

## Exploring a New Relationship between Gene Regulation and Behaviour Psychology by Employing Acharangenetics

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### ABSTRACT

In order to explain certain impressions, communication demeanour, emotional interaction and the action arises is a stimulus from an individual in response to his current situation. Our social cerebrum develops this behavioural stimulus - the framework we consider to be the psyche. Psyche outcome is affected by the level of understanding of an organism on which communication or behavioural response develops. Hormones channelize this significant connectivity and intensity. Our characters are reactions generated by certain hormones in the cells of different organs. The shift in hormone convergence triggers a change in character. This article examines the different effects that hormones have on our physiological status and henceforth on our communication behaviour. All the hormones generated by the body cells are monitored and monitored by the genes present in the cell's control nucleus. It sends the signal to various hormone synthesising organs as the cerebrum (nerve centre) senses any character or any circumstance, and the protein is synthesised by the organs according to the order of genes that Psyche influenced. As per the reaction shifts in Psyche, hormones are produced depending on different variables. Since the behaviour is constrained by the hormones, according to the command from the cerebrum, the characteristics that are tweaking hormones blend should turn now and again. Under the order of cerebrum, explicit hormone is generated for the specific alteration of behaviour. In order to explore the techniques by the mode of behaviour psychology, which can regulate gene activity, we have tried to establish a connection between communication behaviour and genes. In order to clarify the association of behavioural psychology and genes, the word Acharangenetics was written. The word Acharangenetics is a compound word, structured by a combination of two words that investigate heredity: the Acharan Hindi root word meaning character and the subsequent word is genetics.

**Keywords-** behaviour; genes; acharangenetics; psychology; hormone; brain; characters; psyche; hormones; genetics.

behaviour. According to brain behavioural research, behaviour involves controlled responses to its current circumstances. In addition, our social cerebrum stimulates this response (Frith, C. D., 2007). The social brain is the structure that we think of in the brain. For the development of the psyche, the conscious exercise of the workforce and thought is seen as important. A psyche that evolves through the process of understanding and hormonal influence. And the ways in which behaviour develops are the ways of understanding thoughts and hormonal behaviour.

We practise the concepts of psychology in order to examine mind and conduct (Henley et al., 1989). A psychologist very often performs the psychological practise to provide advice to an individual who is validated for contemplating or living a life with a harmful state of mind (Strong et al., 1992). Consequently, counselling can help an individual generate positive psychology and help to relieve a person's social life from any unfavourable social-psychological disruption (Harris et al., 2007). In addition, it has been demonstrated that our characters are the general responses of several hormones synthesised by various glands in the cell. The concentration of these hormones results in a variation in character due to these sifts. We have therefore discussed different causes of origin and effects of hormones on our physiological status in order to discuss this biochemical, behavioural and genetic triad relationship.

Most of the hormones delivered by the body cell are monitored and monitored by the genes present in the cell genome ("Gene Regulation," genome.gov. National Institute of Human Genome Research, April 4, 2014) ("How do genes direct protein production?" ghr.nlm.nih.gov. U.S. National Library of Medicine, April 28, 2020.). As the mind (nerve centre) senses any behavioural reaction or any situation, it sends the reaction to our various organs of hormone synthesis (Knobil, et al., 1980) (Schally, et al., 1973), and these organs release the protein according to the order customised according to the genome's dynamic dominated genes ("How do genes direct protein production?". ghr.nlm.nih.gov. U.S. National Library. It has been recognised that social reaction admirably changes, depending on the circumstances. As the communication and psychological behaviour of the hormones are modulated. In this way, according to the response from the mind, it tends to be perceived that the

### I. INTRODUCTION

The asset of any building is recognised by its pillars. Similarly, we must first emphasise its sub-fundamental phenomenon which holds its existence in order to understand this multidisciplinary concept 'Acharangenetics'. The first look at this definition is

dominant gene that tweaks hormone production should turn off/on ('Gene Regulation,' genome.gov. National Institute of Human Genome Research, April 4, 2014). Those dominance genes that affirm the combination of the specific hormone for the specific assignment of behaviour according to guidance under the cerebrum order ("Gene expression." ncbi.nlm.nih.gov. National Biotechnology Information Center, 2017-11-07T19:13:02Z.). Also, those dominance genes that affirm

the combination of the specific hormone for the specific assignment of behaviour according to guidance under the cerebrum order. So here in this theory, we have attempted to build up a connection among behaviour and genes that handle the synthesis of behavioural biochemical, with the goal that another examination should complete in the thought process the gene dominance by using behaviour psychology as a genetic tool (fig:1).

