Determinants of Behaviour

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First published in Nigeria by

FLOXY VENTURES
No 7 Onyiuke Street Ogui New Layout Enugu. Enugu State Nigeria.

ISBN:978-356-88-11

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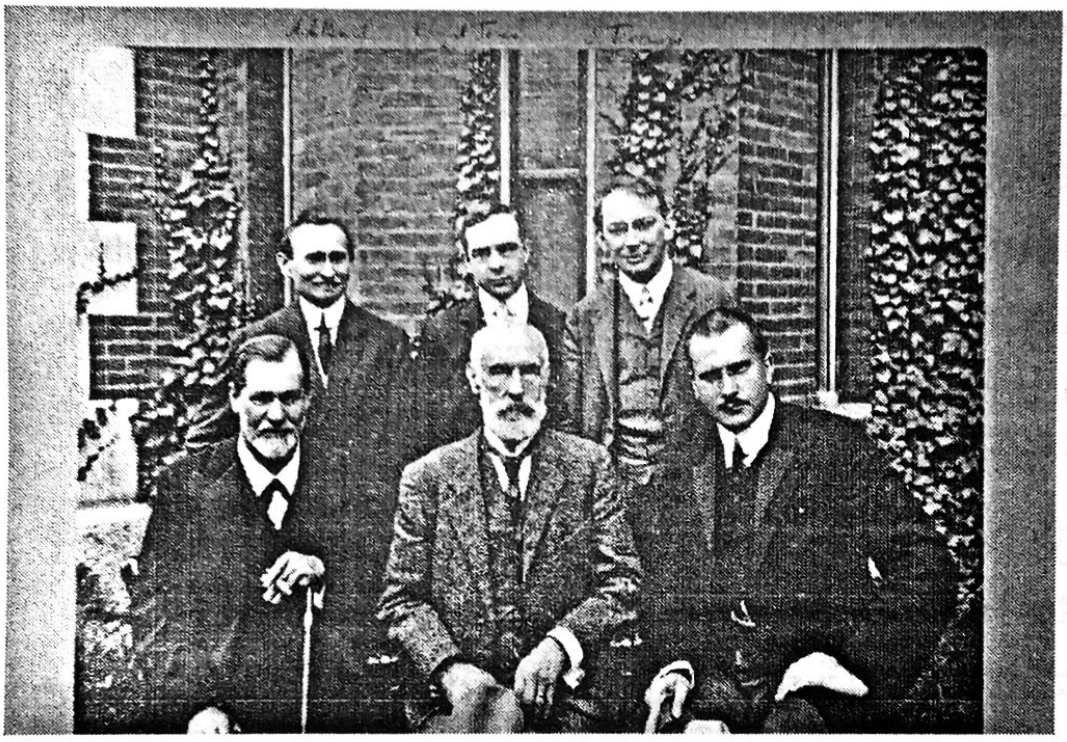
CHAPTER ONE

THE CONCEPT OF BEHAVIOUR



At Clark U. in 1909, from left (front): Sigmund Freud, G. Stanley Hall, Carl Jung; (back): Abraham A. Brill, Ernest Jones, and Sandor Ferenczi.

The definition of psychology which is the logical point, from which all generations of students begin their study of the discipline, has undergone some evolutions over the years. For instance, in its years, leading up to about 1940, psychology was defined as

the science of mental life. Then, from about 1940 to 1960, American behavioural psychologists redefined psychology as the science of behaviour, referring particularly to observable behaviour (Douglas 2006). But from the 1960's with encouragement from increasingly successful researchers on how the mind processes and retains information, psychology recaptured its interest in mental processes, while at the same time acknowledging that behaviour (manifested externally and thus observable) is an important channel for the scientific study and understanding of psychology

Consequently, in order to take care of psychology's abiding concern with internal and external happenings in man and animals, it is currently and more commonly defined as the science of behaviour and mental processes. It is now accepted that every form of behaviour has in it internal as well as external generated components, though in differing proportions. That is what has provided the impetus for an analytic approach to the study of the *Determinants of Behaviour.* It is in this sense that behaviour is regarded as the subject matter of

psychology.

Very often the term "behaviour" is taken for granted in everyday life and a diversity of meanings, both theoretical and empirical, is associated with it. Examples of such meanings are found in the use of terms like:

(a) Response (b) activity (c) action (d) movement etc

Accordingly, the following definitions of behaviour are common:

a) Behaviour involves response to stimuli by an individual, species or group. This implies that behaviour may be peculiar to an organism, characteristics of a species of organisms or learned and exhibited by a group of organisms.

b) Behaviour is an activity of an organism. The activity may be conscious or unconscious, internal or external, subjective or objective, observable or non–observable, measurable or non-measurable, overt or covert.

c) Behaviour is what organisms do, that is action.

d) Behaviour involves movements or a movement towards a goal. This implies that all behaviours are goal-directed, irrespective of the level of

awareness on the part of the organism. Behaviour involves movements that are directed towards objects in the environment or towards other parts of the body (Smock 2005).

The term organism is used here in the biological sense of all living things. Psychology as a biological and experimental science, seeks to study the behaviour of all organism. However, the ultimate focus is on the behaviour of human organism; the behaviour of other organisms is studied partly in their own right but particularly with a view to unraveling the complexity of human behaviour.

Behaviour is a mechanism for fulfillment of the needs of the organism. It is generally acknowledged that the human organism, by its very nature, has more needs to fulfill than other organisms. For instance, it has physiological/ biological needs which he shares with other organisms. He has social needs which other organisms share only in a very limited sense, which therefore means that it is predominantly human in quality and complexity. He has cognitive or intellectual needs which are almost entirely exclusive

to him.

Lower level needs generally develop and transform into higher level needs, particularly in the human organism, and since behaviours are mechanisms for or means of fulfilling needs, behaviours, like the needs they help to fulfill, can be categorized into lower and higher level behaviours in line with the quality of the need to be fulfilled. That is why human behaviour qualifies to be described as complex.

One way of understanding the complex network of human behaviours is to study it hierarchically. For instance, when studying the developing human individual who is initially dominated by physiological/ biological needs and who is bound to behave at that (low) level, attention must be paid to how he continuously interacts with his environment in order to facilitate his physiological maturity. By the time he becomes an adult, he has built up a history of many such interactions. These interactions help to form a system of organized past experience which in turn becomes a guide to future behaviour. He develops beliefs and

values concerning the world in which he has been interacting, and concerns himself as the interacting agent. These beliefs and values become the foundations of the future characteristic behaviours he manifests. The beliefs and values also influence the way he perceives and understands events, and how he deals with or behaves with regard to problems he encounters. Furthermore, the interactions lead to the development of more and more complex needs that require combining past experience in new ways, to make it possible to fulfill such needs. Thus, with psychology's analytical approach to the study of behaviour, the characteristics of the human organism and the inter relationship of those characteristics become better known and better understood. That is the major objective of this text.

CHAPTER TWO

BIOLOGICAL DETERMINANTS OF BEHAVIOUR

The previous chapter ended on the note that psychology uses the analytical approach to the study of behaviour. This approach is necessitated by the fact that behaviour is a product of the totality of the behaviour of the organism, and the total organism is complex in structure and function, and complexity is

increased by the functions. If we take the human organism which is our major and ultimate focus as an example, we can say that when he behaves by laughing, using the hands, walking with his legs or thinking and planning with his mind (to mention but a few forms of behaviour), scientists would agree that the contributors to those behaviours include his organ, system, his mind and the characteristics of his where about. This chapter begins a rudimentary analysis of the contributions of the biological organ/ system to behaviour.

Evolution in Brief:

The concept of evolution emerged from intense interest on the part of individuals in Europe, particularly in Great Britain, in the study of the way change and variety take place in living things. Such observational researchers were called naturalist since their general focus was on nature. The best known of these were Charles Darwin and Alfred Russell Wallace, both of whom initially worked independently and almost simultaneously, to produce a theory of evolution. Their studies took them on sponsored expeditions by sea to the shores

and jungles of South America in the case of Darwin, and to the Far East, particularly the Malay Archipelago, in the case of Wallace.

After reading Malthus' (1798) publication on the causes and effects of over-population and how this could be checked as embodied in "An Essay on the principles of population, as it affects the future improvement of the society," Darwin was convinced he had an explanation for the way species of living things came about (evolved) and how their populations increased or decreased qualitatively. A little latter, Wallace also came across Malthus' essay, read it, came to the same conviction that Darwin had, put his explanation of evolution on paper, and sent a copy to Darwin. Darwin was surprised at the coincidence of their ideas, conclusions and convictions about evolution. Wallace recorded the flash of explanation that came to him as follows:

"It occurred to me to ask question, why do some die and some live? And the answer was clearly, that on the whole the best fitted lived. From the effects of diseases the most healthy escaped; from enemies, the strongest the swiftest, or the most cunning; from

famine, the best hunters or those with the best digestion; and so on. Then I at once saw, that the ever present variability of all living things will furnish the material from which, by the mere weeding out of those less adapted to the actual conditions, the fittest alone would continue the race. There suddenly flashed upon me the IDEA of the survival of the fittest. The more I thought over it, the more I became convinced that I had at length found the long-sought-for law of nature that solves the problem of the origin of species.... I....wrote it out carefully in order to send it out to Darwin by the next post, which would leave in a day or two." (In Rathus, 2000).

