The Haran (Salisbury) University in Rhodesia offer advanced training in psychology. The Universities of Leopoldville, Elisabethville, Stanleyville in Zaire (Congo Republic) offer advanced study in psychology. Areas of emphasis in these institutions include: general, developmental, clinical, comparative, industrial and social psychology. Nigeria, Ghana and Sierra Leone which also inherited the British system of education have more advanced training in psychology. The University of Ghana offers both undergraduate and master's degrees in general psychology. Even as the discipline of psychology is assumed to have developed in the continent of Africa, records of such developments are not yet readily available.

TABLE 1: Psychologists (1974-1975) - Highest degree and where degree was obtained

Country	No	Degree Level			Where Educated
		Ph.D	M.A.	B.A. & Less	
Benin Republic	1	-	-	1	France
Botswana	2	-	2	-	US1/Canada 1
Cameroon	1	-	1	1	West Germany
Egypt	29	10	3	16	Cairo 27; U.S.1; USSR 1
Ethiopia	1	1	-	-	West Germany
Ghana	7	5	11	1	US 1; UK 5; Ghana
Kenya	4	3	-	1	US 3; UK 1
Lesotho	1	-	1	1	France
Mali	1	1	-	-	France
Mauritius	2	-	1	1	France 1; UK 1
Morocco	3	3	-		Morocco 2; UK 1
Nigeria	34	22	9	3	US 13; UK 14; West Germany 2; South Africa 1; Belgium 1
Rwanda	1	-	1	1	Belgium 1
Senegal	11	3	1	7	Dakar 1; France 10
Swaziland	3	1	2	-	South Africa 2; US 1
Togo	3	2	1	-	France
Tunisia	21	3	3	15	Tunisia 17; France 4
Tanzania	4	4	-	-	US 2; Tanzania 2
Uganda	4	2	-	-	Uganda 1
Zaire (Congo Rep.)	6	5	1	-	Belgium 3; France 2; Geneva 1; Uganda 1
Zambia	7	5	2	-	UK 5; US 2
Zimbabwe	3	2	1	-	South Africa 1; UK 2

Ph.D includes D.Ed; M.A. includes M.Sc.; M.Ed; and their French equivalent; B.A. and less includes their French equivalent.

Source: Jacobson and Reinert (1980). *International Directory of Psychology.* New York: North-Holland Publishing Co.

PSYCHOLOGY IN NIGERIA

Nigeria appears to have the highest number of psychologists on the continent of Africa. Twenty-two of the 34 psychologists listed by Jacobson and Reinert (1980) as listed in Table 1, obtained the doctorate degree, nine had the master's degree and three obtained the bachelor's degree by the year 1975. Thirteen of the listed psychologists obtained their highest degrees from the United States of America, 14 from the United Kingdom, two from West Germany, two from Canada, one from South Africa, one from Ireland and one from Belgium. The Nigerian Psychology Society (NPS), a forerunner of the Nigerian Psychological Association, had over 200 registered members as evidenced by the 1983 membership record (Ugwuegbu, 1985). A little more than ten years ago, there were over 100 Ph.D degrees and over 1,000 masters' degree holders in psychology who were trained in Nigerian universities only. Although there are no definite records readily available, it has been estimated that those numbers have increased tremendously.

Table 2 indicates the number of universities in Nigeria that have departments of psychology together with dates of establishment, levels of degree offered by the departments and areas of specialization at higher degree level.

As could be seen in Table 2, the University of Nigeria, Nsukka along with the universities at Lagos, Ibadan, Ife, Jos, Ekpoma, Awka, Enugu, Ado-Ekiti and Benue State University Makurdi, offer courses leading to the award of the bachelor's degree in general psychology. Other Nigerian universities located at Uyo, Ado-Ekiti, Akungba, Ago-Iwoye and Otta are also offering courses in psychology. Indeed, a number of existing Nigerian universities without psychology departments as well as some of the newly established private universities have been showing interest in setting up psychology departments. At the University of Ibadan, the department of psychology offers the master's and doctorate degrees in the areas of clinical, industrial, social/personality, developmental, physiological/comparative as well as professional degrees in managerial psychology as well as legal, criminological and security psychology. Educational psychology also forms part of the undergraduate curriculum of psychology at the University of Ibadan. The department has been making concerted efforts to boost teaching and research in the areas of physiological and experimental psychology. Also, plans are underway to establish professional diploma courses and undergraduate distance learning programmes in the department of psychology at Ibadan. Apart from their general undergraduate programmes, the universities of Lagos, Jos and Ife admit students for advanced degrees in clinical, industrial and social psychology while the Universities of Benin and Ife again offer degrees in mental in their Faculties of Medicine. Mental health degrees offered in the faculties of medicine have a lot to do with the clinical psychology courses offered in the department of psychology.

CONTRIBUTION OF PSYCHOLOGY TO NATIONAL DEVELOPMENT IN NIGERIA

The first conference on "Social Psychology and National Development" was held in 1963 at the University of Ibadan. Later in 1985, a similar conference was held at the then University of Ife (now Obafemi Awolowo University) on "Behaviour and National Development". But very few authors in Nigeria have brought the knowledge and skills of psychology to bear on national development (Mundy-Castle, 1993).

Psychology in Nigeria is still struggling to receive desired attention in Nigeria. Despite this, Ugwuegbu (1990) reported that there are several public policy oriented areas, which are based on psychological principles and theories. Many of these include the

University of Benin-based drug abuse programme which involves psychologists like Professor Awaritefe; the child abuse programme led by Professor Peter Ebigbo of the University of Nigeria Teaching Hospital, Enugu; and the environmental psychology group led by Professor Folarin of the University of Lagos.

The Department of Psychology, University of Ibadan has developed a number of good and significant development programmes under "Psychology and Socio-Economic Development". Many students have carried out postgraduate research on this topic. Moreover, a professional master's degree programme was introduced in 1996 at Ibadan. The programme is called masters in managerial psychology (MMP). This programme was introduced to equip managers in industries and organizations on the best techniques to manage people and organizations towards enhancing increased productivity.

In response to the global and national attention to women's development and empowerment issues, a course called psychology of women (PsyWom) was introduced at bachelor's degree level in the past decade at the University of Ibadan. The aim of this course is to enhance studies on psychological factors at play on the standard of living of women in Nigeria so as to enable them to contribute more to national development. Many students have carried out their Bachelor of Science research work on the psychology of women. More enduring work on this is being carried out with the establishment of the psychology of women association called "Network for the Psychological Studies of Women" by a former Acting Head of Psychology Department, University of Ibadan, Dr. Bola Udegbe, in collaboration with Dr. Helen Osinowo, also a former Acting Head in the same department. This association has held many seminars and published a good number of journals on the psychology of women.

Further contributions of Professor D.C.E. Ugwuegbu and other psychologists at University of Ibadan encompassed the introduction of developmental programmes called the National Orientation Movement (NOM); and the National Opinon Poll (NOP) in the 1980s. The National Orientation Movement was predicated on the belief that for any socio-economic or political programme to succeed, such a programme must be planned based on the empirical knowledge and understanding of individuals in Nigerian. The more a people's characteristics, values, needs and intentions are known, the higher the likelihood that programmes and policies directed at such a people will succeed.

TABLE 2: Departments of Psychology, Date of Establishment and Areas of Specialization

University	Year	Degree offered and areas of specialization
University of Nigeria, Nsukka	1963	B.Sc., M.Sc., Ph.D. (Clinical, Industrial & Social)
University of Lagos	1965	B.Sc., M.Sc. (Developmental, Industrial Environment, Learning), Ph.D (Development and Industrial)
University of Ibadan	1976	B.Sc., M.Sc., Ph.D (Industrial, Social, Clinical, Developmental); Managerial, Legal, Criminological.
University of Jos	1976	B.Sc., M.Sc., Ph.D. (Clinical, Social, General and Industrial)
Obafemi Awolowo University (formerly University of Ife)	1977	B.Sc., M.Sc., Ph.D. (Clinical, Developmental, Industrial, Social)
Ondo State University	1982	B.Sc. (General)
Edo State University, Ekpoma	1982	B.Sc. (General)
Nnamdi Azikiwe University, Awka	1985	B.Sc., M.Sc. (General)
Enugu State University of Science and Technology	1993	B.Sc. (General)
Benue State University	1994	B.Sc. (General) and M.Sc

Source: Ugwuegbu (1985). *The Development of Psychology in Africa*

Public Opinion Poll (POP) as a means of eliciting information in a society is essential and its relevance in a democratic setting cannot be over-emphasized. Public Opinion Poll can be defined as the measurement of attitudes, feelings, and intentions and needs of a large body of people on important societal, social economic issues as these relate to development efforts of the nation. It provides a channel of feedback to government programmes, policies, actions and intentions. It also serves as guide on a wider perspective to policy formulation review as well as implementation. Today, only few psychologists in Nigeria are working with socio-economic development oriented organizations.