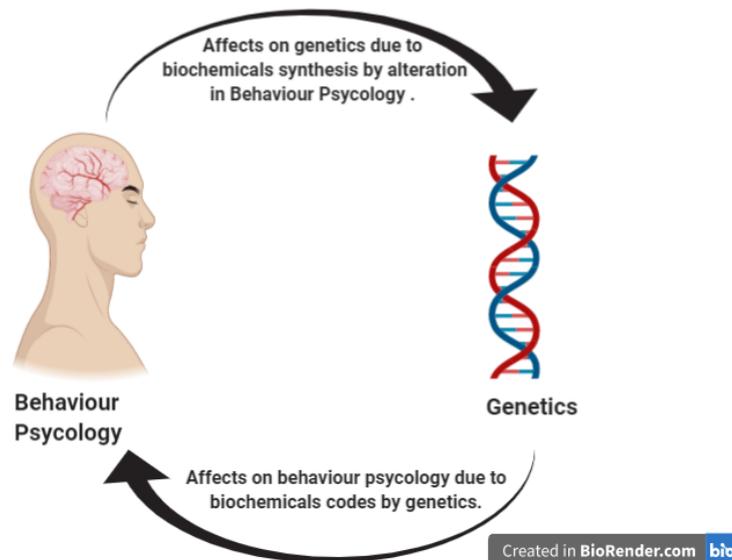


Figure 1: Relation in-between behaviour psychology and genes/genetics

## II. PSYCHOLOGY OF COUNSELLING

Counselling psychology is mainly practised in the academic bailiwick, in the field of sports to encourage athletes, or to help those who try to hark back after suffering injury (Webster et al., 2008), or in the field of medicine to strengthen the depressed state of patients suffering from chronic diseases such as cancer (Watson et al., 1988) (Sheard, T., & Maguire, P., 1999). In addition, it is widely practised by people who handle the mentality of life defeat (Silbert et al., 1991). Counselling is therefore found to be very effective in raising the level of the psyche.

## III. PSYCHOLOGY OF MOTIVATION

Human instinct and inspiration have been broadly investigated in psychological research. Sigmund Freud (1856-1939) recognised that behind every capacity for human physical action is the instinctual drive that fills in as a stimulating factor that leads to tonnes of psychological responses from human beings (McClelland, D.C., 1987). Brain research on human inspiration/motivation is a noticeable study of expression, action and communication behaviour. In addition, it connotes a target science which figures and

recognisable information on the experimental test. The physiological, biochemical and neurological responses in the human body are the results of all human physical activities, communication and stimulation in response to the environment. This fact also reveals that human behaviours are nothing more than the way in which human beings react to environmental stimuli. In their version of psychological findings, behaviourists accept indeterminism. They consider that it is possible to anticipate every human reaction concerning the kind of boost that triggers the reactions of man. A part of our acting intentions is natural to our biology of the body, while others have beginnings that are individual and social. We are motivated to search for food, water, and sex, but social approval, acceptance, the need to achieve, and the motivation to take or avoid risks have a good influence on our behaviour. (In 2009, Morsella, Bargh, & Gollwitzer).

In the case of genetic studies, we take motivation into account. We will find that our body gene regulation exploits the dominance of genes that are well-functional in the management of stress throughout the motivational process. And as the process begins with some genes that are responsible for dopamine production, it begins to work. Dopamine is an increasing molecule of motivation, it is a hormone that provides the drive and builds the mind presence for the target work.

This motivates you to perform your tasks most efficiently. This hormone is mainly required for attention span, concentration, and motivation. It is a neurohormone from which the hypothalamus is secreted. Symptoms such as tiredness, lack of focus, difficulty concentrating, forgetfulness, insomnia, and lack of motivation are associated with a lack of dopamine in the body.

If dopamine is not regularised in the correct way, it can lead to a dysfunctional pursuit of good feelings, such as in habits or an overactive state, such as in attention deficit/hyperactivity disorder (ADHD). These indications are more often associated with an increased risk of early death rather than longevity, but the most recent study paints a picture that in other situations, "risk" genes may improve well-being for certain problems in certain environments.

For homo sapiens, dopamine neurotransmission in the dopamine transporter (DAT1) and catechol-O-methyltransferase (COMT) genes is determined by operational polymorphisms. The COMT and DAT1 genes were discovered in the ventral striatum and lateral prefrontal cortex during reward anticipation and in the lateral prefrontal and orbitofrontal cortices as well as in the midbrain at the time of reward delivery, with DAT1 9-repeat allele and COMT met/met allele carriers exhibiting the highest activation, presumably pondering working change concomitant to higher synaptic.

#### IV. CASES OF MOTIVATION

It is possible to palpate the originations of motivation as either internal in the push motivation phase or external as in the pull motivation effect.

##### *Motivation for Push*

It is defined in terms of biological variables bobbing up psychological variables in an individual nervous system and mind that symbolise characteristics of the mind of a person, such as psychological motives, in an individual nervous system and mind. We can empathise with it as an individual can channel his motivation and concentration of stress hormones through the imagination mode. And if a person thought is responsible for the concentration and transmission of his hormone, then it is a matter of fact that individual gene regulation can be affected by the individual thought or imagination. And this regulation of the genes is a background of motivation for push.