On reading the write-up sent to him by Wallace, Darwin exclaimed." I never saw a more striking coincidence; if Wallace had my MS. Sketch written out in 1842, he could not have made a better short abstract!" (Rathus 2000)

Thus in 1859, Darwin published his famous book on evolution: "The origin of species," which shocks all sectors of society: religious, political and scientific. Evolution then came to be defined as a

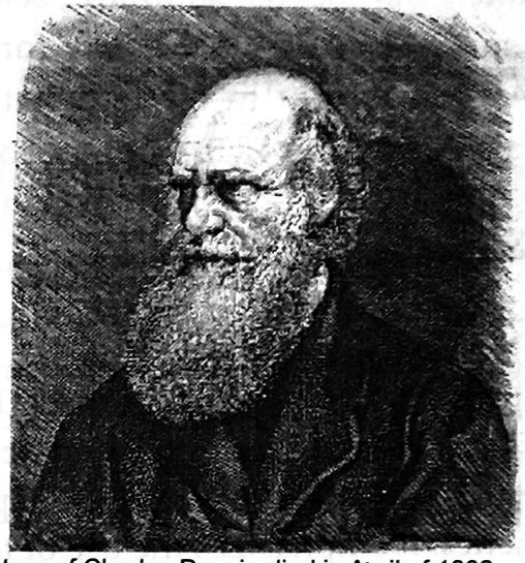
progressive series of changes in the structure and behaviour of organisms, taking place through a long succession of generations, and dependent on variation, natural selection and inheritance. Implied in this definition is the idea that the process of natural selection ensures that the affected organism is suitable for or can survive a specific environment.

It also implies that variety/individual differences (which is the spice of life) among organisms are guaranteed. Rathus (2000) states emphatically that evolution has its foundation in variety and creates diversity. Without variety and the accompanying individual differences, the study of science generally (and particularly psychology with a major focus on the how and the why of differences in human behaviour) will not be worthwhile or motivating. Indeed, Rathus (2000) adds: "...of all animals, man is most creative because he carries and expresses the largest store of variety. Every attempt to make us uniform, biologically, emotionally and intellectually, is a betrayal of the evolutionary thrust that has made man reach its apex. In the biological realm, current pressures to clone both man and animals, would

seem to be one such betrayal. Humanity would be the greatest loser if variety and individual differences were destroyed.

As it affects man, evolution-structural and/ or behavioural – is an extension area of study. It cannot be covered in detail in this introductory text. But one or two observations are in order. Structural evolution implies the gradual physical transformation (over hundreds of thousand of years) of the great apes into modern man. But behaviourally, evolution is understood in terms of the functional correlation between biological and socio-cultural changes that take place in the course of human growth and development from conception, through childhood, adolescence, adulthood and old age, to death. It is in the biological and socio-cultural aspects of evolution that the processes of variation (as in genetic mutation) and natural selection (e.g. of the chance fertilization of an ovum by a sperm) are easily noticeable. The socio-cultural aspect will be given greater attention in Chapter 4, but it is appropriate and natural to complete this chapter with a focus on the bio-genetic processes of variation and selection.

Behaviour Genetics



Picture of Charles Darwin died in April of 1882

The brief consideration of evolution that we have had in this chapter shows that the theory of evolution that emerges from the studies of Darwin and Wallace, emphasized selection above all else. In other words, as organizations increased in population in specific environments, Darwin and Wallace found that individuals in the population varied in quality and capability to survive, as a consequence of *gene mutations* from one generation to the next. Each individual, according to its capability, was seen

exact/respond to behave, in the specific environment that facilitated its being naturally selected for continued survival or paved the way for its being dropped. All these point to the fact that *behaviour* genetics is a natural outgrowth from the concept and theory of evolution. It is more modern than evolution and deals more directly with the *biological*

DETERMINANTS OF BEHAVIOUR.

According to Broadhurst (2006), behaviour genetics is a cross-disciplinary specialization between genetics and psychology. Some experts call it psycho genetics. It emphasizes the use of techniques of genetics in the analysis of behaviour. Its importance therefore lies in the fundamental nature of biological processes and in our understanding of human social behaviour.

CHAPTER THREE
GENETIC PARSE

Genetics parse is the study of how traits (characteristics) are passed on from one generation to the next, whether it is in plants, animals or humans. A trait in this contest means any inherited characteristics e.g. height, eye colour, texture of the hair, or something as profound as the inability of the blood to clot (hemophilia) etc

It is at this point that we bring in Gregor Mendel. Mendel was an Austrian/Moravian monk.

Gregory Johann Mendel

He came from a poor background, the son of a poor farmer. He had little education. The head of the monastery, the Abbot, sent Mendel into the University of Vienna so that he could get a formal diploma as a teacher. But he turned out not to be a clever student! Bronowski (2005) observed that Mendel's teacher wrote that Mendel lacked "insight and the requisite clarity of knowledge" and therefore failed him. Mendel thus went back to what he had learned in the farm, and to what fascinated him most, namely, plants, particularly the garden pea, including shapes of the seeds, colours of the seeds, etc, ending his list of the comparative characteristics with tall-stemmed versus short-stemmed varieties, for instance. He cross-bred them.

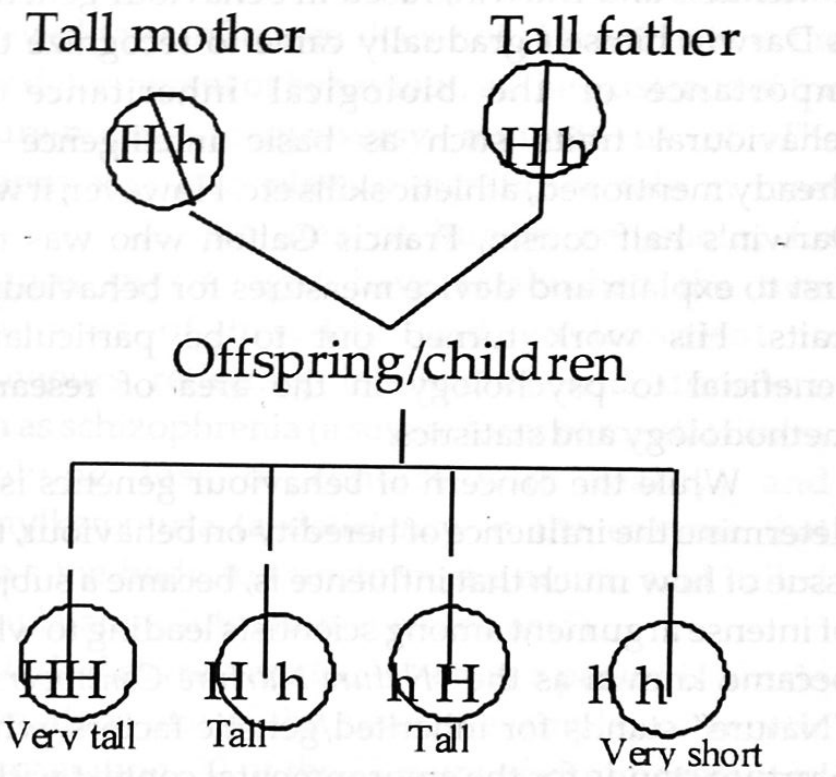
The traditional view about cross-bred or hybrid plants, in his time, was that their off-spring would have averages of the characteristics of the parent stock. Mendel's view was radically different. He guessed that a simple character, like height, was regulated by two particles (now called genes). Each parent contributed one. If the two genes were different, one would be dominant, and the other

recessive. In the first experiment, Mendel's guess was confirmed; the hybrid produced plants that were all tall (not average), meaning that tallness was dominant. In the second generation, the self-fertilized hybrid produced a majority of tall plants and significant minority of short. He was able to conclude that the particular combination of genes that the offspring received would determine the direction of its development. Mendel's findings heralded the beginning of modern behaviour genetics, even though his work remained unrecognized for over 30 years, until in 1990 when genetics started blossoming. The issue as it concerns us here really is, "What genetic characteristics do we inherit from our forbears, and how do those characteristic affect our all-round growth and development such that we consistently behave the way we behave?" The answer to that question necessitates, among other things, consideration of how heredity works.