Though psychology has made and is still making enormous contribution to development issues in Nigeria, it has not been given adequate attention by the Nigerian government. This is clearly shown by the inability of the government to include psychologists in many plans and programmes of national development. Nigerian Government and other developing countries should involve psychologists in their development programmes so as to enable them contribute more meaningfully to national development like their counterparts in the United Stated, Canada and Europe.

HISTORICAL PERSPECTIVE OF SPECIALIZED AREAS OF PSYCHOLOGY IN NIGERIA

In Nigeria there are about five major areas of specialization in psychology. These are clinical, social/personality, industrial/organizational, developmental and physiological. Recently, students of psychology in Nigeria have begun to diversify to other areas such as experimental and environmental psychology. This segment will focus on the first three areas of psychology earlier mentioned.

CLINICAL PSYCHOLOGY

Clinical psychology is one of the most recent areas of specialization in Nigeria. The first meeting of the Nigeria Association of Clinical Psychologists was held in Benin in 1979. The members of clinical psychologists group including those under training then were less than ten (Ugwuegbu, 1985). But with the introduction of postgraduate programmes in clinical psychology at the University of Nigeria – Nsukka as well as the Universities of Lagos, Ibadan, Jos and Ife, the prospects of the immediate future appeared brighter.

The history of the development of clinical psychology and the practice of psychotherapy in Nigeria cannot be complete without the mention of Professor Lambo's contributions. Lambo, a social psychiatrist, held that the Western and African cultures produce divergent philosophical orientations to causation illness and the nature of cure. First, unlike their counterparts from the West, many Africans believes that both physical and mental illnesses can be externally caused by the breach of taboos or customs, disturbances in social relations, spirit possession, and other afflictions by ancestral spirits and gods. They also hold to beliefs about life after death and reincarnation. Lambo (1978) pointed out that the notion of spirit causation is still very prevalent, even among the educated. Odejide (1977) in a study of traditional healers and mental illnesses reported that the native healers' concept of causes of mental illness related mostly to the supernatural powers.

Second, Lambo (1978) also noted that the concept of cure that is prevalent in the Western theories (i.e. the individualistic notion) is inappropriate for the African people. According to Lambo, "African concepts of health and illness, like those of life and death, are intertwined. Health is not regarded as an isolated phenomenon but reflects the integration of the community. It is not the mere absence of disease, but a sign that a person is living in

peace and harmony with his or her neighbours, that he or she is keeping the laws of the gods and tribe". Lambo practicalized his theory by the establishment of the Neuro-psychiatric Hospital Aro, a village-like community where the patient live with his relatives while receiving treatment. He employed native healers and Western-trained therapists and they formed part of the treatment teams.

The Aro Mental Hospital remains the largest institution for the application of clinical psychology in Nigeria. Other institutions include the over 13 Federal University Teaching Hospitals including those at Ibadan, Enugu, Zaria, Lagos, Jos, Calabar and Ilorin. Other institutions where clinical psychology skills are applied include the psychiatric hospitals at Yaba (Lagos), Uselu (Benin) and some State government psychiatric hospitals in Awka, Enugu and other towns. Many of the recently designated Federal Medical Centres across the country also have psychiatric units, which provide ample opportunities for the practice of clinical psychology. Not many psychology departments in Nigeria universities had psychology consulting clinics in the past one or two decades. More than a decade ago, Professor Uzoka of the Department of Psychology, University of Nigeria, Nsukka, established a consulting clinic in his department. About the same time Professor Josiah Shindi also established a psychology consulting clinic in the Department of General and Applied Psychology at the University of Jos. In 1994, Professor Shindi left the University of Jos to found a department of psychology at the newly established Benue State University, Makurdi. Much more recently, some departments of psychology in Nigeria have been putting machinery in place to establish consulting/counselling clinics. An example is the effort, which the clinical psychology unit at University of Ibadan under the leadership of Dr. H.O. Osinowo has made in this regard. It is worth noting that most, if not all, clinical psychologists in Nigeria are based in the urban areas; hence, they can only attend to a very limited number of Nigerians who are in need of psychological help.

SOCIAL PSYCHOLOGY

Like clinical psychology, the existence of social psychology is a recent happening in Nigeria. The relevance of social psychology was realized long before it was thought necessary to establish the department of psychology. For example, at the University of Ibadan, social psychology was established as a sub-unit of the department of sociology in 1972. This lasted for several years before the establishment of the department of psychology.

Until recently, very little literature that could be called serious contribution in social psychology exists in Africa. Mallory Wober's (1975) and Frederick Wickert's (1967) had chapters from which a careful reader gets a feeling of the nature and concerns or what might be called social psychology in Africa. Initially, the area attracted contributors from Western European, South African and later, American social anthropologists, educationists, missionaries and sociologists. Indeed, most of the contributors to the field were people whose educational backgrounds did not expose them to the rigid principles of experimental social psychological research. For example, Professor Armer, an anthropologist authored the work "African Social Psychology…" in 1974. The involvement of researchers from different disciplines in social psychology in Africa produced a retarding effect in the progress of the area. First, with a few exceptions (Levine, 1966) much of the contributions lacked theoretical or practical relevance to the problems of Africa and Nigeria in particular. Second, the area evidenced a total lack of concerted effort and continued contribution. Third, the methodologies by each research worker were influenced by the researcher's background, making the results difficult to compare or replicate. Finally, the results of studies conducted in one locality are often generalized to the entire African continents.

The focus of the early social psychological research in Africa was very narrow. It covered attitude research concerning the social changes that were going on in the continent. Wober's (1975) summary indicated that researchers distinguished two structures of attitudes. These included traditional attitude (those congruent with traditional forms of society) and emergent "modern" attitude. Modern attitude is said to correspond to western social forms and it is influenced by western attitudes. A second area of research interest was the intergroup attitudes and ethnic relations. The central focus in this area was the question of tribalism and nationalism. Another area of interest was that of personality and identity which utilized projective techniques, and questionnaire tests to arrive at a definition of the African personality. Wober (1975) indicates that the approaches in this area have been psychoanalytic in development.

One should be aware of the following general problems with early attempts at the social psychological studies of Africa: lack of consensus in the definition of concepts. What is a Western attitude? Recently, writers in social psychology and anthropology are raising questions about the concept of "modernity". Contributions by researchers like Doob (1960) and Dawson (1967a) illustrate the type of confusion and difficulty lack of precise definition of a researcher's concepts can cause any area of research.

The second problem is the "missionary model of orientation" of these research workers. This includes the general attitude exhibited by these researchers that what is African is "bad", and that which is European or Western is "good". Coupled with this is the erroneous belief that western cultures should set the pattern to be followed by new attitudes in Africa. By implication, this orientation shapes the relative contribution of the African environment in the evolution of the cultures of African people. These research workers failed to acknowledge that cultural changes are a two-way process. The early social psychological researchers on Africa are merely receiving western influences and giving nothing in return.

Other aspects of biases are evident in the western contributions to the social psychology of Africa. These include biases arising due to "experimenter" effect, statistical procedures, sampling errors, use of unreliable and invalid questionnaires and biases arising from ignorance of the African languages, the relations between white experimenters and their African subjects.

INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

In Nigeria, the development of industrial/organizational psychology and its increasing impact on the society seems to follow the similar trend that exists in the West. In other words, the need for industries to solve practical day-to-day problems has led to the demand for people with some knowledge of human behaviour.

The need to solve these problems in the Nigeria society was intensified by two processes. These included the oil boom of the mid-seventies and the "Manpower Indigenization Decree" of the Nigerian government. The oil boom increased industrial and economic growth of the country, while the provisions of the Indigenization decree increased the level of managerial responsibilities of Nigerians in various private industries and organizations. The manpower implication of the decree was felt more by the multinational corporations, who had prior to the decree, relied heavily on foreign manpower and expertise. The massive promotion of Nigerians to senior management positions brought about the realization that unless these individuals so promoted are properly trained, they may not acquire the appropriate leadership, attitudes or orientations required for the management of people – hence, the great need for industrial psychologists in Nigeria.