##### *Motivation to Pull*

It is perceived as ecological variables, similar to motivating forces or goals, that represent outside wellsprings of inspiration. Our inside inspiration wellsprings connect with external sources to coordinate behaviour (Deckers, 2014). In addition, this external effort could embed thought in an individual that allows a way of thinking to ascend with imaginations to a mind. In addition, the thoughtful mind influences the serum metabolite density of the body. And the phenomenon of

gene expression and generegulation is controlled by this signalling metabolite. Therefore, guidelines for the regulation of stress management and risk-taking of genes will be prompt (Yashin, et al., 2012). In addition, this prompts the production of hormones such as dopamine, oxytocin, and so on that are conscious of dealing with the degree of external motivation or push motivation. This structure can be seen in the field of broad games such as boxing and rugby, where expert mentors try to rouse the player's energy and abilities by coaching either using speech sound adjustment or by using some ethical idea defined as winning or losing.

Our evolutionary history also clarifies parts of propelled behaviour, and our chronicles shed light on how our deep-rooted encounters shape our processes of thought and determine the usefulness of goals and forces of motivation.

Physiological requirements such as yearning, thirst, sex, or some longing for the essential necessities are simply the natural beginnings that ultimately show in the abstract mindfulness of an individual as a mental drive. These biological occasions become intentions of the mind. It is essential to recognise the physiological need of the mental drive it creates, because it has inspiring properties only later on.

The driving hypothesis of motivation reflects the emergence in our bodies of physiological intentions. As our physiological structure strives to look after well-being, it registers a mental drive in our cerebrum to fulfil a physiological desire and encourages us to create the framework from insufficiency to homeostasis (Reeve, 2018). Likewise, the individual who propels themselves for individual well-being should channel the impact of their serum hormones. This desire may encourage them to initiate a self-mindful educational programme. To keep up with personal health, this desire is very much needed. As you can find that in the event of following a good diet or a healthy lifestyle, many individuals are not under control. In that case, therefore, the modality of personal motivation is necessary.

If the drive to satisfy it interferes with our normal functioning by causing us to feel increasing tension until the need is satisfied, the biological demand becomes a psychological motive.

#### V. SOCIAL CONNECTION INFLUENCES BEHAVIOR AND PSYCHOLOGICAL STATUS

It has been seen that ponders in the field of clinical science have been performed by an individual behaviour characteristic that is concerned with social connection. Through the focal points of science, some points of view are evident, but some are the exchanges of imperceptible energy. Among the imperceptible behavioural energy that has staggered the eyes of numerous researchers is the placebo effect. Substitution models suggest that placebo reactions are due to the

combination of restrictive and unambiguous improvements, according to the Stimulus (Montgomery et al., 1997). These circumstances are either changed by people or, perhaps, by a distinctive location. For the production of metabolites in the body and the functioning of hormonal glands, the placebo effect has an essential effect. Placebo effects provide rise to endorphin discharge according to speculated instruments (Levine et al., 1978) and drop down the manifestations of nervousness (Sternbach et al., 1968), classical conditioning (Wickramasekera et al., 1980), and response expectation (Kirsch, et al., 1985) (Kirsch et al., 1990.). Montgomery and Kirsch (1996) presented data that is difficult to accommodate with the speculation that placebo effect reactions are interfered with by global systems such as a reduction in anxiety or the arrival of endogenous opioids. It has been found that it has been used very well as a sedative or as a local anaesthetic.

Hereditary characteristics express that what we express as a character is only a prearranged influence of dominated genes on its altering conditions, irrespective of whether its behaviour or phenotypes of the organism. These conditions could be an environmental or behavioural factor. Depending on the level of gene regulation, the switch may appear sooner or later. In addition, the emergence of any action or the manner in which someone expresses themselves in stimulus to the actions of others is estimated during psychological exercise. The switch in character, action, and development of thought has been found to trigger the discernment of different biochemical hormones organised in different parts of the mind and body. The result of any action could be observed throughout the body, such as; the whole body shares the heat that springs from anger in the state of anger, we feel energetic and comfortable in the emotion of happiness, and we can enjoy the moments of peace at the time of exercising meditation. Other behavioural or body processes can cause this beginning of anger, but its oncoming start is the synthesis of adrenaline and noradrenaline cortisol, which are anger-inducing hormones. Similarly, the state of happiness is the result of dopamine, endorphins, and serotonin synthesis. Likewise, the action of meditation starts the manufacture of all essential hormones, required by the body to attain the state of peace.

Only if these hormones are well circularised in the cells of the body can they experience the effect of these hormones on the entire body. It produces a signalling reaction that goes from the cell cytoplasm to

the nucleus whenever any hormone goes into the cell. And the nucleus is the place where the cell's behaviour is encrypted by the main genetic material. A cell that represents an organism's structural and operational unit.

## VI. IMPACT OF ENVIRONMENTAL ELEMENTS IN CONTROLLING BEHAVIOR

Metabolism and psychology have been noted to be mutually related to each other. This can be experienced by observing that it will trigger the production of different hormones or metabolites whenever there is a change in psychology or credit for the alteration in biochemical or hormone concentration. In addition, the physiological status of a wide range of organisms in a particular area is found to be normal in the general state of life when we enjoy the normal external environment, social environment, and diet intake. The biochemical concentration is, therefore, balanced as well.