Cell Mechanisms in Heredity. A lot of advances have been made in the knowledge of the mechanisms of heredity since the days of Mendel. We know, for

example, that genes exist in the nucleus of every living cell. We know that genes are lined up in thin thread-like bodies called chromosomes (chroma-colour, soma-body). Chromosomes, in turn are arranged in pairs. Mice used commonly in laboratory experiments, have 20 pairs, monkeys have 27, and garden peas have 7, while human beings have 23 pairs in every normal body cell. The 23 pair in man is invariably the sex cell. Each set of chromosomes carries a complete set of genes. Any given gene may exist in two or more forms. For instance, we can think of a gene for height as having one form "H" that will result in a very tall person, and another form (small) "h" that will result in a very short person. If a child receives the "H" gene from both parents, he will, in normal circumstances be very tall. If he receives the "h" gene from both parents, he will be very short. But if he inherits a (Capital) "H" gene from one parent and a (small) "h" gene from the other, he will be tall because the "H" form is dominant while the "h" is recessive. It is to be noted that even though the person who received the "H" gene from one parent and "h" gene from the other, is himself tall, the recessive "h"

gene for shortness is still carried by him and can be passed on to one or more of his own children when he later gets them. It is therefore not a surprise if very tall parents have among their children, very short ones and vice versa. The permutation can be illustrated thus:



The same law that applies to height applies to other genetic or inherited characteristics, such as intelligence, eye colour, facial structure, hair type etc.

It is obvious from the brief comments on the mechanisms of heredity, that genetic characteristics in a person have significant influences on both observable and unobservable behaviours. The works of Mendels and Darwin, fused in behaviour genetics as Darwin himself gradually came to recognize the importance of the biological inheritance of behavioural traits such as basic intelligence as already mentioned, athletic skills etc. However, it was Darwin's half cousin, Francis Galton who was the first to explain and device measures for behavioural traits. His work turned out to be particularly beneficial to psychology in the area of research methodology and statistics.

While the concern of behaviour genetics is to determine the influence of heredity on behaviour, the issue of how much that influence is, became a subject of intense argument among scientists leading to what became known as the *"Nature-Nurture Controversy"* "Nature" stands for inherited/genetic factors, while Nurture stands for the environmental context within

which the genetic factors undergo development. The questions can be put this way: "Are you the you because of your genes or because of your environment?" Researchers using animals other than humans have detected hereditary influences in such characteristics as general activity, willingness to explore strange environments, aggressiveness, eating habits and territoriality. But the demonstration of hereditary influence does not mean that it is the only determinant of behaviour, as the existence of the nature-nurture controversy reminds us of. The environment also plays a significant role in most behaviour. In the area of human behaviour, for instance, psychologist have established the twin influences of heredity and environment in behaviours reflecting intelligence and disorders, such as schizophrenia (a severe form of mental illness involving loss of contact with reality) and phenylketonuria (a deficiency in the enzyme that allows the body to transform the amino acid called phenylalanine into another amino acid).

Sex-linked characteristic: Whether a person is a male or female is one of the clearest examples of genetic determination. 22 of the 23 pairs of chromosomes in

human cells are structurally similar and carry equal amounts of genetic information. However the members of the 23rd pair, *the sex chromosomes, are dissimilar*. Females have X (XX) chromosomes (So named because when observed with a microscope they look like the letter X). But males have one X chromosomes and one smaller y chromosome (so named for its resemblance to the letter y). What this means is that the genetics make up of the father's sperm cell (with an XY chromosome) determines the sex of the child. The mother can only offer an X chromosome in the cell. Accordingly, if the father contributes an X chromosome to fertilize the egg, the child will be a girl, but if a Y chromosomes, the child will be a boy. The Y chromosome appears to contain some kind of genetic information that directs certain cells in the unborn child, to form the testes, a principal male characteristic. The hormones produced by the testes then take over and cause the other male characteristics to develop.

For psychological, medical and other reasons, it is important to note that the Y chromosomes is smaller than the X chromosomes, and therefore cannot carry as much information as the X

chromosome. This explains why several inherited problems occur more frequently in males than in females. For instance, haemophilia (a disease that prevents the blood from clotting) may be carried as a recessive gene in one of the woman's X chromosomes. She herself will not suffer the disease because the other X chromosomes will carry the dominant gene that will overwhelm the recessive one and cause her blood to clot normally. But if she passes the X chromosomes with haemophilia to a son of her's the Y chromosomes inherited from the father by that son, will not have the counterbalancing dominant gene. The boy will therefore become haemophilia. Otto and Towle (2001) say that Queen Victoria of England carried a recessive gene for haemophilia and passed it on to many of her descendants. One of her sons and several of her grandsons and great grandsons inherited the disorder.

Other sex-linked characteristics include red-green blindness- a form of colour blindness in which red and green are confused. The condition could cause havoc at traffic light junctions for a driver who has the deficiency. Certain forms of muscular dystrophy (wasting disease) are also sex linked. The

recessive genes that cause these deficiencies are always carried by one of the mother's X chromosomes. Baldness in men, although not necessarily a deficiency, is said to be carried in the woman's X chromosome as well.

Sex chromosomes can also be inherited abnormally as in the genetic make-up identified as XYY, resulting in a rather gigantic male. There was a time when researchers in behaviour genetics thought that XYY persons had criminal tendencies. There has been no definite proof of this. If anything, criminality in such persons may be environmentally triggered. However, considering the small number of persons involved, it may be expedient to wait for further research before reaching a conclusion.

Other Genetic Abnormalities/Defects. It is not every genetic abnormality that is sex-linked. Occasionally, chromosomes pairs fail to separate normally. If fertilization takes place in such circumstances, the resulting organism will be defective, if it survives at all. These genetic abnormalities act to disrupt the biochemical processes in the organism, and these in turn, affect the behaviour of the organism. One such abnormality is *Down's syndrome or Mongolism.*

Persons with this condition are severely mentally retarded with IQ's ranging between 20 and 60, whereas an average IQ is expected to be 100, the distinctive physical features are slanted eyes, flattened facial contours and a thick tongue that is often sticking out. Broadhurst (2005) notes that about one baby in every 600 is born with Down's syndrome. In addition to mental retardation, such children usually have rounder faces and shorter limbs than normal children, and suffer heart, eye and ear problems. With today's better medical care, however, and with sufficient love and education, some Down's syndrome children can become self-sufficient adults. The condition has been traced to the chromosomes pair that is numbered 21. The victim of Down's syndrome has inherited more than the two normal numbers of this chromosome pairs. -sometimes a complete third chromosome and sometimes just one extra fragment of a chromosome. An even more common genetic abnormality peculiar to the black race is sickle cell anaemia.

Methods of studying Human Heredity: It is necessary to know how to determine whether a human behavioural attribute has a genetic basis or not. One

method is the study of twins. There are two kinds of twins: identical and fraternal twins. Identical twins originated from a single fertilize egg or ovum that splits into two identical replicas, which in turn develop into two identical individuals. In contrast, fraternal twins arise when two distinct eggs (ova) in the female reproductive tract; are fertilize by two distinct sperm cells. As a result, the genetic similarity between fraternal twins is not greater than the similarity between ordinary brothers and sisters.

Identical twins are of particular interest in the study of *genetic determinants of behaviour.* If identical twins turn out to be more similar in a certain characteristic, e.g. intelligence, than fraternal twins are, then one can conclude that these characteristics are, in large measure, *genetically determined.* Genetic similarities between identical twins have in fact been found in a number of psychological characteristics such as performance in intelligence tests. Such similarities cannot be guaranteed in fraternal twins. The most significant studies involving the comparison of twins have involved the heritability of schizophrenia, which is a mental disorder characterized by withdrawal from reality,

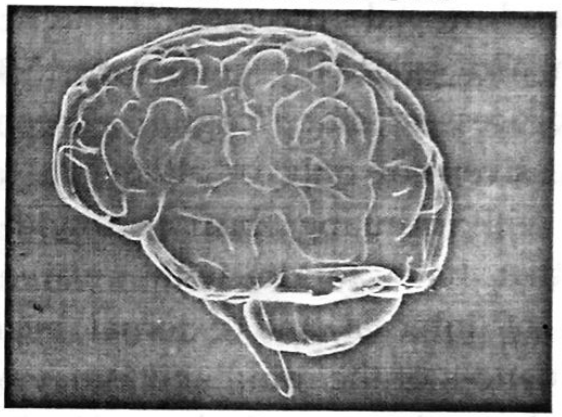
disturbance in the pattern of thinking, delusions, hallucinations etc. In a classic American study of 1000 pairs of twins (Kallamann, 2006) it was discovered that where one fraternal twins was schizophrenic, the other was schizophrenic in 10 percent of the cases. But for identical twins, when one twin was schizophrenic, the other was schizophrenic in 69 percent of the cases. This gave a very strong basis to conclude that schizophrenia is highly heritable.

Another way to measure the heritability of traits/characteristics is through the study of the whole family groups. For instance, in cases where both parents of a schizophrenic are themselves schizophrenic, between 45 and 68 percent of their children are found to be schizophrenic. Where neither parent is schizophrenic, the percentage of their children who turn out to be schizophrenic is only 5 to 10 percent. Here again, there is strong evidence of a genetic basis for schizophrenia. However, findings connected with family groups (As opposed to those involving identical twins) do not rule out the possibility of children learning the schizophrenic behaviours of their parents. That is to say that growing up in a household in which both

parents are schizophrenic, could cause a child to become schizophrenic even if he does not have a genetic predisposition for that disorder. It also follows that a child with a genetic predisposition to become schizophrenic may never become schizophrenic if the environmental triggers are not potent.