At Ibadan, more than fifty percent of the students who apply for the master's degree usually choose to specialize in industrial

psychology. The same trend appears in the doctorate degree programme as well. Many industrial and organizational psychologists are employed in industries where the financial rewards are more attractive than in universities where development of strong theoretical aspects of the discipline are likely to take place. The tendency in such a situation is that Nigeria and other developing countries will continue to depend on imported theories in the area.

IMPEDIMENTS TO THE DEVELOPMENT OF PSCYHOLOGY IN NIGERIA

Many factors hinder full development of psychology in Nigeria and Africa. One of them is limited manpower resource in needed areas of psychology. While some areas like the industrial/organizational psychology have relatively sufficient trained personnel, other areas like the physiological and experimental psychology do not have enough manpower. Indeed, many universities in Nigeria are not offering physiological psychology as a course, needless to think of having specialists in the area. This leads to acute shortage of specialists in such areas.

Another impediment to the growth of psychology in Nigeria is the problem of poorly equipped and developed laboratories. Some institutions that struggled to establish psychology laboratories do not even have enough facilities. This absence of adequately equipped laboratory hinders research. As a result of this, majority of students especially at the undergraduate level prefers survey method of research to experimental research.

Another problem is limited psychological services. As has been stated earlier, many universities in Nigeria that offer clinical psychology at postgraduate level do not even have psychology clinics. Even some clinical psychology departments of some of the Psychiatric and Teaching Hospitals in Nigeria do not have trained clinical psychologists. This limited psychological service leaves a large proportion of the Nigerian population to the care of traditional and spiritual healers many of whom designate themselves "prophets".

Another problem stems from the fact that psychology has not yet attained the status of a profession in Nigeria. This is largely due to the failure of psychologists to make psychological research relevant to the human, industrial and economic development of the country. But recently, many students, guided by their supervisors, have started taking up this big challenge of relating their research work to developmental problems of the country. The Nigerian Psychological Association (NPA) has not yet taken up this challenge. Quite unlike the American psychological Association (APA) which has contributed greatly and influenced many public policies in the United States, NPA is yet to make much impact in this regard in Nigeria.

Reliance by some Nigerian psychologists on the theories of psychology developed for the Western cultures is another impediment to the development of psychology in Nigeria. Wholesale application of Western psychological models has not helped in developing psychology in the country. Though some of the Western theories and models could be applicable to the Nigerian cultural setting, many of them are not applicable to the problems of Africa and Nigeria in particular. Yet Nigerian psychologists rely heavily on these theories.

Poor communication channels constitute another hindrance. Nigeria depends heavily on Western journals as outlets for research findings. Many psychology departments in Nigeria do not have departmental journals. Neither are they independent publishers of psychological research. This problem also creates a wide gap between scientific information and government policy.

Finally, inadequate library facilities have been discovered as constituting another impediment to the growth of psychology in

Nigeria. Many libraries in Nigeria are not adequately equipped. Some universities in Nigeria do not even have departmental libraries to supplement the general library. Only few libraries in Nigeria are computerized. This problem, therefore, hinders academic work in the field of psychology in Nigeria.

Although these problems are hindering development of psychology in Nigeria, Nigerian psychologists and Nigerian students of psychology have contributed to the development of significantly in a short period. The number of candidates who make psychology their first choice course in the University Matriculation Examination (UME) is increasing every year in Nigeria. Moreover, many students pursuing masters' degree programmes in the country usually cross over to psychology from other social science and arts departments. With support from the government and organizations, psychology as a discipline and profession seems set to overcome her difficulties and make more contribution to the development of Nigeria.

HISTORICAL PERSPECTIVES OF FOUNDERS OF PSYCHOLOGY

Several personalities in different countries of the world contributed to the development of modern psychology. Many other founders of psychology contributed their theories based on the foundation already laid down by the founding fathers. In this section, the birth, life style and contributions of some of these personalities will be discussed. Notable among them are Wilhelm Wundt, William James, Sigmund Freud, John Watson and Max Wertheimer.

Wilhelm Wundt (1832 – 1920)

Discussing the history of psychology will not be complete without the name of Wundt taking a major part. Wundt was the philosopher-physician who established psychology as an academic discipline. Wilhelm Maximillan Wundt was born on August 16, 1832 in Neckarau, Baden, Germany – the fourth child of a minister (Leahey, 1997). Many ancestors on both sides of Wundt's family were intellectuals, scientists, professors, government officials, and physicians. At the age of thirteen, Wundt began his formal education at a Catholic Gymnasium. He disliked school and failed, but he was transferred to a school in Heidelberg from which he graduated in 1851. Wundt decided to go into medicine, and after an initial poor start, he applied himself and excelled in his studies. His scientific interests emerged in physiological research. He got his M.D. Summa Cum Laude in 1855, and after some study with the physiologist Johannes Muller, Wundt received in 1857 the second doctorate that German universities required of lecturers. These courses were interrupted by acute illnesses from which he almost died.

During his convalescence, Wundt applied for and received an assistantship with Hermann Von Helmholtz, another foremost experimental psychologist from Germany. Although Wundt admired Helmhotz, they were never close, and Wundt rejected Helmholtz's materialism. While with Helmholtz, Wundt gave his first course in "Psychology as a natural science" in 1862, and his important writings began to appear. He worked his way up the academic ladder at Heidelberg while dabbling in politics, for the first and last time, as an idealistic socialist. He got married in 1872. His publications including the first edition of his fundamental work, **Grundzuge der phsiologischen psyhologie**, continued in 1873 and 1874. This work, in its many editions, propounded the central tenets of his experimental psychology.

After a year in a "waiting room" in Zurich, Wundt received a chair in philosophy at Leipzig, where he taught from 1875 to 1917. At Leipzig, Wundt won a degree of independence for psychology by founding his psychological institute. Beginning as a purely private

institute in 1879, it was supported out his own pocket until 1885, when it became officially recognized by the university and listed in the catalogue. It begun as a primitive, one-room affair and expanded over the years. In 1897, it moved to its own specially designed building, later destroyed during World War II.

During the years at Leipzig, Wundt continued his extraordinary output supervising at least 200 dissertations, teaching over 24,000 students, and writing or revising volumes, as well as overseeing and writing for the psychological journal he founded, *philosophische studien.* He trained the first generation of psychologists, many of them Americans.

In 1900, he began a massive undertaking, the publication of his *Volkerpsyschologie*, which was completed only in 1920, the year of his death. In this work, Wundt developed what he believed was the other half of psychology, the study of the individual in society as opposed to the individual in the laboratory. Wundt's work continued to the last. His final undertaking was his reminiscences, *Erlebtes and Erkanntes*, which he completed only a few days before he died on August 31, 1920, at the age of 88. Wundt's psychology rejected association of static ideas and the functionalists' theory of mind.

William James (1842 – 1910)

William James was one of the oldest founders of psychology. He was one of the most influential of American psychologists. He taught philosophy and psychology at Harvard University for thirty-five years. James began to work out his own version of pragmatism in the 1870s and 1880s. At first he wanted to be an artist but got an MD instead due to the influence of his parents. He advanced his philosophy timidly, as psychology rather than philosophy (Leahey, 1997). In 1878, he contracted with the publisher Henry Holt to write a textbook on psychology; and during the 1880s, James published a series of articles that formed the core of his new psychology and philosophy and were incorporated into the book, *Principles of Psychology*. It's publication in 1890 marks a watershed in the history of American psychology, for it inspired American students as neither the Scots nor Wundt could, and it set the tone for American psychology from 1890 to 1913 and beyond. James combined the usual interests of a founding psychologist: psychology and philosophy. He began his academic career with an MD and held a variety of posts at Harvard. Beginning as an instructor of physiology, he later established a chair in psychology which he himself first occupied. He spent his last years as a Professor of Philosophy.

James' special "system" of psychology evolved from keen observations of himself and others. He opposed structuralism because he saw it as artificial, narrow and essentially inaccurate. Consciousness, James argued, is "personal and unique", "continually changing", "evolving over time", and "selective" in choosing from among the stimuli that bombard it. Above all, it helps people adapt to their environment.

In the early 1900s several psychologists at the University of Chicago were strongly influenced by James' views. Like James, they were interested in the mental processes, particularly in how they functioned to help people survive in a dangerous world. Although the functionalists, as they were called, disagreed with one another on many issues, they were strongly united in their opposition to structuralism.