It has been proven that as soon as there is any modification of the anorganism's surrounding environment (social/environmental). It is observed that the biochemical response sifts. These modifications include changes in both the physiological status and the behaviour of the organism. There are a number of circumstances where, against their comfortable character, organisms have to act. It has been found that the social environment is either causing this situation or that it happens unpredictably. We have tried to list some of the real-life circumstances and different body metabolism stimuli in table 1.

In addition, there is the situation that is either normally delivered or displayed and is responsible for creating some unusual characters in a life form. In the situation of endurance, a few individuals express exceptionally cheerful willingness to stay alive and begin to neutralise their inclination. They are found to deal with conditions of pressure with a demeanour of addressing it and bringing out anything great according to the accessible things. This can be the case of the explicit activation of stress-caring characteristics by the gene regulation phenomenon (Yashin, et al., 2012). In general, this phenomenon will regulate the conduct of a creature (table 1.2). These people are therefore found to have extraordinary enduring abilities and to behave very wisely in managing a predicament.

**Table 1: The effect of hormones on behaviour and body in different stress situations.**

| S.no | Changes in the physiological/social/habitat climate | Hormone Release                                                                                                  | Body Impact                                                                                                                         | Impact on actions                                                                                                                                    |
|------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.   | Accidental Emergencies                              | <ul style="list-style-type: none"> <li>• Dopamine</li> <li>• Catecholamines</li> <li>• Norepinephrine</li> </ul> | <ul style="list-style-type: none"> <li>• Modulating visceral functions (Lieberman, et al., 2009) (Malenka, et al., 2009)</li> </ul> | <ul style="list-style-type: none"> <li>• Initiate hyperarousal, and</li> <li>• Initiate the acute stress response (Cannon, et al., 1916).</li> </ul> |

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|----|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |              | <ul style="list-style-type: none"> <li>• Epinephrine</li> <li>• Oestrogen</li> <li>• Testosterone</li> <li>• Cortisol</li> <li>• Serotonin</li> <li>Dopamine</li> <li>• (Walter et al., 1915)</li> </ul> | <ul style="list-style-type: none"> <li>• enhancing the output of the heart,</li> <li>• enhancing blood flow to muscles,</li> <li>• enhancing blood sugar level and</li> <li>• pupil dilation response (Bell et al., 2009) (Khurana, et al., 2008)</li> </ul>                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• It also affects how organisms react to stress.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                         |
| 2. | Sports       | <ul style="list-style-type: none"> <li>• Testosterone</li> <li>• Other steroids which are anabolic-androgenic (natural only) (Wood, et al., 2012)</li> </ul>                                             | <ul style="list-style-type: none"> <li>• Athletic success is caused by testosterone, not just by its long-term anabolic acts, but also by fast behavioural impressions.</li> <li>• In women, higher endogenous testosterone production due to inborn sexual development disorders (DSD) may have a comparative edge (Wood, et al., 2012).</li> </ul>                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>• Act to improve anger and rivalry drive on particular substrates in the brain (Gleason, et al., 2009)</li> </ul>                                                                                                                                                                                                                                                                                                                                   |
| 3. | Struggle     | <ul style="list-style-type: none"> <li>• Testosterone</li> <li>• Dopamine</li> <li>• Serotonin</li> </ul>                                                                                                | <ul style="list-style-type: none"> <li>• Muscular reactions may be caused by testosterone.</li> <li>• Adrenaline offers a shock of additional motivation to help combat the hyper condition or sprint away from the scenario. (2009, by Bell et al) (Khurana, et al., 2008)</li> </ul>                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• The key emotion researched with respect to adrenaline is anxiety (Mezzacappa, et al., 1999).</li> <li>• Regulating respiration(Lieberman et al., 2013)(Malenka, et al., 2009) Increasing cardiac output, muscle blood flow, blood sugar level, and reaction to pupil dilation (Bell et al., 2009) (Khurana, et al., 2008).</li> </ul>                                                                                                             |
| 4. | Intimidation | <ul style="list-style-type: none"> <li>• Chemical imbalance of metabolites.</li> <li>• Cortisol (National Academie of Sciences, Engineering, and Medicine. 2016 .)</li> </ul>                            | <ul style="list-style-type: none"> <li>• Physical and psychological stressors, such as being the victim of abuse, activate the hypothalamic-pituitary-adrenal (HPA) axis stress mechanism (Dallman et al., 2015).</li> <li>• The importance of HPA and other hormones is to initiate adaptation and longevity, but complications may also be caused by permanently removed hormones.</li> <li>• Stress has ubiquitous physiological and brain effects, influences the production of certain hormones and other biomarkers, and eventually influences actions.</li> </ul> | <ul style="list-style-type: none"> <li>• It causes somatic disruptions,</li> <li>• Difficulties of sleep,</li> <li>• Anxiety, anxiety;</li> <li>• Poor confidence, low faith,</li> <li>• Reduction of self-respect</li> <li>• Headaches.</li> <li>• Some genes have been identified as regulators of vulnerability to toxic stressors, such as health effects and child neglect, contributing to depression (National Academies of Sciences, Engineering, and Medicine. 2016 .)</li> </ul> |