CHAPTER FOUR

COGNITIVE DETERMINANTS *Of* BEHAVIOUR



In the opening pages of this book, we drew attention to the fact that in an initial attempt to a scientific definition of psychology, it was said to be a study of the mind. The definition held sway until the emergence of behaviourism which conveyed the view that for psychology to be truly scientific, its subject matter had to be observable. Behaviour was characterized as observable, while the mind which

was then commonly analyzed through introspection was not considered to have the same scientific credentials (observability) as behaviour. However, with the revolution in neurophysiology, it soon became clear that the mind has influences on behaviour and vice versa, and the study of psychology as a science, has to take account of both behaviour and mental processes. The term "mental process" in turn gradually gave way to the term "cognitive processes", since "cognitive" seemed to be more expressive, not only of all mental activities associated with thinking, but also with all the processes that have to do with awareness and knowledge of internal and external events. The mutual influences of the mind and behaviour have, for instance, been given practical proof in the form of psychological treatment tagged cognitive-behaviour therapy.

According to Myers (2005), cognitive–behaviour therapy is the type of therapy that teaches people new, more adaptive ways of thinking and acting/behaving, based on the assumption that thoughts intervene between events and our

emotional reactions. Cognition is therefore legitimately considered a determinant of behaviour through its various components or factors. Cognitive components have been identified to include: thinking, learning, language and perception, among others.

Thinking as a Determinant of Behaviour:

Thinking has been recognized as a characteristic peculiar to the human organism. Marx (2007) defined it as a general term for *subjective* processes in which representations of real objects and events are manipulated. In the same vein, Bruno (2000) defined it as a mental process of employing symbols, images, ideas and concept representing past experiences, future possibilities and external reality.

The definitions agree on the fact that when one thinks, he is able to deal with external objects and events by means of images and words that stand for such objects and events. He does not therefore need to be stimulated by the actual objects and events themselves. It is this feature of thinking that makes it so powerful, useful and effective because, through thinking, reality can be constructed and or

reconstructed. Hypotheses can be generated and the individual can be moved to some form of action or behaviour. From this point of view, there is no doubt that thinking is a powerful cognitive determinant of behaviour.

Thinking allows the individual an additional means of evaluating his needs and adjusting to them and the world around him. It does this in two principal ways that relate to the well being of the individual:

a) Through reasoning, which prepares the individual for dealing with the environment as it is, resulting in productive or creative thinking and problem-solving? This way, behaviour is realistically and adaptively determined.

b) Through fantasy, which directs the individual away from dealing with the real environment, resulting in autistic, wishful, self – directed thinking, often manifested in Freudian mechanism, such as repression, projection, rationalization, displacement, regression, etc? That way, behaviour is unrealistic and maladaptively determined.

Learning as a Determinant of Behaviour:

Learning is normally defined as the process by which relatively permanent changes in behaviour are brought about through experience and practice. Learning can be formal, involving planned, deliberate and directed delivery and receipt of information, or informal, involving covert, conscious or unconscious adoption of processes and practices that lead to positive or negative additions, subtractions or adaptations in the behaviour of the individual. It is clear from the definition that the sole purpose of learning is to determine behaviour.

Extensive studies of how behaviour is either built up or eliminated have been carried out over the years. These studies have generated theories such as, the classical conditioning theory, initiated by the Russian physiologist, Ivan Petrovich Pavlov, Operant conditioning theory, initiated by the American psychologist, B.F. Skinner, Social Learning theory, initiated principally by the American social psychologist, Albert Bandura.

Classical Conditioning involves learning to transfer a response from a stimulus that naturally

provokes or elicits the response to some neutral stimulus that does not naturally produce such a response. Evidence of the influence of this form of conditioning emerges when the neutral stimulus elicits the expected response.

In Operant Conditioning, the learner operates in or explores his environment until he gets what he desires or can find a way of avoiding what he finds unpleasant. The conditioning is done by reinforcing response that leads to the solution of the problem and ignoring or punishing incorrect responses. That way, behaviour is shaped, modified or determined in the direction desired.

Social learning theory is an approach to effecting the acquisition of behaviour that stresses learning by observing others who serve as models in the exhibition of the behaviour, the learner admires. The effect of the model may be to allow learning by imitation and also may be to show the leaner whether the responses he already knows should or should not be performed. In this way, the behaviour of the learner is consciously or unconsciously influenced. Details about these learning theories are important

but are not within the context of this discourse. As the individual advances to higher level course, he will, of necessity, have to cover those theories in greater detail for later practical use as demonstrated in the next paragraph.

Learning principles have led to the device of an important technique called behaviour modification. Behaviour modification is an attempt to change, modify or shape people's behaviour through the use of operant conditioning techniques. It is used in therapy, in schools, in businesses, and in a wide variety of other situations in which the results of effort become sources of encouragement for continued and, often, increased performance. In the schools, for instance, teachers are trained on how to effectively change their students' undesirable behaviours. One form of behaviour modification that is used in both schools and businesses is the *Token Economy* by which people are rewarded for performing acceptable behaviours by being given tokens (e.g. chips, purchase stamps etc) which may be exchanged for privileges or something they want.

In therapy or behaviour-therapy, there is a

general approach to psychological treatment which (a) holds that the disorders which therapy seeks to address are produced by maladaptive learning and must be remedied by re-education, (b) proposes techniques for this re-education based on principles of learning and conditioning, and (c) focuses on the maladaptive behaviours as such, rather than on hypothetical unconscious processes of which the maladaptive behaviours may be expressions. Stealing, chain-smoking, excessive drinking, rape, womanizing e.t.c are examples of maladaptive behaviours that behaviour therapy can deal with.

Strongly associated with learning as a determinant of behaviour is memory, which involves retention of learned materials, recall of such materials and the transfer of what is learned to relevant settings. Thus, together with learning, memory is a cognitive factor and a determinant of behaviour. Memory deficiencies can become major obstacles to effective acquisition of learning and the expression of learning in behaviour.

Language as a Determinant of Behaviour:

While thinking is the internal process of planning for

an organizing behaviour, language is regarded as the vehicle that conveys thought. That is to say that, among human beings, at least, the thoughts of one person is communicated to others through language, for action or reaction. Thus, language is not only related to thought but influences and is, in turn, influenced by thought processes. A psychological definition of language is that it is a conventional system of expressive signs, functioning psychologically in the individual as an instrument of conceptual analysis, synthesis, and socially, as a means of intercommunication.

Language and related behaviours can be described in terms of quality and richness. The quality of language influences the quality of thought and action. Studies have shown that in cultures with languages that are limited in the variety of words available for describing and differentiating objects in the phenomenal world, there are corresponding limitations in thought and advancement-socially, technologically, economically and educationally.

Language has social functions, prominent among which is communication which is the life

blood of societies and culture. It is a principal means of socialization at all levels of human development. The absence of communication and information generates suspicion and hostility among peoples. Language also serves the function of bringing about conformity.

Language is acknowledged to be one of the most powerful instruments at the disposal of human beings. For instance, in terms of behaviour determinations, its power can be found manifest in:

a) Instruction in the educational process;
b) The subjugation of people through its influence on their minds and cultures;
c) Exciting people to jubilation or violence and war
d) Psychological healing and counseling. In this respect, language has been described as a soothing balm.

Perception as a Determinant of Behaviour:

Perception can be seen as a bridge between the physical world, through the physiological field, and the cognitive world. That is why it is fittingly defined

as a process by which we become aware of our sensations of the world around us and our (cognitive) interpretations of these sensations. The awareness and the interpretation which are central to perception, naturally lead to responses, actions, reactions or behaviours. This is the sense in which perception is a cognitive determinant of behaviour.

Most of the facts about perception can be summarized around two basic characteristics, namely (a) *Selectivity and (b) Organization.*

Selectivity:

Perception has to be selective because the perceiving person himself has limited capability to cope with the variety of sensations that impact on him at any one time. It follows, therefore, that his system should select for processing those sensory experiences that are required for the needs of the system. At any moment the individual does not and cannot acquire knowledge of all events in his physical environment. What is selected from the mass of events that surround him depends on the basic characteristics of the sense organs, and on the condition of the organism as a whole. The sense organs themselves

are limited as shown by the fact that not every events acts as a stimulus upon a sense organ. For instance, one type of event stimulates the hearing mechanism while another stimulates the visual mechanism. Moreover, the stimulus for any sense organ must reach a certain magnitude to be noticeable and perceptible. Notice ability and perceptibility are also subject to individual differences.