Among James' contributions to psychology was the establishment of an informal psychological laboratory at Harvard in connection with a graduate course, "The relations between physiology and psychology", in the department of natural history in 1875. In 1887, he began to offer a course called "psychology" in the philosophy department; in 1885, he had obtained recognition and

funds from Harvard and had established the first official psychology laboratory in America (Cadwallader, 1980).

In conclusion, James consistently maintained that psychology should focus on the methods people use to adapt to the environment, satisfy their needs, and increase their abilities. He was particularly interested in consciousness, which he saw as a tool that enabled people to select appropriate courses of action. Towards the end his life James got tired of psychology and turned to philosophy.

Sigmund Freud (1856-1939)

Another prominent personality in the history of psychology is Sigmund Freud. He was born a Jew – but was an atheist proud of his Jewish heritage – and lived in the shadow of centuries of oppression by the Mandarin class. He was a Viennese physician who specialized in treating nervous disorders. Freud created psychoanalysis in part as a political challenge to the rulers of Austria-Hungary. He wanted to be a conquering hero in the mould of Moses, bringing disagreeable commandments to a disbelieving people. Freud used cocaine regularly in the late 1880s and 1900s (Crews, 1986). Under the influence of cocaine, Freud in February 2, 1886 described himself to his fiancée, Martha Beranys thus:

> Breuer (some friend and collaborator) told me he had discovered that hidden under the surface of timidity there lay in me an extremely daring and fearless human being. I had always thought so, but never dared tell anyone. I have often felt as though I had inherited all the defiance and all the passions with which our ancestors defended their temple and could gladly sacrifice my life for one great moment in history.

On February 1, 1899, awaiting reception of the interpretation of the Dreams, Freud wrote to his intimate friend Whilhelm Fleiss:

> For I am actually not at all a man of science, not an observer, not an experimenter, not a thinker. I am by temperament nothing but a conquistador or – an adventurer, if you want it translated – with all the curiosity, daring and tenacity characteristic of a man of this sort. Such people are customarily esteemed only if they have been successful, have really discovered something; otherwise they are dropped by the wayside. And that is not altogether unjust (Freud, 1985).

To the world, he aimed to conquer, Freud presented psychoanalysis as a revolution. Psychoanalysis, according to him, represented the third great blow to human self-esteem. The first blow was Copernicus's demonstration that human beings did not live at the center of the universe. The second blow was Darwin's demonstration that human beings were part of nature – being animals like any other master in its own house (Leahey, 1997).

Freud being a medical doctor was attracted to the idea of approaching psychology through physiology. Freud's psychology was likely to be physiological for the same reason as Wundt's, but once Freud took up clinical practice and began to create psychoanalysis as both science and therapy, the path through physiology also exerted two special attractions for him. For Freud, the most unique attraction of the path to science through psychology lay his situation as a clinical neurologist. Today, the term "neurosis" is virtually synonymous with a disorder that is mental, but in Freud's time, it was viewed as primarily a neural disorder. By far the most common neurosis of the time was hysteria. In post-Freudian, it had a psychological cause; but in Freud's time, the physical symptoms of hysteria – such things as paralyses and failures of sense perception – were thought to stem from an unknown disorder of the nervous system (Macmillan, 1991). In

1896, Freud gave a paper on hysteria. Chairing the session was the greatest student of sexual psychopathology of the day, Richard Von Krafift-Ebing, who pronounced it a "scientific fairytale".

The physiological path to scientific psychology found fullest expression in a manuscript, which Freud never completed, the "Project for a Scientific Psychology". It was written in a white heat of Newtonian passion in the fall of 1894 and the spring of 1895. On April 27, 1895, Freud wrote to Fliess, "Scientifically, I am in a bad way; namely caught up in the 'psychology of neurologists', which regularly consumes me totally". On May 25 1895 he wrote "… A man like me can not live without a hobbyhorse, without a consuming passion, without – in Schiller's words – a tyrant. I have found one. In its service I know no limits. It is psychology." Freud was "tormented by two aims: to examine what shape the theory of mental functioning takes if one introduces quantitative considerations, a sort of economic nerve forces; and second to peel off from psychopathology a gain for normal psychology (letter to Fliess, May 25, 1895, p.129).

According to Freud, sex played a key role in the formation of neurosis. Sexuality came into play as the factor working on the nervous system to cause the symptoms of hysteria. In Freud's early theorizing, sexual seduction as a child provided the trauma that would later blossom into neurosis. In his later theory, childhood sexual fantasies provided the kernels of adult neurosis.

By 1905, Freud had written the founding works of psychoanalysis, *Interpretation of Dreams* and *Three Essays on the Theory of Sexuality*, and sorted out what was biological and what was psychological in psychoanalysis. In 1895, Freud wrote what Joseph Breurer had called *Studies in Hysteria.* Breurer was a distinguished general physician and physiologist who, in 1880 first treated the patient whose case starts the story of psychoanalytic therapy. Freud came up with more publications; *Interpretation of Dreams in 1900; Analysis of a Case of Hysteria in 1905; Three Essays on the Theory of Sexuality* also in 1905; and *Psychopathology of Everyday Life* in 1914. Freud did not remain satisfied with his working hypothesis. In 1920, he published *Beyond the Pleasure Principle*, the first of two major revisions of his theory, culminating in the structural model of personality in *The Ego and Id* (1923). Freud also published *Future of an Illusion* in 1927 and in 1930, he came up with *Civilization and its Discontents.* In that work which he used psychoanalysis as a scalpel to dissect religion, maintaining that religion is a dangerous illusion with dogmatic teachings that stunt intellectual development, keeping human kind in a childish state.

Freud made so many contributions to psychology. Most of his ideas were opposed in his death. However, the more his views were opposed, the more he gained followers. Of all his works, Freud believes *The Interpretation of Dreams* to be his greatest. The psychoanalytic theory created a revolution in the conception and treatment of emotional problems and generated interest among academic psychologists in unconscious motivation, personality, abnormal behaviour, and child development. Psychoanalytic ideas are still very much alive today in both their original form and numerous modifications. Freud moved to the United States in 1933 due to the Nazi regime, and later spent his last months in England.

John Watson (1878-1958)

John Broadus Watson was born in 1878. He completed his doctorate in the field of animal psychology at the University of Chicago under a functionalist professor. As a young man, he was one of numerous behavioural scientists dissatisfied with the prevailing practices of American psychology. One of Watson's major complaints about structuralism and functionalism was this: facts about consciousness could not be tested and reproduced by all

trained observers, because they depended on each person's idiosyncratic impressions. He felt that introspection was a serious bar to progress. Watson resolved to make psychology a respectable science like the physical sciences. He felt psychologists should study observable behaviour and adopt objective methods.

By 1908, Watson defined a purely objective, non-mentalistic approach to animal psychology, shortly after graduating from the Univeristy of Chicago and taking a position at Johns Hopkins University. In his autobiography, he said that he had broached the idea of a purely objective human psychology to his teachers during his days as a graduate student at Chicago, but his proposals were greeted with such horror that he kept his own right, he felt emboldened to expand publicly the scope of his objective psychology.

In 1912, Watson began lecturing and writing to publicize his views. This led to the birth of a movement known as Behaviourism. On February 13, 1913, he began a series of lectures on animal psychology at Columbia University with a lecture on "Psychology as the Behaviourist Views it". Encouraged by the editor of *Psychological Review*, Howard Warren, Watson published his lecture. In 1943, a group of eminent psychologists rated this paper as the most important one ever published in the Review (Longfeld, 1943). From the paper's aggressive tone, it was clear that Watson was issuing a manifesto for a new kind of psychology: behaviorism.

In the tradition of modernist manifestos, Watson went on to repudiate psychology as it had been. He refused to see any difference between structuralism and functionalism. Both of them, according to him, adopted the traditional psychology as "the science of the phenomena of consciousness", and both of them used the traditional "esoteric" method of introspection. However, psychology so conceived had "failed to make its place in the world as an undisputed natural science".

In 1908, Watson had declared the autonomy of animal psychology as the study of animal behaviour. He proposed to use human beings as subjects and to employ methods of investigation which are exactly comparable to those now employed in animal work". Earlier comparative psychologists had warned that we should not anthropomorphize about animals; Watson urged psychologists not to anthropomorphize about human beings.

Watson faulted introspection on both the empirical and philosophical notes. It was not like the natural sciences where good techniques provide "reproducible results". Finally, introspection failed practical tests. In the laboratory, it demanded that animal psychologists find some behavioural criteria of consciousness. He argued that consciousness was irrelevant to animal work: "One can assume either the presence or absence of consciousness anywhere in the phylogenetic scale without affecting the problems of behaviour one jot".

