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Acharangenetics; Behaviour Psychology as Gene Regulation Tool

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ABSTRACT

Behavior is satellite responses to its environment generated by our social brain - the system that we consider as mind. Mind endeavor over persuasion on which behavior develops. Our characters are responses of some hormones produce in the cell of different gland. The shift in concentration of hormones leads to change in character. This article reviews various effects of hormones on our physiological status and hence behavioural responses. All the body hormones produced by body cell are actually controlled and managed by the genes present in the cell. As the brain (hypothalamus) sense any character or any situation it sends the response to various hormone glands and the glands synthesis the protein as per the command of active gene. Depending upon various factors behavioural response shifts vary wisely. As the behavior is controlled by the hormones, the genes which are modulating hormones synthesis must be switching off and on as per response from brain. Specific hormone for the specific task of behaviour is produced under the command of brain. We have attempted to establish a relationship between behaviour and genes so that a new study should accomplish in the motive to control the gene activity by the mode of behaviour psychology. The word Acharangenetics has been coined to explain the relation of behaviour psychology and genes. The word Acharangenetics is a compound word, form by combination of two words - Acharan Hindi origin word meaning behaviour and the second word is genetics - the study of heredity.

Keywords- behaviour; genes; acharangentics; psychology; hormone; brain; characters.

I. INTRODUCTION

The asset of any edifice is understood by its pillars. Likewise, in order to understand this multidisciplinary concept, we have to first give emphasis on its sub fundamental phenomenon that holds its existence. The first look of this concept is behaviour. As per psychology, behaviour comprises satellite responses to its environment. And this response is engendered by our social brain (Frith, C. D., (2007).). The social brain is the system which we consider as the mind. The Conscious exercise of faculty and thought is considered very important for the development of the mind. Mind that endeavour over persuasion. And its persuasion on which behaviour develops.

In order to examine mind and behaviour, we practise the concepts of psychology (Henley et al., 1989). The psychological practice is very frequently performed by a psychologist in order to deliver counselling to a person who is validated to be contemplating or living life with some detrimental state of mind (Strong et al.,1992). Hence, counselling can help a person to engender positive psychology, and aids to soothe the social life of a person from any detrimental social-psychological disturbance (Harris et al., 2007).

Moreover, it has been proven that our characters are the general responses of several hormones synthesised in the cell by different glands. These sift in the concentration of these hormones leads to a variation in character. Hence, to discuss this biochemical, behaviour and genetic triad relationship, we have discussed various causes of origin and effects of hormones on our physiological status and, on our behavioural responses.

All the body hormones which are produce by body cell are actually controlled and manage by the genes existing in the genome of the cell ("Gene Regulation", genome.gov. National Human Genome Research Institute, April 4, 2014) ("How do genes direct the production of proteins?". *ghr.nlm.nih.gov*. U.S National Library of Medicine, April 28, 2020.). As the brain (hypothalamus) sense any character or any situation it sends the response to our various hormone synthesising glands (Knobil, et al., 1980) (Schally, et al., 1973), and those glands synthesis the protein as per the command programmed inside the active gene ("How do genes direct the production of proteins?". ghr.nlm.nih.gov. U.S. National Library of Medicine, April 28, 2020.). Contingent upon the circumstances it has been realised that behavioural response sifts very wisely. As the behaviour is control by the hormones. So, it can be understood that the genes which are modulating hormones synthesis must be switching off /on, as per response from brain ("Gene Regulation", genome.gov. National Human Genome Research Institute, April 4, 2014). And those genes are approving the synthesis of the specific hormone for the specific task of behaviour as per instruction under the command of the brain ("Gene expression". ncbi.nlm.nih.gov. National centre for biotechnology information, 2017-11-07T19:13:02Z.). So here in this hypothesis we have tried to established a relationship between behaviour and genes so that a new study should carry out in the motive to control the gene activity by the mode of behaviour psychology.