The condition of the organism as a whole sets limits to its perceptual capacity and hence to its consequent responsiveness or behaviour. Typical conditions include *age, fatigue and chemical influences,* all of which can be considered as physiological factors of perceptual selectivity. Age changes in sensory capacities mark the organism's schedule of development and decline. For instance, the upper limit of audibility gradually declines after the age of 20 years. Fatigue is typically accompanied by loss of alertness and increase in perceptual errors. Chemical influences (e.g. alcohol) can remarkably alter perceptual capacities.

Psychological factors related to the selectivity of perception are grounded under attention. For

instance, the fact that a person chooses to listen to music rather than a conversation when both are going on at the same time, is psychological selectivity-the mind intervenes for one reason or another, to impose preference. The term "attention" therefore denotes the fact that an individual selects out of a complex environment, certain stimuli in favour of other psychologically available stimuli. He is then said to "give attention" or attend to the selected stimuli.

There are certain factors which favour attention. The first of these are those regarded as *external stimuli factors* which tend to create a difference or contrast. They include:

a) **Change:** e.g. a changing flickering light is more readily perceived than a constant light of the same magnitude. The use of flickering neon multi-coloured lights to advertise is a typical example of the factors of change.
b) **Movement:** e.g. a waving hand is more readily perceived than one held upright.
c) **Novelty**: e.g. the lone man in a crowd of women or the lone woman in a crowd of men readily attracts attention because it is

something novel, uncommon.

Apart from contrasts in external stimuli, we have intensity or magnitude as a factor favourable to attention. For example, the loudest voice may win an argument because its prominence will be the most readily attended to.

Note should be taken of the fact that attention due to stimulus factors has been termed involuntary attention.

While attention as a factor of perception directs perceivers toward behaviour –related objects in the environment. There are other factors that are deliberately used to direct attention away from certain objects in order to determine behaviour in unexpected ways. Such factors include *Camouflage,* which is inversely related to attention. Just as the typical; advertising problem concerns how to increase stimulus factors in attention, the typical problem in military tactics is how to camouflage or reduce the "attention value" of certain objects. This is accomplished by reducing differences between the object and its surroundings. This may be accomplished by:

a) **Masking:** The object so as to make it resemble the surroundings, or
b) **Alternating the background** to match the characteristics of the object, thereby embedding it in its surroundings.

The second groups of factors that favour attention are internal in nature. A person not only gives attention to objects which "command attention", but also attends to what he *expects* to perceive, what he *wants* to perceive and what *interests* him. Attention characterized by such factors is said to result from 'an act of will" and is therefore *voluntary* attention. Voluntary attention manifest in:

a) Momentary preparation or set toward action. Thus an athlete readily perceives the **"GO"** sign, when he is prepared by the "**READY** and **SET** signals which precede the GO.
b) Present organic needs, Hunger, for instance, are an organic need. Thus, to a hungry person, stimuli related to food, readily command attention.

Another significant internal factor is enduring interest which makes a person readily perceive what

corresponds with his long-range interests and attitudes. Because this form of attention seems to proceed without deliberate intent or act of will, it is referred to as habitual attention.

Organization: Perception is not only selective, but organized. Characteristically, several sense organs tend to contribute to a single perceptual experience. For instance, in the perceptual experience of food, not only taste, but also smell, temperature and touch are involved. It is obvious therefore that in perception, the contributions of the relevant sense organs have to be organized to facilitate awareness and interpretation of the perceptual object in its wholeness rather than in its parts. Even from the rather telescopic presentation of it in this chapter, there can be no doubt that perception in all its ramifications, is an important determinant of how and when we will behave toward the perceptual object. It is also important to realize that the cognitive factors work interactively for the consolidation of knowledge of an object. For instance, a perceptual object can be a subject of thinking, of learning as well as of language or communication.

CHAPTER FIVE
SENSATION AND PERCEPTION

SENSATION

Sensation is the process by which the sense organs-the eyes, the ears, the nose, skin etc gather information about the environment which is then relayed to the brain. In other words, sensation can be constructed as the process of receiving, translating and transmitting information from inside and outside the body to the brain. This implies that apart from the five known senses of vision, hearing, smell, taste and touch, the vestibular sense (the sense of balance) and the kinesthesia (the sense of bodily position and movement) are involve. The former collects information from within or inside the body that is internal environment. Sensation is experienced when stimuli objects or events that stimulate an organism to respond from the environment impinge upon the sense organ. These are connected to the sensory areas of the body through neutral activities as mediated by neurons-chemical messengers who are specialized in conducting or transmitting nerve impulses or electro chemical energy from one nerve cell to the other.

A neuron is equally capable of receiving information or stimulation directly from the external environment.

Sensation is the process that detects stimuli from one's body environment. The process of sensation begins with a stimulus in the internal or external environment. The stimulus then excites the sensory receptor cells where it is transformed into neural activity or impulse that can be processed by the brain. This is known as sensory transduction and it occurs in all the sensory systems. For example, a stimulus such as noise may be experienced by the ear when it impinges in it and this is relayed by neural activity to the auditory cortex of the brain and the individual will correspondingly experience the sensation of hearing. Equally, another stimulus may impinge on the eyes and the individual will experience a visual sensation i.e., the sensation of sight. Thus each of the sensory system is specialized to respond to a different type of stimulation, for instance, the eye is responsive to light (vision), and the ear is responsive to the movement of air molecules, i.e. noise or sound while the nose and

tongue are responsive to chemical stimulation.

One can equally construe sensation as physiological behavioural phenomenon of hearing i.e. sound waves, smelling i.e. odour molecules or olfactory, testing (gustation) seeing (vision) and feeling (touch) e.g. feeling of hot or cold temperature, pain and pressure. Sensation is a measure of how attentive we are to our environment. Information or stimulation collected by the senses is sent to the brain by neural activities via the peripheral nervous system (PNS) and this is normally done in any of these ways:

a. Transduction
b. Reduction
c. coding

TRANSDUCTION: Transduction as stated above is the process by which energy stimulating a receptor is converted into neural impulse.

REDUCTION: Reduction is the process of selecting and filtering incoming sensation with a view of determining their importance.

In the process of sensory reduction, our sensory systems do not only filters incoming sensations, but also analysis their relative importance by sending a

neural impulse to the cortex of the brain.

CODING: Coding is the process that converts a particular sensory input into a specific sensation. Coding makes it possible for our brain to differentiate between various incoming sensation such as sound, smile, vision etc.

PERCEPTION

Perception refers to the way our environment looks, feels, tastes, sounds and smells. It is an individual's awareness of mind and reaction to stimuli. In other words, perception refers to the world of experience. The world has seen, heard, smell, felt and tested by an individual.

Perception can also be defined as the process of selecting, organizing and interpreting sensory data into usable mental representations of the world. It is highly an individualized aspect of behaviour, for it is the way each person processes the raw data he received into meaningful patterns.

However, individual perception of the same event may vary with time that is; an individual may have different perceptions of the same patterns on

different occasion for example, rain may evoke sadness at a time and joy at the other time.

Psychologists are interested in perception because our behaviours are determined greatly by the way in which the world is perceived. Perception must be emphasized though it depends on the following factors. The nature of the stimulus or stimuli, the effectiveness of the individual's sense organs, attention span, the organization of the stimuli, the context in which the stimuli occur, mental or (bodily conditions at the moment of perception), past experiences, values and attitude (feeling of pleasantries or un-pleasantries).

Perception and sensation are inter-related but different psychological constructs, whereas sensation is concerned with the process of receiving sensory stimuli from both internal and external environment. Perception refers to the process of selecting, organizing and interpreting those stimuli meaningfully. In other words, the two terms make use of our senses but at different levels. Sensation proceeds perception.

Douglas (2006) opined that perception is the

second response of the brain to a stimuli, while sensation is the first response..

Psychologists divide perceptual processes into three parts and interpretations.

SELECTION

Selection refers to the process that a great number of stimuli impinge on our senses but we tend to select only the ones that are meaningful to us, i.e. the ones we like.

ORGANIZATION

Organization is a fundamental perceptual process commonly referred to as the sorting of sensory data into forms, patterns or shape. When we talk of organization we imply form or depth perception.

INTERPRETATION

This involves the analysis of this perceptual stimuli and this is greatly influenced by many factors e.g. cultural factors, value system, mental set etc.

Our perception can be faulty. This results when our sensation does not agree with our perception. An illusion will result if this happens. Thus, illusion is misinterpretation of an experience of sensory perception.

CHAPTRER SIX
ATTITUDE AND BEHAVIOUR

What is your opinion on the death penalty in kidnapping, stealing, secret cult and examination malpractice? Which political party does a better job in running the country? Should prayer be allowed in schools? Should violence on television be regulated? Chances are that you probably have fairly strong opinions on these and similar questions, you have developed attitudes about such issues, and these attitudes influence your beliefs as well as your behaviours.

Attitudes are an important topic of study

within the field of social psychology. What exactly is an attitude? How does it develop? Continued reading will make one to understand how psychologists define this concept; how attitudes influence our behaviour and things we can do to change attitudes.

WHAT IS AN ATTITUDE?