Watson's position about the environment's impact on the individual is expressed in his famous declaration: "Give me a dozen healthy infants well formed and my own specified world to bring them up in and will guarantee to take any one at random and train him to become any type of specialist I might select – doctor, lawyer, artist, merchant-chief, and yes, even beggar man and thief, regardless of his talents, penchants, tendencies, abilities, vocations and race of his ancestors" (Watson 1930). Watson's view attracted many young American psychologists partly because of his forceful prose and flamboyant manner. In some form or another, behaviourism dominated American psychology for about thirty years.

Watson had always been willing to write about psychology for a popular audience. After 1920, following his expulsion from academia, he became the first modern popular psychologist, writing, for example, articles on human psychology from the behavourist

perspective in Haper's from 1926-1928. There, he began laying out behaviourism as the scientific replacement for mentalistic psychology. Watson said psychoanalysis had "too little science – real science" to long command serious attention, and the traditional psychology consciousness "never had any right to be called a science". As he often did in his popular writings, Watson connected mentalistic psychology with religion, asserting that "mind and consciousness" were but "carry-overs from the church dogma of the Middle Ages". His behaviourism rejected religion and the moral control of behaviour and aimed to replace these with science and the moral control of behaviour through behavioural psychology.

By 1930, behaviourism was well established as the dominant viewpoint in experimental psychology. Watson's usage had triumphed, and psychologists called the new viewpoint "while recognizing that behaviourism took many forms (Williams, 1931). Watson, therefore, set the stage for psychologists to create specific theories for predicting and explaining behaviour within the new viewpoint of behaviourism. His impact on psychology through behaviorism continues to attract much attention up to date.

Max Wertheimer (1880-1943)

The last founder of psychology to be discussed here is Max Wertheimer who began the gestalt movement in 1912 as a German psychologist at the University of Frankfurt. He published a report on studies of apparent movement. The "Moving" News bulletin in Times Square in New York provides an example of apparent movement.

Wertheimer was by nature a prophet for whom the idea of the Gestalt was "not only a theory of perception of philosophy; it was a theory of perception of philosophy; it was, rather, a *Weltanschauung*, indeed an all-encompassing religion. The core of this religion is into meaningful parts, that natural units have their own structure" (Wertheimer, 1978).

The phi phenomenon demonstrated a faith that Wertheimer had held before 1912. Despite being a Jew, he received an education "typical of the elite of his day" including studies with Von Ehronfels at Prague and Kulpe at Wurzburing (Wertheimer, 1978). In all his studies, he was immersed in the reaction against traditional atomism and traditional psychology, but Wertheimer moved in a more holistic direction than his teachers did. His Gestalt ideas appeared first in a 1910 paper on the primitive music of a Ceylonese tribe, in which he concluded that their compositions were organized by "Gestalter that are rhythmically and melodically strict" (Wertheimer, 1978).

Central to the Gestalt movement was the "Gestalt vision", Wertheimer's holistic *Weltanschauung*. In 1924, Werheimer declared that "Gestalt Vision", Wundt's halfway holism, in which wholes are constructed by the mind, was unacceptable. Wertheimer condemned traditional – Wundtian – psychology for containing what he called an abundance of "things arid, poor and inessential" and for having "alien, wooden, monstrous" implication (Wertheimer, 1925).

Wertheimer argued that traditional psychology rested on two erroneous assumptions. The first is the mosaic or bundle hypothesis, which is his term for sensationalism. The second is the association hypothesis, by which Wertheimer means the building-toy theory. Wertheimer could not accept Wundt's idea that the mind's power of apperception unites elements into greater wholes, for this still concedes the fundamental status of sensational elements. Wrote Wertheimer (1922): "Gestalten" are not "the sums of aggregated contents erected subjectively upon primarily given pieces…Instead, we are dealing with wholes and whole processes possessed of inner intrinsic laws. 'Elements' are determined as parts

by the intrinsic conditions of their wholes and are to be understood 'as parts' relative to such wholes". This is central and formal for Gestalt psychology (Leahey, 1997).

Wertheimer later moved to the United States of America with other founders of Gestalt psychology namely: Kohler Koffka and Lewin. The Gestalt movement was a strong, unified one. Its philosophy shaped the direction of psychology in Germany and later influenced American psychology. Some of their findings, such as those on insight learning, and some of their ideals, such as the principles of object perception, are found in textbooks of psychology in all parts of the world. Max Wertheimer remained one of the prominent psychologists that contributed to the development of modern psychology.

INFLEUNCE OF EUROPE AND AMERICA ON PSYCHOLOGY

Some of the European countries and the United States of America contributed greatly to the development of psychology. Most of the founders of psychology are either Europeans or Americans. Although some of them are Jews, only contributions from Germany, America, Britain and Russia will be discussed. These are the countries with high records of contributions to the development of modern psychology.

Germany

Psychology began in Germany in 1878 by Wilhelm Wundt who is often referred to as the founder of psychology. Wundt was a philosopher and a physician when he established psychology as an academic discipline in Heidelberg. Throughout the nineteenth century, German universities were unique both in quality and organization, especially with regard to science. German universities combined research and teaching functions and established the world's leading programmes of graduate education.

The governments of the separate German principalities after the unification of Germany in 1870, strongly supported German universities with money and resources (Leahey, 1997).

This setting affected the establishment of psychology as a science. Germany was then at the forefront of the Industrial Revolution, and Littman (1979) argues that, in their universities, "Germany had industrialized the process of acquiring and applying knowledge". Thus, says Littman, Germany was uniquely open to the creation of new scientific disciplines promising more production of world-leading research. However, Ash (1980) noted that if the German system was well-suited to give birth to psychology, however, it also possessed what would slow its growth and shape its form (Ash, 1980).

The growth of psychology in Germany was greatly inhibited by the *Mandarin* culture of philosophical *Bildung.* As long as psychology remained where Wundt left it, in philosophy, psychologists had to compete with philosophers for professorships and resources. Especially as psychology became more completely experimental, it seemed to philosophers to be a rude intrusion on their traditional concerns. This perceived rude intrusion made philosophers to band together to oppose psychology's growth within psychology. However, efforts to move it elsewhere – to medicine, for example, as Kulpe proposed – were unsuccessful.

The coming of the Nazis to power in 1933 complicated matters. They destroyed the old Mandarin system and drove from Germany its best minds. Jews and others sickened by Nazi oppression left Germany in a remarkable emigration that included outstanding intellectuals of every type, from writers such as Thomas Mann to physicists such as Einstein. Important psychologists were

among their number, most notably the Gestalt psychologists, who moved to the United States and Sigmund Freud, who spent his last months in England. Appallingly, many psychologists who remained in Germany turned with rapidity in the Nazi direction, in some cases providing "scientific" justification for Nazi racial policies (Leahey, 1997).

On the other hand, psychology won its autonomy under the Nazi regime. One route to independence for psychology had been rejected by the *Mandarins* – that of making psychology a practical, applied discipline, which, for example, the Mayor of Berlin had asked for as early as 1912. Applied psychotechnic psychology won bureaucratic recognition as an independent field of study "because the *Wehrmacht* required trained psychologists to assist in the selection of officers". This proved a Faustian Bargain, of course, when the Nazi regime brought upon Germany the destruction of World War II and the subsequent division of Germany into East and West. Not until 1950s did psychology in Germany get on its feet again (Ash, 1981), and then it was an entirely new environment, dominated by American ideas.

America

United States of America played the most significant role in the development of psychology. As Wundt was establishing psychology in Germany in 1879, William James began to work out his own version of pragmatism in the 1870s and 1880s.

Experimental psychology was called "new psychology" in the United States, to distinguish common sense realists. Protestant denominators controlled the great majority of American colleges, and in the 1820s, the Scottish system was installed as a safeguard against what religious leaders took to be the skeptical and atheistic tendencies of British empiricism as described by Reid. The works of Locke, Berkeley, and Hume – and, later, the German idealists – were banished from the classroom and replaced with texts by Reid, Dugald Stewart, or their American followers (Leahey, 1997). Common sense psychology was taught as a pillar of religion and Christian behaviour. For the American followers of the Scots, psychology "is the science of soul" and its method, ordinary introspection, reveals "the soul as an emanation from the Divine, and is made in the image of God" (Dunton, 1895). "Mental science, or psychology, will therefore be (foundational) for moral science…. The province of psychology will… be to show what the faculties are; that of moral philosophy to show how they should be used for the attainment of their end".