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|----|-------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                   |                                                              | Therefore, both a general awareness of stress during early adolescence and, where understood, clear connections between bullying and stress may give insight into the negative consequences of bullying.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 5. | Believe Framework | <ul style="list-style-type: none"> <li>• Oxytocin</li> </ul> | <ul style="list-style-type: none"> <li>• One aspect that can regulate the psychological impact of the organisation of intranasal oxytocin is human variation at the genetic stage. For the most frequently studied polymorphism in the gene of the oxytocin receptor, OXTR rs53576 (Marsh et al., 2012), this form of impact was seen (Feng, et al., 2015).</li> <li>• It takes part in multiple body functions, such as the reflex of milk ejection (Wagner, et al., 2006),</li> <li>• Oxytocin is very important in the embryonic growth of the heart by facilitating the division of cardiomyocytes (Paquin, et al., 2002.)</li> <li>• Uterine contraction, which is highly necessary for pre-birth cervical dilation</li> </ul> | <ul style="list-style-type: none"> <li>• The oxytocin mechanism is seriously interested in social bonding.</li> <li>• This helps one to believe in a positive distribution of life and a sense of link with a Divine Force or the universe. It may even influence spirituality.</li> <li>• It also encourages the experience of individual positive feelings among participants at the moment of meditation.</li> </ul> |

**Table 2: Any explanations of hormones and their impact and action on the human body.**

| S. no | Hormones | Body-related symptoms                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Gene with liability for processing.                                                                                                                                                                      | Behavioural impact                                                                                                                                                                                                                                                                                                     | Synthesis locations                                  |
|-------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1.    | Oxytocin | <ul style="list-style-type: none"> <li>• Oxytocin facilitates attachment.</li> <li>• Oxytocin improves bonds</li> <li>• Oxytocin facilitates depression</li> <li>• Oxytocin crystallises the memories of feelings</li> <li>• Oxytocin makes labour and breastfeeding simpler.</li> <li>• Oxytocin enhances sexual excitement</li> <li>• Oxytocin lowers cravings for drugs</li> <li>• Oxytocin raises coping skills</li> <li>• Oxytocin initiates defensive impulses</li> </ul> | Gene from OXT. (The gene card database containing human genes.1996-202. < <a href="https://www.genecards.org/cgi-bin/carddisp.pl?gene=OXT">https://www.genecards.org/cgi-bin/carddisp.pl?gene=OXT</a> >) | <ul style="list-style-type: none"> <li>• This hormone acts as a carrier of a chemical and</li> <li>• In human behaviour, which involves appreciation, belief, fear, sexual arousal, and child attachment, it has been articulated as necessary.</li> <li>• It is also recognised as the hormone of passion.</li> </ul> | Bloodstream via the gland of the posterior pituitary |

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|----|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |           | <ul style="list-style-type: none"> <li>• Oxytocin triggers sleep.</li> <li>• (2017, by Lawson et al.).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                |
| 2. | serotonin | <ul style="list-style-type: none"> <li>• It is chemically classified as 5-Hydroxytryptamine.</li> <li>• It is the most known biogenic amine for its role as a neurotransmitter. Serotonin has been involved in the pathophysiology of mood disturbances, migraine, emesis, irritable bowel syndrome (IBS), and pulmonary and systemic hypertension by advanced studies in the modulation of cerebral vascular sound, peripheral vascular tone, gastrointestinal motility, and platelet activity. (Mohammad-Zadeh and others, 2008)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  | <p>SLC6A4 Gene card from the archive of human genes.1996-2020.<br/>&lt;<a href="https://www.genecards.org/cgi-bin/dispcard?SLC6A4">https://www.genecards.org/cgi-bin/dispcard?SLC6A4</a>&gt;</p>  | <ul style="list-style-type: none"> <li>• Serotonin shapes social actions by adjusting the positive course of social tastes,</li> <li>• Growing the emphasis that individuals put on the performance of others.</li> <li>• (Siegel, et al., 2013, respectively)</li> </ul>                                                                                                                                                      | <p>In the intestines and some areas of the brain, the synthesis takes place. It is also present in platelets of the blood and some parts of the central nervous system (CNS)</p>               |
| 3. | dopamine  | <ul style="list-style-type: none"> <li>• A lecture and psychopharmacological research say a</li> <li>• For rising midbrain dopaminergic networks, a wide spectrum of behavioural functions. Nevertheless, electrophysiological and neurochemical research on relevant topics</li> <li>• A more narrow scope of dopamine-mediated shifts is illustrated by behavioural tasks. A Substantial</li> <li>• Increases in behaviour induced by dopamine, as assessed</li> <li>• By electrophysiology or voltammetry, they are associated with</li> <li>• Rewards and stimuli for reward-predicting. A somewhat a bit of a</li> <li>• Slower, separate encoding of electrophysiological response</li> <li>• The confusion that is synonymous with incentives. Aversive and Aversive</li> <li>• Events elicit various electrophysiological dopamine responses, often slower, and comprise mainly of dopamine</li> </ul> | <p>DRD2 Gene card from the 1996-2020 human gene database&lt;<a href="https://www.genecards.org/cgi-bin/carddisp.pl?Gene=DRD2">https://www.genecards.org/cgi-bin/carddisp.pl?Gene=DRD2</a>&gt;</p> | <ul style="list-style-type: none"> <li>• The basic relationship between striatal and cortical vision that is involved in behavioural regulation is controlled by dopamine.</li> <li>• Overall, dopamine works in order to encourage stimulation, which facilitates response to conditioned or reward-related stimuli at several forebrain locations by integrative behaviour. (Jentsch, et al., 2000, respectively)</li> </ul> | <p>Dopamine production is carried out in the midbrain ventral tegmental region (VTA) dopaminergic neurons, the substantia nigra pars compacta, and the arcuate nucleus of the hypothalamus</p> |