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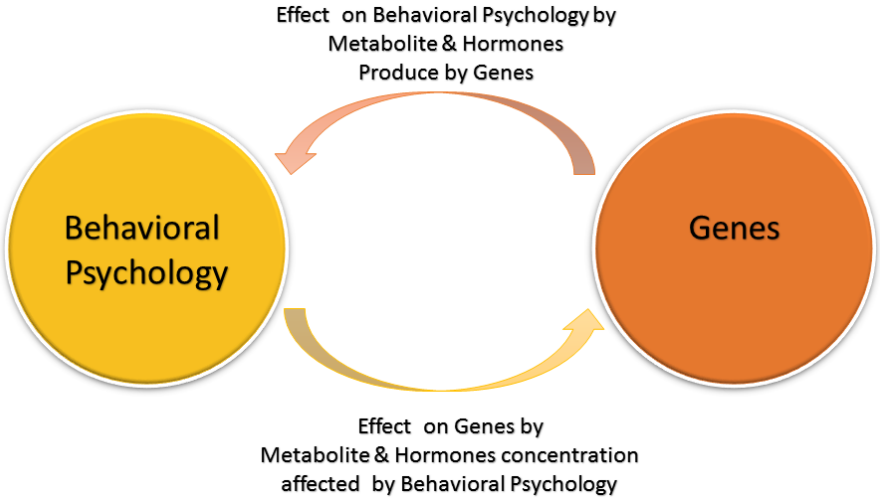

Counselling psychology

Counselling psychology is majorly practice in the bailiwick of academic, in the field of sports for motivating sportsman, or for aiding the one who is attempting to come back after injury (Webster et al., 2008), or in the area of medicine for fortifying the depressed state of the patients enduring from chronic diseases like cancer (Watson et al.,1988)(Sheard, T., & Maguire, P., 1999), diabetes (Snoek et al., 2002) or in various chronic diseases (Karademas et al., 2009) that has harassed the health as well as the mental stability of patients. Moreover, it is extensively practiced over the people who are handling life defeat mentality (Silbert et al., 1991). Hence, counselling is discovered to be very effective in uplifting the level of the psyche.

II. MOTIVATION

In psychology, human nature and motivation have been deliberated very extensively. Sigmund Freud (1856—1939) believed that behind every human bodily function there is the instinctual drive that works as a motivating factor that brings upon types of human behavior (McClelland, D.C., 1987). Human motivation psychology is a science of behavior that is observable. It's also signifies an objective science that reckons on the experimental and observable data. All human bodily activities and behaviour are the consequence of the physiological and neurological reactions in the human body. This fact also reveals that human behaviours are nothing more than the way man reactions to stimuli that comes from the environment. Behaviourists take on determinism in their version of psychology. They deem that every human response can be predicted concerning the type of stimulus that triggers man's responses. Some of our motives to act are biological, while others have personal and social origins. We are motivated to seek food, water, and sex, but our behaviour is well influenced by social approval, acceptance, the necessitate to achieve, and the motivation to take or to avoid risks. (Morsella, Bargh, & Gollwitzer, 2009).

If we consider motivation in the event of the genetic. We will encounter that throughout motivational process our body gene regulation exploits on the activation of genes that are good in handling stress. And as the process starts some genes that are responsible for the production of dopamine starts working. Dopamine, is a motivation molecule, it is a hormone that provides the drive and construct your presence of mind for the target work. This focuses you to accomplish your tasks most productively. This hormone is primarily demanded for attention span, focus, and motivation. It is a neurohormone that is secreted by the hypothalamus. Lack of dopamine in the body is consociated with symptoms like fatigue, lack of focus, difficulty in concentrating, forgetfulness, insomnia, and lack of motivation.

When dopamine isn't regularised the right way, it can kick in to a dysfunctional pursuit of good feelings, such as takes place in addictions or lead to a hyperactive state as in attention-deficit/hyperactivity disorder (ADHD). These symptoms are more often colligated with an increased risk of early death, rather than longevity, but the most former study paints a picture that "risk" genes for certain problems in some environments may be beneficial in other situations.

In humans, dopamine neurotransmission is influenced by functional polymorphisms in the dopamine transporter (DAT1) and catechol-Omethyltransferase (COMT) genes. The COMT and DAT1 genes were found 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 carriers of the DAT1 9-repeat allele and COMT met/met allele exhibiting the highest activation, presumably reflecting functional change consequent to higher synaptic dopamine availability.

Types of Motivation

The inceptions of motivation can be palpated as either internal in the form of push motivation or external as in the consequence of pull motivation. Push

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motivation is described in terms of biological variables arising in a person's nervous system and mind psychological variables that symbolize attributes of a person's mind, such as psychological motives. We can empathize it as, a person has the capability to channelize its motivation and stress hormones concentration by the mode of imagination. And if a person thought is responsible for its hormone concentration and transmission, then it a matter of fact that the person thought or imagination may affect individual gene regulation. And this gene regulation is a background of push motivation.