As higher education became more secular after the civil war, the intellectual tide turned in favour of the naturalism of the new psychology. In 1875, William James then established an informal psychology laboratory at Harvard in connection with a graduate course," The Relations between physiology and psychology", in the department of natural history. In 1887, he began to offer a course called "psychology" in the philosophy department. In 1885, he had established the first official psychology laboratory in America (Cadwallader, 1980). At Yale, the old psychology of the president, Noah Porter, yielded to George Trunball Ladd (1842-1921, who, though a Congregationalist minister and a psychological conservative, respected Wundt's experimental psychology and incorporated it into an influential text, elements of physiological psychology (1887). At Princeton, the president, James McCosh, was a staunch Scot but recognized that "the tendency of the day is certainly towards philosophy" (Evans, 1984) and taught Wundt's psychology to his students.

Harvard produced its first Ph.D. Philosopher, G. Stanley (1844-1924) in 1879. A student of James, Hall was really a psychologist. He went to Johns Hopkins University – the United

States first Graduate University – where he established a laboratory and a series of courses in the new psychology. Hall's psychology went well beyond Wundt. This, however, included, in typically American eclectic fashion, experimental studies of the higher mental process, anthropology, and abnormal psychology. Hall launched the child study movement, and coined the term "adolescence". He led the institutionalization of America's Psychology. Furthermore, Hall started the *American Journal of Psychology* in 1887, and facilitated the founding of the American Psychological Association (APA) in 1892. One of Hall's students was James McKeen Cattell (1860-1944), who later studied with Wundt and then returned to the United States to establish laboratories at the University of Pennsylvania (1887) and Columbia University (1891).

As historians have often pointed out, Americans got the methods of experimental psychology from Wundt, but their ideas and theories came from elsewhere. When Cattell was in Leipzig, he proposed to study individual differences in reaction time, but Wundt disapprovingly called the subject "*ganzAmerikanisch"(*completely American).

Edward Titchener (1867-1927), an Englishman brought German psychology to America. He also played an important role in the founding of American psychology. He was the foe of both functionalism and behaviourism, while on the European front, he was the enemy of act psychology and imageless thought.

By 1892, psychology in America was well launched. In Europe, scientific psychology was making slow headway even in Germany, the country of its birth. In the United States, by contrast, psychology expanded rapidly. In 1892, there were fourteen laboratories, including one as far west as Kansas. Half of them had been founded independently of philosophy or any other discipline. Psychology would soon be what it largely remains, an American science. Today, America has made the greatest contribution to the development of psychology. Today, the American Psychological Association (APA) remains the first and the most organized psychological association in the world. It was founded far before the German equivalent was founded in 1904. APA has made the greatest contribution to the development of psychology and the impact of American psychology is getting stronger everyday.

Britain and Russia

Britain and Russia did not make as much impact on psychology as Germany and the United States. However, the contributions of both countries (Britain and Russia) to the development of modern psychology cannot be ignored. Some of the prominent founders of psychology are from Britain and some are from Russia as well. However, psychologists from these countries were influenced by German and American Psychology.

One of the founders of psychology in Britain is Edward Bradford Titchener (1867 – 1927). Titchener was born in 1867 at Chichester, England. He went to Oxford University from 1885-1890. The conjunction of interests in philosophy and physiology naturally predisposed Titchener to psychology, and while at Oxford, he translated the third edition of Wundt's massive *Principles of Physiological Psychology*. Titchener could find no one in England to train him in psychology, so in 1890 he went to Leipzig, taking his doctorate in 1892 (Leahey, 1997).

As an Englishman, Titchener arrived in Leipzig from the other side of the intellectual gulf separating Germany from the West. He was thoroughly versed in philosophy and was much impressed by James Mill, remarking that Mill's speculations could be empirically demonstrated. In his first systematic book, *An Outline of Psychology* (1897), he wrote: "The general standpoint of (my) book is that of the traditional English psychology". It is reasonable to expect, therefore, that Titchener may well have

assimilated Wundt's German psychology into the "traditional English psychology". After a short stint as a lecturer in biology in England – a country long unreceptive to psychology – Titchener left for America to teach at Cornell, where he remained until his death in 1927.

Another contributor to British psychology is James Ward (1843-1975). James is sometimes called the "father of modern British Psychology" (Turner, 1974). He was for a time a minister, but, after a crisis of faith, turned first to physiology, then psychology, and finally philosophy, exactly as William James had done. His tremendous influence in British psychology comes from his article on psychology in the *Encyclopaedia Britanica's* ninth edition, in 1886. It was the first article by that name in the Encyclopedia, and Ward reworked it later into a text. Ward settled at Cambridge University, where he was active in attempts to establish a psychological laboratory.

Russia

In Russia, the founder of modern Russian physiology and Russian objective psychology is Ivan Michailovich Sechenov (1829-1905). Sechenov studied in some of the physiological laboratories in Europe, including Helmhotz's and brought back their methods and ideas to Russia. He believed that psychology, which was known to him only as a branch of philosophy, could be scientific only if it were completely taken over by physiology and adopted physiology's objective methods. Sechenov, like American functionalists, abandoned mentalism. Psychology is to be positive, concerned with objective, public facts. Starting with the simple, it will proceed to the more complex while being cautions and unspeculative. It will ignore consciousness.

Another Russian, Vladimir Michailovitch Bechterev (1867-1927) who popularized Sechenov's objectivism, called his system reflexology, a name that accurately describes its character. However, the greatest of Sechenov's followers, though not his student, was Ivan Petrovich Pavlov (1849-1939), who was one of psychology's few household names. Pavlov was also a Russian physiologist whose studies of digestion won him the Nobel Prize in 1904. In the course of this work, he discovered that stimuli other than food may produce salivation, and this led him to the study of psychology, especially to the concept of the conditioned reflex and its exhaustive investigation.

Pavlov's technical contribution to the psychology of learning was considerable. He discovered classical conditioning and inaugurated a systematic research program to discover all its mechanisms and situational determinants. In the course of his Nobel Prize-winning investigation of canine salivation, Pavlov observed that salivation could later be elicited by stimuli present at the time food was presented to an animal. He originally called these reactions *physical secretions* but later substituted it with the term *conditioned response.*

After James Ward and Ivan Pavlov, many prominent psychologists also came up in Britain and Russia. Today, both countries have contributed greatly to modern psychology. History of psychology today will not be complete without mentioning the impact of Britain and Russia.

IMPACT OF PHYSIOLOGY AND PHILOSOPHY ON PSYCHOLOGY

Psychology was founded through physiology. However, the new psychology was conceived as the scientific offspring of a fruitful marriage between philosophy of mind and the science of physiology. This marriage – or alliance, as Wilhelm Wundt called it – was reflected in the careers of psychology's main founders, Wundt, William James and Sigmund Freud. Wundt and James had

M.D. degrees and taught physiology, but moved toward philosophy, holding professional chairs in philosophy and starting laboratories of psychology along the way. Freud, too had an M.D. and early saw psychology as a branch of neurophysiology, but was learned in and wrote about philosophy issues. All three were thus physician-philosophers. However, long before psychology established itself as a science on the path through physiology, there were physician-philosophers who approached the problems of the mind through the discipline of physiology (Leahey, 1997).

Alcmaeon of Croton (fl 500 B.C.E) was a physician who practiced some of the earliest dissections. He was also interested in philosophy and directed his attention to understanding perception. He dissected the eye and traced the optic nerve to the brain.

Unlike later thinkers such as Empedocles and Aristotle, Alcmaeon correctly believed that sensation and thought occur in the brain. He also proposed a view of perception that was developed into the first theory in psychology by another physician-philosopher who opposed Promenade's rejection of the validity of experience.

From the time of Aristotle right through the religion of the Middle Ages, physicians, philosophers, and theologians had attributed most psychological functions to the animal soul, and, therefore, to the animal and human body. The Islamic physician-philosophers had even proposed specific locations in the brain in which imagination, memory, and so on took place. But while working on his system of physics, Descartes took up the path of psychology through physiology that had begun with Empedocles and would ultimately lead to the founding of scientific psychology. In a letter to Mersenne in December, 1629, Descartes described how he began to study anatomy by watching butchers slaughter cattle and taking parts back to his lodgings for his own dissections. These researchers took him in a new and exciting direction. Three years later, he wrote to Mersenne that he would now "speak more about man than I had intended to before, because I shall try to explain all of his principal functions. I have already written about those that pertain to life such as … the five senses. Now I am dissecting the heads of different animals in order to explain what imagination, memory etc. consist of" (Gaukroger, 1995).