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|----|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
|    |              | <p>responses.</p> <ul style="list-style-type: none"> <li>• Depression, depression.</li> </ul> <p>In comparison, the more modest dopamine</p> <ul style="list-style-type: none"> <li>• Fluctuations of focus, concerning movement and punishment</li> <li>• 200-18 000 times longer period can be used,</li> <li>• Voltammetry classes and in vivo microdialysis courses.</li> <li>• Dopamine neurotransmission, employing certain reactions</li> <li>• Differential and heterogeneous information is supplied to</li> <li>• Subcortical and prefrontal systems of the brain with important structures</li> <li>• Outcome components for the actions of approach, learning</li> <li>• And decision-making on economic issues. (Schultz, among others, 2007)</li> </ul> |                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                              |                                                                                                                                      |
| 4. | Cortisol     | <ul style="list-style-type: none"> <li>• Growing the synthesis of carbohydrates</li> <li>• Mediating the reaction to stress</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p>Gene from ACTC1. Gene card from the 1996-2020 database of human genes.&lt;<a href="https://www.genecards.org/Search/Keyword?StartPage=18&amp;queryString=cortisol&amp;pagePageSize=25">https://www.genecards.org/Search/Keyword?StartPage=18&amp;queryString=cortisol&amp;pagePageSize=25</a>&gt;</p> | <ul style="list-style-type: none"> <li>• The stress hormone is the man violent antisocial activity named</li> </ul>                                                                                                                                          | <p>Zona fasciculata adrenal gland, the second of the three layers forming the adrenal cortex,</p>                                    |
| 5. | Oestradiol   | <ul style="list-style-type: none"> <li>• The creation of uterine and other feminine tissues;</li> <li>• Control of female and male sexual motivation and efficiency</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>CYP19A1 ESR1 gene 1996-2020.&lt;<a href="https://ghr.nlm.nih.gov/gene/ESR1">https://ghr.nlm.nih.gov/gene/ESR1</a>&gt; U.S. National Library of Medicine</p>                                                                                                                                           | <ul style="list-style-type: none"> <li>• Conduct that is strongly correlated with abuse, including sexual behaviour, contact, listening, and memory.</li> <li>• Shift in attitude during the adolescence of a child. (Balzer, among others, 2015)</li> </ul> | <p>The granulosa cells and the corpora lutea of the ovarian follicles</p>                                                            |
| 6. | Testosterone | <ul style="list-style-type: none"> <li>• Strengthens the development of sperm</li> <li>• Improves secondary sexual traits for males;</li> <li>• Induces sexual motivation and actions, usually translated into estradiol.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p>Gene from AR. A gene card from the 1996-2020 human gene archive. &lt;<a href="https://www.genecards.org/cgi-bin/carddisp.pl?gene=AR">https://www.genecards.org/cgi-bin/carddisp.pl?gene=AR</a>&gt;</p>                                                                                                | <ul style="list-style-type: none"> <li>• It tends to promote competition.</li> <li>• Increase self-appreciation</li> </ul>                                                                                                                                   | <p>In both males and females, the adrenal gland is formed in limited amounts. The Leydig cells in male testes and the ovaries in</p> |