Pull motivation is understood in terms of environmental variables that depict external sources of motivation, like incentives or goals. Our internal sources of motivation interact with external sources to direct behaviour (Deckers, 2014). Moreover, it may happen that this external effort implants an idea in a person which allows creating a thought process rising to an imagination. Furthermore, this imagination leads to affect the body's serum metabolite concentration. And this signaling metabolite modulates the process of gene regulation and gene expression. Hence, it will lead to regulation of the activity of stress handling and risk handling genes (Yashin, et al., 2012). And this leads to the production of hormones such as dopamine, oxytocin, etc. that are responsible to manage the level of external motivation or push motivation. This system can be observed in the field of extensive sports like boxing and rugby, where professional coach try to motivate the energy and skills of the player by mentoring with either using sound modulation or by some moral thought related to winning or losing.

Our evolutionary history also explains aspects of motivated behaviour, and our individual personal histories shed light on how our lifelong experiences shape our motives and determine the utility of goals and incentives.

Physiological needs like hunger, thirst, sex, or some desire on the basic needs are the biological beginnings that eventually manifest themselves as a psychological drive in a person's subjective awareness. These biological events become psychological motives. It is important to distinguish the physiological need from the psychological drive it creates because only the, later on, has motivational properties.

The drive theory of motivation states that physiological motives spring up in our bodies. As our physiological system attempts to maintain health, it registers in our brain a psychological drive to satisfy a physiological craving and motivates us to make for the system from deficiency toward homeostasis (Reeve, 2018). Likewise, the person who motivates themselves for personal fitness must be channelizing their serum hormones effect. This desire might be facilitating them to initiate a curriculum of self-caring. These desire is very necessary to keep up with personal health. As you may detect that many people are not under control in case of following a good diet or healthy lifestyle. So the modality of personal motivation is necessary in that case. The biological demand turns into a psychological motive when the drive to satisfy it is interfering with our normal functioning by causing us to feel increasing tension until the need is satisfied. Social interaction affects behaviour and health status.

It has been seen that behavioural characteristic that are concerning to social interaction has performed wonders in the field of medical science. Some aspects are visible through the lenses of science but some are the trades of invisible energy. The placebo effect is among those invisible behavioural energy which has stunned the eyes of many thinkers. As per the Stimulus, substitution models posit that placebo responses are due to the pairings of conditional and unconditional stimuli (Montgomery et al., 1997). This circumstances are either developed by people or maybe, by a natural place. The placebo effect has a very vital consequence on the synthesis of metabolites in the body and functioning of hormonal glands. As per hypothesized mechanisms placebo effect give rise to endorphin release (Levine et al., 1978), and drop down the symptoms of anxiety (Sternbach et al., 1968.), classical conditioning (Wickramasekera et al., 1980), and response expectancy (Kirsch, et al., 1985) (Kirsch et al., 1990.). As per Montgomery and Kirsch (1996) described data that are hard to reconcile with the hypothesis that placebo responses are mediated by such global mechanisms as anxiety reduction or the release of endogenous opioids. It has been found that it can be used as a local anesthetic.

Genetics states that what we express as a character, whether its behaviour or phenotype it is just a pre-programmed stimulus of genes on its switching circumstances. And the circumstances could be behavioural or environmental. The switch may arise sooner or later, depends on the degree of gene regulation. On the other hand, the arising of any action or the way someone conducts themselves in response to other's actions is judge during psychological practice. It has been seen that the switch in mood, action, and development of thought triggers the secretion of different metabolites, by a different gland present in different parts of the brain and body. The effect of any action could be seen all over the body, such as; at the time of anger the whole body shares the heat arises from anger, at the stage of happiness we feel comfortable and energetic and at the time of practicing meditation we can feel peace. These kicks off of anger can take place by others behavioural activity but its onset initiates the production of adrenaline and noradrenaline cortisol, which are anger causing hormones. Similarly, the state of happiness is the result of the production of endorphins, dopamine, and serotonin. Likewise, the action of meditation kicks off the synthesis of all good hormones, required by the body to be at peace.

The effect of these hormones on the entire body can only be experienced if these hormones are well

circularized in the body cells. Whenever, any hormone goes into the cell it creates a signalling response which moves from the cell cytoplasm to the nucleus. And nucleus is the place where the key genetic material codes for the behaviour of the cell. A cell which is the structural and the operational unit of an organism.