By splitting off experience from the self and making it a thing, consciousness, to be studied, Descartes made psychology possible – and philosophy important. As a philosopher and scientist, he wanted to know what the 'world' really was. Descartes' psychology and his followers' variant of it swept over the intellectual world of Europe, becoming the starting point from which virtually every psychologist began, even when disagreeing with him. Descartes' influence cannot be denied. His framework created the idea of psychology as the study of consciousness and made the search for self-understanding important and influential. It was more commonsensical, more intuitive, less encumbered with metaphysics, and informed by Newton's Principle, published 37 years after Descartes' death. It was an attempt at scientific psychology made by the physician-philosopher John Locke.

Alexander Bain was the major contributor in uniting physiology and philosophical psychology. He began to work on this in 1850. By 1855 Bain fulfilled his desire with his book titled. *The Senses and the Intellect.* He also came up with *The Emotions and the Will* in 1859. Bain's comprehensive survey of psychology from the stand-points of associationism and physiology embraced every psychological topic from simple sensation to aesthetics and ethnics. His importance lies in his synthesis of materials borrowed.

Thus, Bain united the philosophy of associationism with sensorimotor physiology to give a unified human psychology. Even today, most general psychology texts are organized like Bain's beginning with simple nerve function in sensation and working up to thinking and social relations. Bain's integration was quite

influential. He wrote before the functions of the cerebrum were known, and his uncompromising associative view of physiology guided later English investigation to press their studies into the mysterious cerebral hemispheres.

Bain had a considerable lasting effect on psychology. The journal *Mind*, which he founded in 1874, is still in existence as an organ of philosophical psychology. He was, however, too philosophical in his outlook; it did not take long before his conception was out of date. Despite his use of physiological data, he did not experiment, and although he recognized the importance of Darwin's work, his associationism remained pre-evolutionary. In the long run, it was his practical attitude toward psychology that mattered. Like phrenology that had once excited him, Bain wanted to explain human action, not just consciousness.

Wundt (1873) in his work, *Principles of Physiological Psychology* finally defined scientific psychology by merging physiological psychology and psychology based on his knowledge of philosophy. Besides being a culmination of ideas of countries of philosopher-physicians, the alliance of physiology and psychology served several important functions for the fledgling science of psychology. At a philosophical level, the alliance helped psychology become part of the aggressively emerging naturalistic worldview of science. As Wundt was teaching philosophy at Leipzig, he won a degree of independence for psychology by founding the Psychological Institute in 1879. This marked the beginning of psychology as a separate academic discipline.

PSYHCOLOGY AS A SCIENCE

Wundt established psychology as a discipline, but he could and did not retain a monopoly on it, as new psychologists founded new laboratories and new movements in Germany and around the world. The younger German generation established new journals and the society for Experimental Psychology. Theories in psychology moved away from Wundt. Structural psychology recast the psychology of consciousness in terms defined by British associationism. Gestalt psychology redefined the study of experience, rejecting the analysis of experience into theoretically defined atoms of experience, and replacing it with the study of meaningful objects given directly in consciousness.

The claim of Sigmund Freud's psychoanalysis to be a science like any other was contested. Positivists find Freudian hypothesis vague, bad and difficult to test (Nagel, 1959). Kar Popper, who regarded psychoanalysis as a pseudoscience, mounted the most influential attack on the scientific status of psychoanalysis. However, Freud clearly meant psychology to be a science (Grunbaum, 1984) even if this conception of science is now out of date (Breger, 1981).

Psychology began as a science through the effort of J.B. Watson. Watson had always been willing to write about psychology for a popular audience. After 1920, following his expulsion from academia, he became the first popular psychologist.

He began by laying out behaviorism as the scientific replacement for mentalistic psychology and for psychoanalysis, which had earlier captured the popular mind. According to Watson, psychoanalysis had "too little science – real science" to long command serious attention, and the traditional psychology of consciousness (functionalism/structuralism) "never had any right to be called a science". In the place of the fantastic, secretly religious, traditional mentalistic psychology, behaviourism substituted a positivistic, scientific psychology of description, prediction and control of behaviour. Watson stated that behavioural psychology began with the observation of the behaviour of our fellow, and suitably codified by science, issued in "a new weapon for controlling the individual". Watson (1930) declared that it is a part

of the behaviorist's scientific job to state what the human machine is good for and to render serviceable prediction about its future capacities whenever society needs such information.

Watson generally transformed psychology to a science. He maintained that if psychology was to ever become a science, it must follow the examples of the physical sciences; it must become materialistic, mechanistic, deterministic and objective (Heidbreder, 1933). Psychology shared all the assumptions of science today, which includes; determinism, empiricism, invariance, operationism and objectivity. Through the efforts of Watson with other prominent psychologists that followed after him, psychology was transformed into a science. They were able to apply scientific methods in solving human problems. Today, psychology is generally referred to as a science of behaviour.

HISTORY OF EXPERIMENTAL PSYCHOLOGY

The efforts of Watson led to the present day scientific psychology. However, the dean of historians of psychology, E.G. Boring, dates the founding of experimental psychology to the publication in 1860, of elements of Psychophysics written by Gustav Theodore Fechner (1801-1887) who was a physicist. Boring (1963b)'s claim rests on the fact that Fechner conceived and carried out the first systematic research in experimental psychology research that produced mathematical laws.

Before German-born psychophysicist Gustav Theodor Fechner (1801-1887), philosophers had widely assumed, following Kant, that the mind can neither be experimented on nor subjected to mathematical scrutiny. Fechner showed these assumptions to be false. His greatness was to overcome these problems. He saw that the content of consciousness can be manipulated by controlling the stimuli to which a person is exposed. This control makes mental experiment possible. Fechner is not the founder of the science of psychology because, unlike Wundt, he carved out no societal recognized roles for psychologists to take. Nevertheless, Fechner founded experimental psychology, for his methods, broadened to encompass more than sensations. In Wundt's experiments, antecedent stimuli conditions were controlled, as in Fechner's and data were provided as subjects reported the resulting conscious content. It was not Wundt's only method, but it was an important one, and it was the one most of his students carried away with them from his laboratory (Leahey, 1997).

Beginning in 1898, animal psychology experienced a surge in activity and a quickening of interest. But in the new animal psychology laboratory, experiment replaced anecdotes and informal, naturalistic experiments, as psychologists investigated the behaviour of species ranging from protozoa to monkeys. E.L. Thorndike's animal researchers are summarized in *Animal Intelligence*, which appeared in 1911. It includes his most important work, the report on his graduate study, "Animal Intelligence: An Experimental Study of the Associative Processes in Animals", originally published in 1898. Thorndike argued that experimental approach was the only way to completely control the animal's situation. His goal was, by experiment, to catch animals "using their mind".

Another important new experimental approach to animal psychology grew from Russian objective psychology, an uncompromisingly materialistic and mechanistic conception of biology. The founder of modern Russian Physiology was Ivan Sechenov.

Sechenov believed that psychology, which was known to him as a branch of philosophy, could be scientific only if it were completely taken over by physiology and adopted physiology's objective methods. Ivav Pavlov later carried on from Sechenov's objectivism in 1903. Pavlov was a physiologist whose studies of digestion won him the Nobel Prize in 1904. Wolfgang Kohler also

performed animal experiment using an ape named "Sultan". However, Pavlov carried out replications of Kohler's ape experiments in which he viewed Gestaltists as duellists who "did not understand anything" of their own experiments.

Many psychologists are still experimenting on animals. Experiment has become the most practical method through which psychologists carry out their research. Experimental psychology is not limited to animal alone, but human beings are equally used in psychological experimentation. Today, experimental psychology has formed a major part of psychological research.

THE EXPERIMENTAL METHOD

Psychological experiment is the objective observation of phenomena which are made to occur in a strictly controlled situation in which one or more factors or variables are varied and the others are kept constant. The difficulty in ascribing a casual role to any variable or behaviour as it is done in naturalistic observation is what leads psychologists to use the experiment method.

Controlled experiment is a research method in which observations are made of specific behaviours under systematically varied conditions. Here, the investigator manipulates one or more stimuli variables and observes the effects on one or more behaviours. The stimuli variable that is systematically manipulated upon the subjects or the individuals in the experiment is called the independent variable. The response is the unit of behaviour whose form or amount is expected to depend on the manipulation of the independent variables; it is therefore called the dependent variable. For instance, in researching on "the effects of alcohol on learning", "alcohol" is the independent variable, whereas the effect of alcohol depends on ability to learn. So "learning" in this case is the dependent variable. Subjects in an experiment are the individuals whose behaviour is being observed. They are assigned to either the experiment group – the group exposed to the independent variable – or the control group that is the group exposed to all the conditions of the experiment except for the independent variables.