An attitude can be defined as a positive or negative evaluation of people, objects, events, activities, ideas or just any thing in your environment. According to Douglas (2006) Attitude is defined as a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour.

Psychologist defines attitudes as a learning tendency to evaluate things in a certain way. This can include evaluation of people, issues, objects or events. Such evaluations are often positive or negative. Example, you might have mixed feelings about a particular person or issues.

COMPONENTS OF ATTITUDE

Researchers also suggest that there are several different components that make up attitude.

1. **An emotional Component**: How the object,

person, issue or event makes you feel.
2. **A Cognitive Component**: Your thought and belief about the subject.
3. **A Behaviour Component**: How the attitude influence your behaviour.

Attitude can also be explicit and implicit. Explicit attitudes are those that we are consciously aware of and that clearly influences our behaviour and belief while implicit attitudes are conscious, but still have an effect on our beliefs and behaviours.

HOW IS ATTITUDE FORMED

Attitude forms directly as a result of experience. They may emerge due to direct personal experience or they may result from observation, facial roles and social norms which relate to how people are expected to behave in a particular role or context, social norms involves society's rules for what behaviours are considered appropriate.

Attitude can be learned in a variety of ways. Consider how advertisers use classical conditioning to influence your attitude towards a particular product. In television commercials, you see young beautiful people having fun on a tropical beach while enjoying

a sport drink. This attractive and appealing imagery causes you to develop a positive association with this particular beverage. Operant conditioning can also be used to influence how attitudes develop. Imagine a young man who has just started smoking, whenever he lights up a cigarette, people complain, chastise him and ask him to leave their vicinity.

This negative feed back from those around him eventually curses him and he tends to give up the habit.

Finally, people also learn attitudes by observing them. When some one you admire greatly espouses a particular attitude, you are more likely to develop the same beliefs, for example: children spend a great deal of time observing the attitude of their parents and usually begin to demonstrate similar out looks.

ATTITUDE AND BEHAVIOUR

Attitude influences the behaviour of the individuals. Attitude is a usual way of doing things. Successes and failures in life depend upon the attitude of the individuals. If attitude is positive, then human relation will be positive and positive human relations are necessary for a successful life.

Attitude is a disposition to approach an idea, event, person or an object.

It is a tendency to act in one way or the other towards an event, object or something (i.e. idea, person, object, food, colour and furniture, virtually every thing.

CHANGE OF ATTITUDE

Reward and punishment build up attitude. Attitude can be changed if we differentiate negative attitude from positive attitude. Positive attitude can bring positive change in life.

It is difficult to change attitude but with some effort, it can be done. A positive attitude is a pre-requisite for change and development.

If anybody has negative attitude towards changes, this attitude will extend to anything representing change, i.e. Leaders, technology, meetings or any process of change.

TYPES OF ATTITUDE

Attitude is something that lies between emotions and thought processing. Attitude may be positive or negative. If some one has good feelings about something, e.g. towards his/her work, or people, then it is positive attitude otherwise, it would

be negative.

Positive Attitude: The predisposition that results in desirable outcome for individuals and organizations can be described as positive attitudes. Positive attitudes are rewards. It means the individual is encouraged to do the same thing in future.

Negative Attitude: The tendency of an individual that results in an undesirable outcome for the individual and organizations can be described as negative attitude. Negative attitudes are punished in order to discourage the same action in future.

FORMING OF ATTITUDE:

People are not born with specific attitudes towards specific objects, but their attitudes about new objects begin to appear in early child hood and continue to emerge throughout life. How do attitudes form? Some of the variation we see in people's attitudes may reflect genetic influences inherited from their parents (Abrahamson & Baker, 2002), but what they learn from their parents and others appear to play the major role in attitude formation.

In childhood, modeling and other forms of social learning are greatly important. Children learn

not only the names of objects but also what they should believe and feel about them and how they should act towards them. For example, a parent may teach a child not only that snakes are reptiles but also that they should be feared and avoided as a result, children learn concepts such as "reptile" or work, they learn attitudes about those concepts too. (Aronson, 2003).

ATTRIBUTION AND BEHAVIOUR:

Attribution is the process of inferring the causes of events or bahaviours. In real life, attribution is something we all do everyday, usually without any awareness of the underlying processes and biases that lead to our inferences. For example, over the course of a typical day you probably make numerous attributions about your own behaviour as well as that of the people around you.

When you get a poor grade on a quiz, you might blame the teacher for not adequately explaining the material, completely dismissing the fact that you didn't study. When a classmate gets a great grade on the same quiz, you might attribute his good performance to luck, neglecting the fact that he has

excellent study habits. Why do we attribute certain things to internal forces for others? Part of this has to do with the type of attribution we are likely to use in a particular situation.

Attribution biases also play a major role. The attributions you make each and every day have an important influence on your feelings as well as how you think and relate to other people.

TYPES OF ATTRIBUTION

- **Interpersonal Attribution**: When telling a story to a group of friends or acquaintances, you are likely to tell the story in a way that places you in the best possible light.
- **Predictive Attribution**: We also tend to attribute things in ways that allow us to make future predictions. If your car was vandalized, you might attribute the crime to the fact that you parked in a particular parking garage. As a result, you will avoid that parking garage in the future in order to avoid further vandalism.
- **Explanatory Attribution:** We use explanatory attribution to help us make sense of the world around us. Some people have an optimistic

explanatory style while others tend to be more pessimistic. People with an optimistic style attribute positive events to stable, internal and global causes and negative events to unstable, external and specific causes.

PROBLEMS WITH ATTRIBUTION

As we seek to explain the reasons and causes for behaviours, we are prone to errors. Our perceptions of events are often disturbed by our past experiences, our expectations and our own needs. A few of the most common types of errors in attribution include:-

a) **SELF SERVING BIAS:** Think about the last time you received a good grade on a psychology exam. Chances that you attribute your success to internal factors. "I did well because I am smart" or "I did well because I studied and was well-prepared" are two common explanations you might use to justify your test performance. What happens when you receive a poor grade, though? Social Psychologists have found that in this situation you are more likely to attribute to your failure to external forces. "I failed because the teacher included trick questions" or The

Classroom was so hot that I couldn't concentrate" are examples of excuses a student might come up with to explain his poor performance. Notice that both of these explanations lay the blame on outside forces rather than accepting personal responsibility. Psychologists refer to this phenomenon as the self – serving bias. Why are we more likely to attribute our success to our personal characteristics and blame outside variables for our failures? Researchers believe that blaming external factors for failures and disappointments helps to protect self-esteem.

COMFORMITY AND BEHAVIOUR

Conformity is a type of social influence involving a change in belief or behaviour in order to fit in with a group.

According to Crutchfield (2004), Conformity simply means "Yielding to group pressures". Group pressure may take different forms, for example bullying, persuasion, teasing, criticism etc. Conformity is also known as majority influence (or group pressure).

The term Conformity is often used to indicate

an agreement to the majority position brought about either by a desire to "fit in" or be liked (normative) or because of a desire to be correct (informational), or simply to conform to a social role (identification).

TYPES OF SOCIAL CONFORMITY

Man (2002), states that "the essence of conformity is yielding to group pressure". He identified three types of conformity namely, Normative, informational and ingratiational.

Kelman (2004) distinguished between three different types of conformity namely compliance, internalization and identification.

NORMATIVE CONFORMITY:

This means yielding to group pressure because a person wants to fit in with the group. Conforming because the person is scared of being rejected by the group. This type of conformity usually involves compliance where a person publicly accepts the views of a group but privately rejects them.

INFORMATIONAL CONFORMITY

This usually occurs when a person lacks knowledge and looks to the group for guidance or when a person is in an ambiguous (i.e. unclear

situation and socially compares their behaviour with the group. This type of conformity usually involves internalization – where a person accepts the views of the groups and adopts them as an individual.

INTERNALIZATION:

Publicly changing behaviour to fit in with the group and also agreeing with them privately.

IDENTIFICATION:

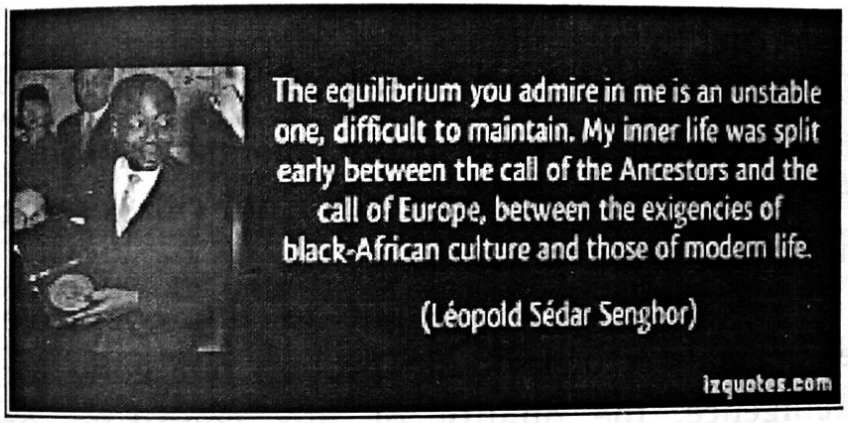
This is Conformity to the expectations of a social role.