III. ENVIRONMENT AFFECTING BEHAVIOUR

It has been found that psychology and metabolism are mutually related to each other. As any change in psych will trigger the synthesis of different hormones or metabolites or it's responsible for the alteration in the concentration of metabolites or hormones. And in the normal condition of the outer environment, social environment, and diet intake, the physiological status of a person is found to be normal. Hence, the metabolite concentration is also balanced.

It has been evidence that as soon as there is any modification in the environment (social/environmental) of a person. The metabolite and hormonal response alters. We may find vital changes in any person's behaviour or health status. There are several situations where organisms have to comport against their natural character. It has been discovered that this situation is either brought forth by the social environment or it occurs unpredictably. In table 1.1 we have tried to list some of the real-life situations and various responses of body metabolism.

Moreover, there are situation that is either brought forth or present naturally and is responsible for generating some rare characters in an organism. As in a situation of survival some people express very high spirits to stay alive and start working against their nature. They are found to handle stress conditions with an attitude of solving it and bring out anything good as per the things available. This can be the situation of specific activation of stress handling genes by the mode of gene regulation (Yashin, et al., 2012). This regulation tends to modulate behaviour in an organism (table 1.2). Hence, these people are found to be having great surviving skills and behaviour of dealing a tough situation.

Table 1.1: Hormone impact on behaviour and body at different stress situations

S. no	Changes in social /physiological/ habitat environment	Release of hormones	Effect on body	Effects on behaviour
1.	Accidental emergency	● Adrenaline ● Catecholamines ● Norepinephrine ● Epinephrine ● Estrogen ● Testosterone ● Cortisol ● Dopamine Serotonin (Walter et al., 1915)	● Modulating visceral functions (Lieberman, et al., 2009) (Malenka, et al., 2009) ● enhancing the output of the heart, ● enhancing blood flow to muscles, ● enhancing blood sugar level and ● pupil dilation response (Bell et al., 2009) (Khurana, et al., 2008)	● Initiate hyperarousal, and ● Initiate the acute stress response (Cannon, et al., 1916). ● It also affects how organisms react to stress.
2.	Sports	● Testosterone ● Other anabolic-androgenic steroids (natural only) (Wood, et al., 2012)	● Testosterone induces athletic performance, not only through its long-term anabolic actions but also through fast impressions on behaviour. ● In women, higher synthesis of endogenous testosterone due to inborn disorders of sexual development (DSD) may carry a competitive advantage (Wood, et al., 2012).	● Act on specific substrates in the brain to raise the aggression and motivation for competition (Gleason, et al., 2009)
3.	Fight	● Testosterone ● Adrenaline ● Serotonin	● Testosterone may induce muscular responses. ● Adrenaline gives a shock or extra energy either to fight against the hyper situation or to run away from the situation. (Bell et al., 2009) (Khurana, et al., 2008)	● The major emotion studied in relation to adrenaline is fear (Mezzacappa, et al., 1999). ● Regulate respiration(Lieberman et al., 2013)(Malenka, et al.,

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				2009) increasing output of the heart, blood flow to muscles, blood sugar level, and pupil dilation response (Bell et al., 2009) (Khurana, et al., 2008).
4.	Bullying	● Metabolite Chemical imbalance. ● Cortisol (National Academie of Sciences, Engineering, and Medicine. 2016 .)	● Physical and psychological stressors, like being the target of bullying, triggers the stress system cantered on the hypothalamic-pituitary-adrenal (HPA) axis (Dallman et al., 2015). ● The importance of HPA and other hormones is to initiate adaptation and survival, but chronically lifted hormones can also induce problems. ● Stress has ubiquitous effects on physiology and the brain, it changes the concentration of many hormones and other biomarkers, and at last, affects behaviour. Hence, both a general understanding of stress during early adolescence and, where known, particular links between bullying and stress can provide perceptivity into the bearing effects of bullying.	● It creates somatic disturbances, ● sleep difficulties, ● anxiety, ● low confidence, ● decrease in self-respec ● headaches. ● Some genes have been recognized as moderators of the exposure to a toxic stressor such as health outcomes and child maltreatment which results in depression (National Academies of Sciences, Engineering, and Medicine. 2016 .)
5.	Believe system	● Oxytocin	● Individual differences at the genetic level are among one factor that can control the psychological effects of intranasal oxytocin organization. This kind of effect has been presented for the most commonly studied polymorphism in the oxytocin receptor gene, OXTR rs53576(Marsh et al., 2012) (Feng, et al., 2015). ● It takes part in various body function such as milk ejection reflex (Wagner, et al., 2006), ● Oxytocin is found very crucial in the embryonal development of the heart by promoting cardiomyocyte differentiation (Paquin, et al., 2002.) ● uterine contraction which is very important for cervical dilation before birth	● The oxytocin system, severely take part in social bonding, ● may also impinge on spirituality, this lets us believe in a meaningful life spread with a sense of connection to a Divine Power or the world. ● It also promotes participants' experience of specific positive emotions at the time of meditation.