|     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                           |
|-----|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                  | females.                                                                                                                  |
| 7.  | Androgen     | <ul style="list-style-type: none"> <li>• The male sex hormones required by the body for the production of the male reproductive system and secondary sexual characteristics are androgens (testosterone and dihydrotestosterone (DHT)) (MacLean et al., 1993).</li> </ul>                                                                                                                                                                                                                                                | Gene from AR. A gene card from the 1996-2020 human gene archive.<br><<br><a href="https://www.genecards.org/cgi-bin/carddisp.pl?gene=AR">https://www.genecards.org/cgi-bin/carddisp.pl?gene=AR</a> >      | <ul style="list-style-type: none"> <li>• Determine the sexual distinction of the body, and of the brain and actions, particularly androgens.</li> <li>• They include the features of sexual preference, gender identification, childhood play, and attitude, such as violence and empathy. (Hines, et al., respectively (2008)).</li> </ul>                                      | This are synthesised in the adrenal glands, the ovaries, and the masculine testes.                                        |
| 8.  | Progesterone | <ul style="list-style-type: none"> <li>• It plays a key function in regulating the synthesis of proteins, carbohydrates, and lipids.</li> <li>• It causes fat accumulation in the body sections, however has catabolic ramifications for protein metabolism (Kalkhoff et al., 1982).</li> <li>• In the sexual pregnancy and menstrual cycle, progesterone serves as a major agent.</li> <li>• It is also active in dysmenorrhea, premenstrual syndrome, and postpartum disorders. (About Glick, et al., 1981)</li> </ul> | Gene from PGR. The human genome index card with genes.1996-2020.<br><<br><a href="https://www.genecards.org/cgi-bin/carddisp.pl?gene=PGR">https://www.genecards.org/cgi-bin/carddisp.pl?gene=PGR</a> >    | <ul style="list-style-type: none"> <li>• Oral progesterone contraceptives tend to strike actions and attitude, often inducing lack of libido and depression in certain women without a pre-existing mental disorder.</li> <li>• They may have mood-stabilizing consequences and reduce premenstrual syndrome when used as psychotropic agents(Glick, et al., (1981)).</li> </ul> | Within the ovaries (corpus luteum), adrenal glands and placenta, progesterone production takes place.                     |
| 9.  | Thyroxine    | <ul style="list-style-type: none"> <li>• Increasing the rate of oxidation in tissue</li> <li>• Affecting neuronal growth</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                      | Gene. THRB Gene. The human genome archive from Genecard.1996-2020.< <a href="https://www.genecards.org/cgi-bin/carddisp.pl?gene=T.RB">https://www.genecards.org/cgi-bin/carddisp.pl?gene=T.RB</a> >       | <ul style="list-style-type: none"> <li>• Swings in attitude</li> <li>• Aggressiveness</li> <li>• Sadness Unhappiness</li> <li>• Irritability</li> <li>• Liable for maternal behaviour</li> <li>• Reduction of the amount of sex hormones</li> </ul>                                                                                                                              | Secreted from the thyroid gland into the bloodstream                                                                      |
| 10. | Prolactin    | <ul style="list-style-type: none"> <li>• Several reproductive, water control, and human behaviours consistent with parental treatment</li> </ul>                                                                                                                                                                                                                                                                                                                                                                         | Gene from PRLR. A gene card from the 1996-2020 human gene archive.<br>< <a href="https://www.genecards.org/cgi-bin/carddisp.pl?gene=PRLR">https://www.genecards.org/cgi-bin/carddisp.pl?gene=PRLR</a> >   | <ul style="list-style-type: none"> <li>• Liable for maternal behaviour</li> <li>• Reduction of the amount of sex hormones</li> </ul>                                                                                                                                                                                                                                             | Lactotrophic cells contain prolactin in the pituitary gland where it is deposited and then released into the bloodstream. |
| 11. | Vasopressin  | <ul style="list-style-type: none"> <li>• Enhance the reabsorption of water in the kidney</li> <li>• Affects schooling and memories</li> </ul>                                                                                                                                                                                                                                                                                                                                                                            | AVP Gene ('AVP Gene'). The human gene search card for genes.1996-2020.<br>< <a href="https://www.genecards.org/cgi-bin/carddisp.pl?gene=AVP">https://www.genecards.org/cgi-bin/carddisp.pl?gene=AVP</a> > | <ul style="list-style-type: none"> <li>• Taking a part of social conduct,</li> <li>• Sexual motivation</li> <li>• Pair bonding and maternal reactions to pressure</li> </ul>                                                                                                                                                                                                     | Peripheral blood from the secretion of the pituitary gland of the posterior                                               |

## VII. BEHAVIOUR DEVELOPMENT IN AN INFANT

We can observe certain facial expressions and actions in the case of an infant (Craig, et al., (1993).). Children are not educated about behaviour, most of them are birth-inherited. And the gene trigger is the inheritance of the character by birth. The character of attraction towards the light and the urge of the mother's nipple for milk (Doucet, S., Soussignan, R., et al., 2007) (Blass, E. M. et al., 1994) and the ability to recognise their mother in the case of many animal species are some of the inherited behaviour, such as the character of fear from the loud sound.

The development of language between parents and children is also an extraordinary example of the relationship between behavioural, biochemical and genetic triads. The language of weeping is the principal mode of communication. Crying is a very important way of communicating with one another in life. By the completion of the third day of life for the baby, mothers can distinguish the cry of their own baby from that of other babies. Most parents can tell if the cry of their baby means anger, pain, or starvation until the end of the first month of life. "Crying also causes the milk of a lactating mother to let down (fill the breast with colostrum) ("Infant - development of newborn" (2020 October 08). U.S. National Library of Medicine. U.S. National Library of Medicine. Has been recovered from <https://medlineplus.gov/>). In addition, there are many more responses and understanding of communication is observed between mother and child. Not only does this understanding reflect the physiological affection of the mother's love for her baby, but there is also a huge amount of hormonal development inside a lactating mother that makes her more caring for her baby.