INGRATIATIONAL

This is where a person conforms to impress or gain favour/ acceptance from other people.

CHAPTER SEVEN

SOCIAL, CULTURAL AND ENVIRONMENTAL DETERMINANTS OF BEHAVIOUR



We tried to establish that our behaviours are to a very significant extent, genetically determined. What we may not have put sufficient emphasis on is the fact that the genes we inherit provide us with the potential to develop in certain ways or to manifest certain characteristics behaviours. The potential may never be actualized unless appropriate circumstances are available. Some genetic potential

may be fully actualized; some may be partially actualized, while some may just as well have been non-existent. The appropriateness or inappropriateness of the circumstances referred to here, are to be found in our various social, cultural and environmental contexts. Some contexts are exciting, motivating, nurturant, enriching, positively reinforcing, while others are depressing, non-motivating, depraving, discouraging or just drap, etc. Think, for instance, of how many potential scientific, artistic and technological geniuses in our villages that end up their lives as peasants.

We gave some thought to the cognitive determinants of behaviour. Through our gene for intelligence, the quality of our cognitive or intellectual factors, like thinking, learning, etc are provisionally guaranteed. However, the provisional guarantee can only become substantive if the social, cultural and environmental contexts are friendly and qualitative. Qualitative thinking, qualitative learning, qualitative language, qualitative perceptual habits and styles, are acquired or learned in qualitative socio-cultural and environmental

contexts.

It is persons in this context, particularly parents, who must do something to facilitate the actualization of genetic or nay other type of potential. This observation derives from the reality that the human infant is the most helpless organism at birth. The young of other organisms take very short periods to develop, mature and actualize their inherited potentials; it takes the young of the human organism many years, even a life time, to be able to actualize a small percentage of his inherited potentials. As Broadhurst (2006) puts it "compared with other species, far more of our behaviour is learned". Learning paves the way for the emergence of capabilities. The context for this empowering process is socio-cultural and environmental. Indeed, the human organism cannot survive outside the context of human groups. The child learns from other people around him in a process labeled social learning or socialization. This may take place through observation or through imitation.

In observational learning the child comes to appreciate, admire and adopt the behaviour and

perhaps, the way of life of people around him. It is a powerful means of learning because it is through this process that the intricacies of social behaviour and social skills are learned. In the related process of imitation, the child tries to put into practice what he has seen others (models) do or say. For instance, a child who comes back from nursery school to demonstrate what his teacher did or said, or how the teacher's deeds or sayings were carried out, has learned by imitation. Adult models have to be aware that their behaviours, good or bad, are determinants of children's behaviours. Many cultures explicitly use imitative patterns as a way of inducting the child into adult ways.

Social learning theorists have conducted a number of experiments which show that the performance of an observed act depends, in part, on the characteristics of the model (Bandura, 1977). Not surprisingly, therefore, children and even adults are more likely to imitate people they like, respect and regard as competent. In other words, characteristics of such people are sufficiently beneficial to act as incentives for the young to follow in their footsteps. Cognitive

theorists add that acquiring an *understanding* of the behaviour of the adult model, plays a crucial role in learning by observation and imitation. Indeed, the observer/imitator has the urge to understand what he observes or imitates. For that reason, he is an active rather than a passive participant in the determination of his behaviour through observing and imitating.

In the same way, the observer/imitator *recognizes* the *competence* of the adult model and that motivated him to seek competence through imitation. Like the model, the imitating child wants to master his universe and come to do things on his own. He wants to be able to do some of the many things that the apparently "all powerful" adult are capable of doing (including undesirable things) because, eventually, he too wants to be all-powerful. The child wants to enjoy the feeling of his own competence.

Culture:

Although social factors are very closely intertwined with cultural factors as determinants of behaviour, it is still important to focus on culture separately; particularly in view of cultural differences among people. Culture itself can be defined as patterns of

thinking, perceiving, behaviour and practice that are inherited from one's forbears via social rather than biological transmission. In many instances, culture is synonymous with race or ethnic group, and we are often not very conscious of the pervasive influence of our ethnic affiliations in the determination of our social behaviours. Our attitudes, values and behaviours are determined in very significant ways by our cultural/ethnic groups. And by ethnic group we mean a contemporary association of persons within a territory they regard as their own, and whose agreement for membership is a history of common descent and culture, embodied in the language shared by members. It is a group distinguishable on the basis of social life ways; a group that thinks of itself as sharing bonds of history, culture and kinship that set them apart from others.

Culture exerts itself on behaviour through child rearing practices. This fact has been well documented by both cultural anthropologists and social psychologists. For instance, whiting (2000), in a study comparing six different cultures, found that families differed in the way they determined the

behaviours of children in the following ways, among others:

a) The demand for responsibility made on children. Some families expect children of very tender ages to perform a number of tasks, particularly those related to subsistence. Experience in the African setting shows this to be very common. By contrast, families in Euro-American cultures are hesitant about and sometimes even resistant to imposing responsibilities, particularly of a physical nature on children of equivalent age groups. It is in this area of cultural differences that contemporary protests about child labour and child soldiers arise.

b) The emotionally positive behaviours of mothers towards their children, e.g. in issuing praises for desirable behaviours, and being generally warm and nurturant.

c) The amount of physical punishment inflicted on children. It is this factor that has led to the contemporary worldwide concern about child abuse and neglect.

d) The degree to which the mother takes care of babies and older children. Anthropology has drawn attention to the involvement of uncles, aunts and other extended family members in the care-taking of babies. In contemporary Africa, issues have been raised about the handing over of the caretaking of babies and children by working mothers, to ill-trained and ill-educated housemaids or house helps and the type and quality of behaviours such caretakers inculcate in children.

e) The degree of control of aggression between children both inside and outside the home. Some parents are known to encourage the "hit-back" syndrome in their children, particularly in aggressive encounters outside the home. This is one way of determining aggressive behaviours.

f) The degree of control of obedience toward parents. In some families, the "give-back" syndrome allowed in early childhood metamorphoses into parent-battering by grown up children. At the other extreme, the

policy that children are to be seen not heard, leads to problems of self-expression and self-assertion even in adulthood. Adoption of extreme instead of rational-adaptive measures remains socially and psychologically unhealthy irrespective of the culture.

Cultural conventions also have some influences on *emotional expressions* such as smiling, laughing, weeping, frowning, expressions of fear and anger etc, all of which are forms of behaviour. Culturally determined expressions of behaviour reveal cultural differences. For instance, Malines chieftains are said to frown very fiercely when greeting each other at festive occasions and this is typical of their culture, whereas Nigerians are known to be highly exuberant and demonstrative-laughing loudly and shaking hands or embracing each other with a great deal of intensity. The cultural difference in behaviour between these two groups of chieftains appear to be such that a Malines chieftain will highly be embarrassed if he accepted an invitation to a festive occasion organized by his Nigerian counterpart, and vice versa. Other examples of cultural determinants

of behaviour include the fact that African wail loudly at the loss of loved ones, whereas Europeans with the same experience and equally deep sense of loss, end up with what may look like sobbing.

Culture is also known to have a powerful influence on gender role orientation. For instance, while boys are expected to show strength, assertiveness and ambition, girls are expected to accept that they are weaker, and should neither be assertive nor more overly ambitious. As a consequence, women tend to fear high achievements (Honer, 2005), so that they may not be seen to be competing with men, thereby jeopardizing their chances of marriages. These culturally imposed behavioural tendencies are, however, being increasingly questioned as gender studies and gender issues take the centre stage in research circle, conferences, seminars, politics, business and employment

The Environment:

Environmental influences on behaviour can be considered either internal, that is, intra-uterine/prenatal or as external that is post-natal. Where the emotional, physical and nutritional

circumstances of the mother are normal, the prenatal environment is likely going to lead to the development of normal behaviour. But where the prenatal environment is affected by poor emotional, physical and nutritional conditions of the mother or by the ingestion of drugs that are inappropriate in one way or the other during pregnancy, the child's behavioural development is likely going to be adversely affected.

The external and post – natal environment affects the individual after birth and may continue throughout life unless adequate intervention is possible. The post- natal environment not only builds upon the outcome of the prenatal environment, but is also a combination of emotional, social, cultural and physical environments. These can be conducive or unconducive for development, and they can interact with genetic factors to make behaviour desirable or undesirable.

Finally, it is to be noted that social and cultural environmental factors can determine different types of pathological behaviour such as the following:

(a) **Sociopathy**: A sociopath is a person who gets in continual trouble with society, is indifferent to other people, is impulsive and with little

concern for the future or remorse about the past. Delinquency is a typical form of sociopathology.