Table 1.2: Some examples of hormones and their effects on the human body and behaviour

S. no	Hormones	Effects on body	Gene responsible for production.	Effect on Behaviour	Sites for synthesis
1.	Oxytocin	● Oxytocin promotes attachment ● Oxytocin solidifies relationships ● Oxytocin eases stress ● Oxytocin crystallizes emotional memories ● Oxytocin facilitates childbirth and breastfeeding ● Oxytocin boosts sexual	OXT gene. (*Gene card the human gene database.1996-202.* *< https://www.genecards.org/cgi-bin/carddisp.pl?gene=OXT>)*	● this hormone behaves as a chemical messenger and ● It has been expressed to be crucial in human behaviour	Bloodstream by the posterior pituitary gland

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		arousal ● Oxytocin reduces drug cravings ● Oxytocin improves social skills ● Oxytocin triggers protective instincts ● Oxytocin induces sleep (Lawson et al., 2017).		which includes recognition, trust, anxiety sexual arousal, and infant bonding, ● It's also called as love hormone.	
2.	Serotonin	● Chemically it's termed as 5-Hydroxytryptamine. ● It is a biogenic amine most recognized for its function as a neurotransmitter. By performing advanced research serotonin in regulating cerebral vascular tone, peripheral vascular tone gastrointestinal motility, and platelet function and has been concerned in the pathophysiology of mood disorders, migraine, emesis, irritable bowel syndrome (IBS), and pulmonary and systemic hypertension. (Mohammad-Zadeh et al., 2008)	SLC6A4 *Gene card the human gene database.1996-2020. <https://www.genecards.org/cgi-bin/carddisp.pl?gene=SLC6A4 >*	● serotonin shapes social behaviour by switching social tastes in a positive direction, ● increasing the value people place on others' outcomes. (Siegel, et al., 2013)	Its synthesis takes place in the intestines and some parts of the brain. It is also found in the blood platelets and some parts of the central nervous system (CNS)
3.	dopamine	Lessoning and psychopharmacological studies propose a broad variety of behavioral functions for uprising midbrain dopaminergic systems. Still, electrophysiological and neurochemical studies on particular behavioural tasks show a more limited spectrum of dopamine-mediated alteration. Substantial increases in dopamine-mediated activity, as measured by electrophysiology or voltammetry, are related to rewards and reward-predicting stimuli. A somewhat slower, distinct	DRD2 *Gene card the human gene database 1996-2020< https://www.genecards.org/cgi-bin/carddisp.pl?gene=DRD2>*	● Dopamine is found to be regulating the fundamental interaction between striatal and cortical sight that are involved in behavioural modulation. ● Overall, Dopamine behaves in order to promote stimulus-which promotes responding to conditioned or reward-related	The synthesis of Dopamine is carried out in the dopaminergic neurons in the ventral tegmental area (VTA) of the midbrain, the substantia nigra pars compact

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		electrophysiological response encodes the uncertainty associated with rewards. Aversive events produce different, mostly slower, electrophysiological dopamine responses that consist predominantly of depressions. Furthermore, more modest dopamine concentration fluctuations, concerning movement and punishment , are seen at 200–18 000 times longer time courses using voltammetry and microdialysis in vivo. Employing these reactions, dopamine neurotransmission provides differential and heterogeneous information to subcortical and cortical brain structures about essential outcome components for approach behavior, learning , and economic decision-making. (Schultz, et al., 2007)		stimuli by integrative actions at multiple forebrain sites. (Jentsch, et al., 2000)	a, and the arcuate nucleus of the hypothal amus.
4.	Cortisol	● Increase carbohydrate metabolism ● mediate stress response	ACTC1 Gene. Gene card the human gene database 1996-2020.< *https://www.genecards.org/Search/Keyword?startPage=18&queryString=cortisol&pageSize=25*>	Male aggressive antisocial behaviour called the stress hormone	Adrenal gland in the zona fascicul ata, the second of three layers comprisi ng the adrenal cortex
5.	Estradiol	● Uterine and other female tissue development; ● regulate sexual motivation and performance in female and male	CYP19A1 ESR1 gene U.S National Library of Medicine 1996-2020.< *https://ghr.nlm.nih.gov/gene/ESR1*>	● Behaviour that is closely linked with aggression including sexual behaviour, communicatio n, and learning, and memory. ● Change in	The granulos a cells of the ovarian follicles and the corpora lutea