Controlled experiments are used for testing assumptions. Assumptions in this case are called hypothesis. They help to determine how two or more variables are related and whether there is a cause-effect relationship between them, which is between a particular condition and a later response. For instance, in testing "the effect of alcohol on learning" the hypothesis could be that "subjects who did not take alcohol will learn better than those who took alcohol".

Before testing hypothesis, carrying out a scientific research and generating psychological theories, a psychologist must first of all select a method of data collection. After the necessary details about the subjects have been collected, the behavioural outcome from the subjects will then form the data of the study. The data need to be processed and analyzed to achieve the goal of the researcher. Statistic is usually applied in data analysis.

The experimental approach is used in two different research settings – a laboratory setting and a field setting. Laboratory experiment is the experiment conducted in a controlled setting (laboratory) which epitomizes the ability to control or eliminate the influence of extraneous variables. This is accomplished by bringing the problem into an environment apart from the subjects' normal routines. A study on "effect of noise on learning a new subject" could be carried out in laboratory experimentation. Here, the researcher could bring two groups of subjects with the same level of Intelligence Quotient (IQ) into two classrooms. One classroom will be noisy whereas the other will be quiet. New subjects will be taught them using the same method. The result of the experiment could be attributed to the effect of noise. For instance, it could be

that those who were subjected to the quiet environment will learn better than those on a noisy environment. This is an example of laboratory experiment.

Field experiment, on the other hand, is an experiment that is conducted in a real life setting. In this case, the experimenter actively manipulates variables and carefully controls the influence of as many extraneous variables as the situation will permit. For instance, an experimenter wanted to find if people who initially complied with a small request would be likely to comply with a larger request. The basic procedure used was initially to ask one group of housewives if they would answer a number of questions about what household products they used. Three days later, the experiment again contacted these same housewives and asked if they would allow a group of men to come into their house and spend approximately two hours classifying all of their household products. Another group of housewives were contacted only once, during which time the large request was made. The housewives who initially complied with the small request significantly complied with the large request. This is an example of field experiment because it was conducted in the natural setting of the housewives' homes while they were engaging in their daily activities.

The experimental method has the advantage of enabling the researcher to control the extraneous (unwanted) variables. The use of the experimental approach has produced results that have lasted over time and have suggested new studies. This approach has proved to be extremely useful, which makes it important. Athough the experimental method have been criticized on the basis of artificiality and being time consuming, it serves as an authentic method in discovering solutions to practical human problems.

REFERENCES

Abdi, Y. (1995). The problem and prospects of psychology in Africa. *International Journal of Psychology*, 10, 227-235.

Armer, J.M. (1974). African Social Psychology: A Review and Annotated Bibliography. New York: African Press.

Ash, M.G. (1980). Wilhelm Wundt and Oswald Kulpe on the institutional status of psychology: An academic controversy in historical context. In W. Bringmann and R.D. Tweney, eds. *Wundt Studies*, Toronto: Hogrete.

Ash, M.G. (1981). Academic Politics in the History of Science: Experimental psychology in Germany, 1879-1941. Central European History 13: 255-286.

Babalola S.S. and Balogun S.K. (1994). The Development and Status of Modern Psychology and its General uses in Africa. In Balogun S.K. eds, *Basic Concepts in Society:* Government and Economy. Ibadan: Sam Bookman.

Berger, L. (1981). How psychoanalysis is a science – and how it is not. *Journal of the American Academy of Psychoanalysis*, 9: 261-275.

Boring, E.G. (1963b). Fechner: Inadvertent Founder of Psychophysics. In R.I. Watsons & D.T. Campbell (Eds.), History, Psychology and Science: Selected papers by E.G. Boring (pp. 126-131). New York. Wiley (original work published 1961).

Cardwallader, T.C. (1980). *William James' Harvard Psychology Laboratory Reconsidered.* Paper presented at the annual meeting of the American Psychological Association, Montreal.

Crews, F. (1986). *Skeptical Engagement. New York: Free*

Press.
Dawson, J.L.M. (1967a). Traditional versus Western attitudes in West Africa: The construction, validation and application of a measuring device. *British Journal of Social and clinical Psychology*, 6, 81-96.
Doob, L.W. (1960). *Becoming More Civilized.* New Haven: Yale University Press.
Dunton, L. (1895). The old psychology and the new. In L. Dunton, H. Munsterberg.
W.T. Harris and G. Stanley HALL, *The Old Psychology and the New: Addresses* before the Massachusetts School Master's Club. April 27, 1895. Boston: New England Pub. Co.
Evans R. (1984). The origins of American academic psychology. In J. Brozek, ed. *Explorations in the History of Psychology in the United States.* Lewishburg, PA: Bucknell University Press.
Freud, S. (1985). The complete letters of Sigmund Freud to Wilhelm Fliess 1887 – 1904. J.M. Masson, Trans. And-ed. Cambridge, MA: Harvard University Press.
Gaukroger, S. (1995). *Descartes: An Intellectual Biography.* Oxford, England: Clarendon Press.
Grunbaum, A. (1984). The Foundations of Psychoanalysis: A Philosophical Critique. Berkeley: University of California Press.
Heidbreder, E. (1933). *Seven Psychologies.* Englewood Cliffs, NJ: Prentice Hall.
Hopkins, M. (1870). *Lectures on Moral Science*. Boston: Gould and Lincoln.
Jacobson, E.H. and Reinert, G. (1980). *International Directory of Psychology*. New York: North-Holland Publishing Co.
Lambo, T.A. (1978). Psychotherapy in Africa. *Human Nature*, 3, 32-39.
Langfeld, H.S. (1943). Fifty years of the psychological Review. *Psychological Review*. 50; 143-145.
Leahey, T.H. (1997). *A History of Psychology: Main Currents in psychological thought*. New Jersey: Prentice Hall, Inn. Simon and Schuster.
Levine, R.A. (1966). *Dreams and Deeds: Achievement Motivation in Nigeria.* Chicago: The University of Chicago Press.
Littman, R. (1979). Social and Intellectual Origins of Experimental Psychology. In E. Hearst, ed. *The First Centre of Experimental Psychology*. Hillsdale, NJ: Erlbaum.
Macmillan, M. (1991). *Freud Evaluated: The completed Aro:* Amsterdam, The Netherlands: North-Holland.
Mundy-Castle, A.C. (1993). Human behaviour and National Development; Conceptual and Theoretical Perspective. *Ife psychologia, An International Journal*, 12; 1-5.
Nagel, E. (1959). Methodological Issues in Psychoanalytic Theory. In S. Hook ed., *Psychoanalysis, Scientific Method and Philosophy*. New York: New York: University Press.
Odejide, A.O. (1977). Traditional Healers and Mental Illness in the City of Ibadan. *African Journal of Psychiatry, 3, 99-106.*
Turner, F.M. (1974). *Between Science and Religion.* New Haven, CT: Yale University Press.
Ugwuegbu, D.C.E. (1985). *The Development of Psychology in Africa with special Reference to Nigeria. Seminar paper presented Reference to Nigeria.* Seminar paper presented to the Department of Psychology, Wayne State University, Detroit Michigan, U.S.A.

Ugwuegbu, D.C.E. (1990). Are our Gains and Pains in our Stars? *Psychology and National Development. The Case of Nigeria.* Paper presented to the Postgraduate Seminar for Command and Staff College (CSC), 12, Jaji, Kaduna.

Watson, J.B. (1930). *Behaviorism.* 2nd ed. New York: Norton. Original Work Published in 1925.

Wertheimer, M. (1922). The General Theoretical Situation. In W.d. Ellis, ed. *A Source of Gestalt Psychology. London: Routledge & Kegan Paul*

Wertheimer, M. (1925). Gestalt Theory. In W.D. Ellis, ed. *A Source Book of Gestalt Psychology*, London: Routledge, Kegan Paul.

Wertheimer, M (1978). *Max Wertheirmer: Gestalt Prophet.* Presidential Address to Division 26 (history), Annual meeting of the American Psychological Association, Toronto. The General Theoretical Situation. In W.D. Ellis, ed.

Williams, K. (1931). Five Behaviourisms. *American Journal of Psychology* 31: 257-264.

Wober, M. (1975). *Psychology in Africa.* London: International African Institute.