It has been found that in order to understand the behaviour of her baby, a lactating mother develops a lot of abilities. In such a way that the character of a mother changes forever for her baby, the touch and sound of the baby affect the mother.

Most of these characters were not taught and it was discovered that a mother's caring and communication abilities are only developed by her baby's response.

## VIII. THE INBORN INSTINCT OF ANIMALS

It is observed in most of the animal kingdom that newborn infants are highly observable. They are born with the abilities of the environmental phenomenon to analyse the response. In addition, they have the understanding of understanding and controlling their organ of the senses and newly developing part of the body. They adapt to their environmental conditions in a very short time and begin to behave and respond as needed to survive, such as a newly bore calf start running

in the field, turtle, crocodile and many fish, even the beginning of swimming for wale newly born offspring. The astonishing thing is that, as we humans and certain mammal species do, they don't learn this thing from their parents.

This could be because of the relationship between genes and behavioural psychology. They may be born with such a function that activates when certain environmental factors are encountered. And certain brain and mind that fluctuate biochemical body that affect the genes that are bound to express the inborn instinct begin to function as environmental factors that affect them.

## IX. CONCLUSION

A command programme of the dominant genes located in our DNA is the character that we express either in the form of phenotype or specific social behaviour. The emergence of any behaviour and expression is the indirect responsibility of the dominant genes. Therefore, the activity of genes could be on and off for expression, learning, or behaviour. This is understood by the terminology of gene regulation on and off of genes. Similarly, the metabolite or hormones are a functional protein that the reference produces. Reference from the information coded in an organism's DNA inside the different genes.

We talked about the fact that metabolites and hormones are more likely to affect the behaviour of an individual. Therefore, we can say that human behaviour is bound to be a centralization of different biochemical genes or that it is just dependent on turning on or turning off different dominant genes that are responsible for an alternative character that is controlled by the utilitarian protein mixture. Therefore, at whatever stage there is an activation of any genes, there is a specific function that contributes throughout the body to any biochemical response. In the body, there are a few biochemical responses going on. In addition, each of them is channelized by the production of metabolic protein through the initiation of a creature's attributes.

In view of the terms above, we can say that dominant genes in the cells should trigger the starting point of the fundamental character of behaviour. Also, if any human mental problem, produced either by natural or social pressure that will lead to changes in useful protein, should occur, hormones and metabolites, for example, are well noticed. In addition, the action of activated genes is simply produced by any kind of protein required.

Such prepared shreds of evidence demonstrate that not only genes are responsible for behavioural psychology, but behavioural psychology also tends to regulate gene activity. Therefore, in its good study method, behavioural psychology may tend to regularise and guide the action of genes. Therefore, we can explain the new field of research after distinguishing the complete relationship between psychology and genes by using the connectivity of metabolism. And this field of genetic

engineering, behavioural psychology and metabolic engineering, which is based on the three pillars of science, can create a triad-based structure such as Acharangenetics. Acharangenetics(Acharan(almost) + genetics) is a term that can be used to describe the relationship between behavioural psychology and genes. The word Acharangenetics is a combined word, figure by a combination of two words Acharan( अचार ) a Hindi pedigree word meaning behaviour, and genetics is the second word that is the heredity study.

## RESEARCH QUESTIONS

Q->Would we be able to influence gene regulation by the means of behavior psychology?

Q->Would we be able to use behavior psychology as a hereditary guideline instrument?

Q->As genetics influences the behavior and makes an individual's character, would it be able to happen that controlling somebody's character brings genetic changes?

Q->Would we be able to modify genes working without utilizing hereditary engineering?

**Answers to the questions: -**

Since an individual's behaviour is an expression of genes in this way, the adjustment in behaviour by the word's activity may generate such hormones that lead to the outflow of different characteristics in the person that codes for such protein that modifies or creates another character in a person. Consequently, through certain social exercises, the change of human behaviour from a child to a developed person could be a reaction to the expression of genes. Or on the other hand, by using the concept of the shared understanding of prerequisites, we can consider a discussion between two-man about certain common behavioural changes could also be an illustration of gene expression of wanted characters. Behavioral psychology can therefore be used as an instrument for expressing explicit hereditary characteristics.

In the event that both social cooperation and genes engage in biochemical modification, they may interact with each other at some point. Because the metabolic pathway in many biological cycles is found to be a connective link, there could be a connection between behavioural psychology and genetics in this way.

On the off chance that behavioural psychology can influence the action of genes, we can use it as an apparatus for the outflow of explicit hereditary attributes at that point. As it happens, during social connection, any effect on an individual makes a particular degree of progress in its hormones or useful protein fixation that tends to either lift the state of mind or modulate mental status.

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