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				mood during girl's puberty. (Balzer, et al., 2015)	
6.	Testosterones	● Enhances sperm production ● Enhances male secondary sexual characteristics; ● induces sexual motivation and behaviour, typically by being converted to estradiol	AR Gene. Gene card the human gene database 1996-2020. < *https://www.genecards.org/cgi-bin/carddisp.pl?gene=AR*>	● It helps to spark competitiveness ● boost self-esteem	In small quantities produced by the adrenal gland both in males and females. Leydig cells in testes in men and by the ovaries in women.
7.	Androgen	Androgens (testosterone and dihydrotestosterone (DHT)) are the male sex hormones demanded by the body for the maturation of the male reproductive system and secondary sexual characteristics (MacLean et al., 1993).	AR Gene. Gene card the human gene database 1996-2020. < *https://www.genecards.org/cgi-bin/carddisp.pl?gene=AR*>	● Particularly androgens, determine sexual differentiation of the body, and to the brain and the behaviour. ● These involve sexual orientation, gender identities, childhood play, and personality characteristics, like aggression and empathy. (Hines, et al., (2008).	These are synthesized in the male testes, the female ovaries, and the adrenal glands.
8.	Progesterone	● It has a crucial role in affecting protein, carbohydrate, and lipid metabolism. ● It induces the deposition of fat in the body parts but has catabolic consequences on protein metabolism (Kalkhoff et al., 1982). ● Progesterone act as an important agent in the	PGR Gene. Gene card the human gene database.1996-2020. < *https://www.genecards.org/cgi-bin/carddisp.pl?gene=PGR*>	● Oral contraceptives of progesterone appear to strike behaviour and mood, in some women without pre-existing psychiatric	Synthesis of progesterone takes place inside the ovaries(corpus luteum), adrenal

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		sexuality pregnancy and menstrual cycle. ● It also acts in dysmenorrhea, postpartum disorders, and premenstrual syndrome. (Glick, et al., 1981)		illness, sometimes causing loss of libido and depression. ● When used as psychotropic agents, they can have mood-stabilizing effects and relieve premenstrual syndrome(Glick, et al., (1981)).	glands and placenta .
9.	Thyroxine	● Increase the oxidation rate in tissue ● Affects neural development	THRB Gene. Genecard the human gene database.1996-2020. *< https://www.genecards.org/cgi-bin/carddisp.pl?gene=T.RB>*	● Mood swings, ● Aggressiveness, ● Sadness, ● Irritability	Secreted into the bloodstream by the thyroid gland
10.	Prolactin	Many actions related to reproduction, water balance, and behaviour associates with parental care	PRLR Gene. Gene card the human gene database 1996-2020. *< https://www.genecards.org/cgi-bin/carddisp.pl?gene=PRLR>)*	● Responsible for maternal behaviour ● Decrease the level of sex hormones	Lactotrophs cells in the pituitary gland produce prolactin where it is stored and then released into the bloodstream
11.	Vasopressin	● Increase water reabsorption in the kidney ● Affects learning and memories	AVP Gene (“AVP Gene”. Gene card the human gene database.1996-2020. < *https://www.genecards.org/cgi-bin/carddisp.pl?gene=AVP>)*	● Play a role in social behaviour, ● sexual motivation ● pair bonding and maternal responses to stress	Peripheral blood from the secretion of the posterior pituitary gland

Behaviour development in infant

In the case of an infant, we can observe some facial expressions and actions (Craig, et al., (1993).). Infants are not taught about behaviour, most of them are inherited by birth. And the inheritance of character by birth is trigger by genes. Such as the character of fear from loud sound the character of attraction toward light and the urge of mother’s nipple for milk (Doucet, S., Soussignan, R., et al., 2007) (Blass, E. M. et al., 1994) and the ability to recognised their mother in case of many animal species are some of the inherited behaviour.