(b) **Psychopathology:** A psychopath shows the same symptoms as a sociopath but in addition, has poor judgment and seems unable to delay the gratification of his momentary needs no matter the consequences to himself or to others (e.g. the rapist, particularly the habitual rapist). As a result, he is frequently in trouble. In an attempt to extricate himself from trouble, he often weaves an intricate and contradictory web of lies and rationalization. Many psychopaths are very callous, predatory and aggressive (e.g. armed robber and serial Killers).

(c) **Systemic Pathology:** This is often caused by a pattern of socialization or sometimes a turn of events which leads a person to acquire functional or stress- induced hypertension (the commonest type), sustained by underlying neurotic anxiety about which the individual is often unaware.

CHAPTER EIGHT

THE HEALTH DIMENSION IN THE DETERMINATION *Of* BEHAVIOUR

Studies of the human organism, particularly in psychology, have shown that man is more multi-dimensional in nature than other organisms. Prominent among these dimensions are the physical body and the mind. In sickness and in health, these dimensions remain prominent, their inevitable interactive roles not withstanding. Behaviours too

tend to bear the hallmarks of these prominent dimensions, and therefore, for convenience at least, we can look at health conditions primarily in bodily (physical) and mental terms.

Bodily/Physical Health Conditions

The first thing to acknowledge is that health and ill-health (bodily or mental) are on a continuum, running from "very good health" at one end, through the realm of so-called "normal health", to "very bad health" at the other. When the health condition of the body is considered to be "normal", associated behaviours are also expected to be normal. But the absolute threshold or line separating good health from bad health is so thin as to be indeterminable. We therefore generally give heed to the effects of ill-health on behaviour when ill-health is perceptibly pronounced.

The second thing to acknowledge is that studies have shown that the influence relationship between ill-health and behaviour is mutual. Most known physical illnesses, including injuries, certainly have activity – reducing effects on man. Both experts and non-experts have ideas of what normal behaviour is

supposed to be. The concept of normality thus becomes a frame of reference for evaluating the strength or vigour with which behaviour is manifested. Reduction in vigour is readily attributed to "something wrong". It is easily accepted that the health condition of the body is a determinant of the nature of behaviour observed. It becomes handy for both experts and non-experts to use observable behaviour as symptoms of various forms of bodily ill-health, as well as guides to diagnosis, prognosis and treatment.

On the other hand, as observed by Myers (2006), with the conquering of the major infectious diseases, people's behaviour and stress reactions have come to be recognized as major influence upon (determinants of) health and diseases. For this reason, behavioural medicine finds it worthwhile to study the "sick role" often played by patients. Sick people can adopt the good-patient role, and this can generate feelings of loss of control, undue dependence and helplessness. Others may adopt the bad-patient role. Such patients often deliberately ignore doctors' instructions by refusing to follows

disrupted leading to embarrassment.

Psychosis on the other hand, is a psychological disorder in which a person loses contact with reality, experiencing irrational ideas and distorted perceptions. One of the most serious forms of psychosis is schizophrenia. Its main symptoms are disorders of thought and attention, social withdrawal, disruption of emotional responses, and in many cases, the construction of a private world accompanied by delusions (Persistent false beliefs about being persecuted or being grandiose) and hallucinations (false sensations and perceptions).

In another group of conditions of psychopathology called ***affective disorder***, the dominant disturbance is that of mood, as in the overexcited, hyperactive, wildly optimistic and energetic reaction in *mania* or in the despairing, sluggish, lethargic reaction and sense or worthlessness in *depression*. Affective disorders are often periodic, and may also be either bipolar (swings from mania to depression and back) or unipolar (either mania or depression).

In another group of conditions called ***anxiety***

disorders, the symptoms and the underlying pathologies are primarily psychological- a state of persistence and distressing anxiety. It could manifest as generalized – anxiety disorder in which a person is continually tense, apprehensive, and with the experience of autonomic nervous system arousal. It could manifest as phobic disorder in which the person is troubled by a persistent, irrational fear of a specific object or situation. It could also manifest as an obsessive-compulsive disorder in which a person is troubled by unwanted repetitive thoughts (obsessions) or actions (compulsions). Many practitioners believe that the symptoms of such conditions are reactions learned as means of reducing anxiety reactions.

In the condition called sociopathy, there is sometimes a mixture of deviance, mental disorder and criminality. The causes are essentially socio-genic. But in psycho-physiological conditions, the causes are regarded as psychogenic, often with genuinely organic effects. A psycho-physiological illness is literally a mind-body illness. One of such illnesses is essential hypertension (as distinct from

functional hypertension). Essential hypertension is regarded as a residue of non-stop arousal of the sympathetic nervous system brought about by chronic emotional stress. Other illnesses that could be psychogenic include ulcers and headaches. They are psychogenic because they are found not to be caused by any known physical/organic disorder but instead are linked with stress. The conditions discussed in this section of the chapter are to be understood as determinants of unhealthy and undesirable behavioural expressions by those affected by such conditions.

The Role of Substances:

The use of substances (drugs and alcohol) that alter states of consciousness, that is, modify perception, cognition, mood and behaviour is as old as the history of mankind. But a distinction should be made between drug/alcohol use and drug/alcohol abuse. Most individuals who use drugs do not abuse them, particularly when physicians prescribe such drugs. Drug abuse on the other hand, starts when the individual begins to take excessive amounts of a particular drug or alcohol, and finds himself

dependant on it to get through tasks of daily living. He is then described as a drug addict or alcoholic in the particular case of alcoholic substances.

In addiction, body chemistry changes and dependence on the drug assumes the status of a biological need. This is also called physical or physiological addiction. Sudden withdrawal of the drug may bring unpleasant side effects, such as nausea, headaches, muscle spasm, irritability etc. Psychological addiction or habituation on the other hand refers to the habits itself of drug-taking. It is characterized as emotional dependence; that is to say that people feel they need a drug and feel sick when they do not use it. A typical example is a lecturer who feels he cannot concentrate unless he smokes a stick of cigarette. He might interrupt his lecture and step out to smoke before continuing.

Some of the age-old drugs/substances subject to abuse are categorized as depressants, stimulants and hallucinogens.

a) **Depressants:** These include alcohol and opium. Alcohol and the opiates act by depressing neural and cerebral functioning.

Each offers its peculiar form of pleasure, but at the cost of impaired thinking, memory, decision-making, in addition to other physical consequences.

b) **Stimulants:** These include caffeine, nicotine, the amphetamines and cocaine. They all act by stimulating neural functioning with the danger of over-stimulation. As with nearly all psychoactive substances, they act at the synapses by influencing the neurotransmitters of the brain. Their effects depend both on dosage and on the user's personality type, including what he expects to achieve by drug use.

c) **Hallucinogens:** These include hashish and marijuana. Both have the effect of distorting ones judgment of time and perception, and invoking sensory images in the absence of real information from the sense organs involved.

From the brief presentation above, it is clear that drug/substance use and abuse are fundamental health issues. They affect physical, social, and psychological well-being, and therefore form a major

health dimension in the determination of behaviour. Indeed, behaviours determined through substance abuse are of major concern to individuals, families and societies. But attention must be drawn to the fact that, like physical and psychological ailments, therapeutic remedies and interventions are available, and can be provided by clinical and counseling psychologist, sometimes in co-operation with other professionals.

THE INTERACTIONIST PERSPECTIVE

There are some hints that human behaviour has multiple factors determining it. This is often the reason for regarding human behaviour as complex, and it is this acknowledged complexity that provides both the challenge and the sustained interest in the scientific study, analysis and explanation of behaviour in theoretical and practical/applied terms. It is behaviour complexity that makes human organisms paradoxically predictable and unpredictable, reliable and unreliable, stable and unstable, and in evaluating terms, good and bad, depending on the context and the judgmental frame of reference.

. The biological, cognitive and social components determine human behaviour. An organism cannot be human unless he is completely biological and substantially cognitive and social. Accordingly, behaviour cannot be human, unless it is biologically and some how cognitively and socially rooted, and it is the contribution of these three roots that necessitates the use of an inter-actionist perspective to understanding behaviour and its determinants. In other words, the biological, cognitive and social components interact somehow to produce behaviour in humans. Understandably, and probably from experience, the cognitive and social contributions may be potent, moderate or weak, but then that is where differentiations in quality come in, and that is also why study and analysis become inevitable. With the interactionist perspective, the behaviour of all organisms-human and non-human can be evaluated, typed and categorized. This has facilitated the production of the phylogenetic scale, and has enhanced the understanding and difference in human behaviour.

Individual differences in behaviour have been

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ABOUT THE BOOK

If you ever wonder why human beings behave the way they do, this is the book to read. In it you will find information that will enable you to understand, predict and perhaps control behaviour in the right direction. The information contained in the book are Biological Determinants of Behaviour, Environmental Basis of Behaviour, Cognitive Determinants of Behaviour, Socio-Cultural Determinants of Behaviour, Health Dimension in the Determinants of Behaviour and the Relationship between Sensation and Perception.

Printed: 08074461229, 08042641107