Development of language in-between parents and infant is also an extraordinary example of behavioural, biochemical and genetic triad relationship.

As the main mode of communication is the language of crying. Crying is a very significant way of life to intercommunicate. By the completion of baby's third day of life, mothers can distinguish their own baby's cry from that of other babies. Till the end of the first month of life, most parents can tell if their baby's cry means anger, pain, or hunger. Crying also induces a lactating mother's milk to let down (fill the breast with colostrum) ("Infant - new-born development" (2020 October 08). U.S. National Library of Medicine. retrieved from https://medlineplus.gov/). Further, more there are many responses and communication understanding is observed in between mother and the infant. This understanding not only reflect physiological affection of love of mother toward her baby but also there a huge amount of hormonal development inside a lactating mother is observed that make her more caring toward her baby.

It has been observed that a lactating mother develop a lots of skills in order to understand the behaviour of her baby. The touch and sound of the baby effect the mother in such a way that the character of a mother change forever for her baby.

Most of this characters where not taught and it's found that caring and communicational skills of a mother is develop just by the response of her baby.

IV. CONCLUSION

The character which we express either it's in form of phenotype or specific social behaviour is a dictation program of the genes pressie in our DNA. The happening of any behaviour and expression is the activity of genes. Hence, learning, expression, or behaving could be on and off of genes activity. This on and off of genes is understood by the terminology of gene regulation. Likewise, the metabolite or hormones are functional protein which produces by taking the reference. Reference from the information coded inside the various genes in the DNA of an organism.

We have discussed that the behaviour of a person is more likely influenced by the metabolite and hormones. Hence we can say that human behaviour is more likely to be a concentration of different biochemicals or its just based on switching on or switching off of different genes responsible for a different character which are control by the synthesis of functional protein. Hence, whenever there is an activation of any gene there is an activation of a specific function that contributes to any biochemical reaction throughout the body. Several biochemical reactions are going on in the body. And each of them is channelized by the metabolic protein produce by the activation of genes of an organism.

Keeping the above terms in mind we can say that the origin of basic behaviour character must be trigger by genes. Moreover, in case of any human psychological disorder, generated either by environmental or social stress responsible for the alteration of functional protein such as hormones and metabolites are observed. And any kind of functional protein is only produced by the activation of genes.

These organized evidences state that not only genes are responsible for behaviour psychology but also behaviour psychology holds the capacity to influence the activity of genes. Therefore, behaviour psychology in its best possible organized way may have the efficiency to governs and channelizes the activity of genes. Hence, after recognizing the complete relation between psychology and genes by the connection of metabolism we can elaborate on new areas of study either in the field of genetic engineering or in the field of behaviour psychology. Acharangenetics (*Acharan* (□□□□) + genetics) a word which can be used to express the relation of behaviour psychology and genes. The word Acharangenetics is a compound word, form by a combination of two words *Acharan* (□□□□) a Hindi origin word which means behaviour, and the second word is genetics which is the study of heredity.

RESEARCH QUESTIONS

1st. Q-> Can we affect gene regulation by the mode of behaviour psychology?

2nd. Q-> Can we use behaviour psychology as a genetic regulation tool?

3rd. Q-> As genes activation affects the behaviour and creates a person's personality characters, can it happen that molding someone's character results in gene regulation?

Answers to the questions:-

It may occur that as the behaviour of a person is an expression of genes so, the change in behaviour by the action of the word may generate such hormones which lead to the expression of different genes in the individual which codes for such protein that either alter or generate a new character in an individual. Hence, the transformation of human behaviour from a child to a mature person could be a response to the expression of genes by certain behavioural activities. Or we can consider a talk between two-person regarding certain mutual adjustments in behaviour could also be an example of gene expression of desired characters by using the concept of the mutual understanding of requirements. Hence, psychology can be used as a tool for the expression of specific genetic traits.

If social interaction and genes both affect metabolism, then they might be interacting with each other. As the metabolic pathway is found to be a connective link in may biological process, therefore, their might may be a relation between genetics and behavioural psychology.

If Behaviour Psychology can affect genes activity, then we can use it as a tool for the expression of specific genetic traits. As it happens that any effect on a person during social interaction creates a certain level of change in its hormones or functional protein

concentration that tends to either lifting the mood or results in stress conditions.

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