

Original Research Article

Pranayama - A Unique Means of Achieving Emotional Stability

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ABSTRACT

Emotional stability is the foundation of sound psychophysical health and basis of all round development in life. But unstable and immature emotions are the root causes of psychophysical ailments, behaviour disorders as well as personality disintegration. Since last several decades, it has been a major cause of criminal offences and even death in modern society. Many therapeutic techniques like psychotherapy, counselling, drug therapy etc. have been adopted with a view to alleviate the problem but no effective results have evolved so far. Yogic Pranayama, on the other hand is hypothesized as a potent means of alleviating the problem. To test hypothesis, the theoretical data was collected from various Yogic texts and findings of recent investigations. The analysis of these theoretical data have proved that Pranayama is an effective means of alleviating irrational impulses and emotional aberrations of mind by improving psychological functions through the stabilization of Prana in the nadis and physical functions through the down regulation of the hypothalamo-pituitary-adrenal (HPA) axis and also by lessening the over activation of sympathetic nervous system. Pranayama heightened arousability of higher cortical area and lessened limbic arousability which brings forth tranquillity and equanimity along with the reasoning consciousness for judging the situation appropriately. Consequently, an emotional reaction comes under control by virtue of elevated consciousness and an individual achieved the state of emotional stability. Therefore, it is concluded that the Pranayama is an effective tool for achieving emotional stability.

Key Words: Emotional stability, Pranayama, hypothalamo-pituitary-adrenal axis, Psychotherapy, counselling.

INTRODUCTION

Emotional stability is an important trait of an integrated personality which makes the foundation of sound psychophysical health and all round development in life. 'Emotional stability' may be defined as a state of personality in which one is emotionally mature and steady and whose emotional reaction is appropriate for a particular situation and are consistent from one set of circumstances to another (Betal, 2006,p.32). The state of emotional stability is a means of establishing a harmonious, adjusted and enriched relationship between

an individual and the changing state of environment. Such a stable and steady state of emotion is closely related to the individual's fulfillment in life on the one hand and his maximum contribution to the welfare of society on the other. Tranquillity, peace, good will, brotherly feelings and sense of values are of paramount importance for personal as well as social development. But if an individual's personality is not well-integrated due to emotional perturbation, an individual becomes the victim of many psychosomatic illness and behaviour disorders and thus shows a great identity

crisis in personal as well as in social life. Therefore, the state of 'emotional stability' is the real key to the psycho-physiological well being and good interpersonal relationship as well as development in personal life which has been expected and understood in every sphere of human progress, since ancient days.

But the immature, irrational and unstable emotion, on the other hand is an obstacle to the way of personal as well as social development. Young (1943) has rightly stated that 'emotion is an acute disturbance of the organism'. Colman (1974) also mentioned that emotional disturbance adversely affects the psychological as well as physiological health of an individual. One, who is emotionally unstable, displays inappropriate reactions to stress (Reber, 1995). Considering the adverse effect of unstable emotion, Sanford (1962) stated that improper and immature response to the stimulus is the root cause of emotional perturbation which is not only brings distress and disaster in mental mechanism but also interferes negatively with the normal physiological functions of human body.

A number of scientific investigations have confirmed the close and positive relationship between the incidence of emotional *instability* and physical illness. Hinkle and Wolff (1957) examined that individuals with the greatest number of physical illness found their highest degree of distortions in mood, thought and behaviour. Matarazzo, Matarazzo and Saslow (1961) put forth the view that the incidence of physical illness in population is a good indicator of mental disturbances and vice-versa. Jacobs et al. (1970) experimented on 179 college students and found positive correlation between physical illness and emotional instability, of whom 106 sought medical help for respiratory infections. Schwab's (1970) found that emotional disturbance

adversely affects the body's functions and lower its resistance power to diseases.

Emotional instability is not only responsible for causing physical illness but also acts as a breeding ground of various psychosomatic ailments like peptic ulcer, migraine, headache, diabetes, heart troubles, asthma, insomnia, skin disease etc. Diseases produced due to emotional instability have become so wide and common that at least one out of two persons becomes victimized (Colman, 1974). About 10-12 percent of the world is now the victim of mental diseases and in India, it is about 1-3 percent who are the victim of dangerous mental disturbance whereas 5-10 percent of people are mildly victimized (Agrawal, 2008).

The victimized people specifically, the youths indulging themselves in many antisocial acts like drug abuse, rape, theft, murder, homicide, suicide etc. The problems have now sprung up with new dimensions, expressions and manifestation. The situation has become acute since last several decades and has become a major cause of criminal offences and even death in modern society. Therefore, the problem of emotional instability needs to be controlled and corrected immediately.

Mechanism of Emotion

Psycho-physiologically, the limbic system (most primitive region of the brain), plays an important role in generating emotions. Various parts of the limbic system encircle the brainstem and nerve pathways, interwoven through these parts, send a continuous flow of electrochemical impulses that direct human drives and emotions. The hippocampus constantly checks information relayed to the brain by the senses; the thalamus analyses and passes information from nerves to the brain. Hypothalamus raises the emotional feelings of pain pleasure etc. and above it is the amygdala (Zaveri and Mahendra Kumar, 1994) which generates

physiological reactions for emotions. The whole mechanism occurs due to over excitation of hypothalamo-pituitary-adrenal axis (HPA) and sympathetic nervous system. The emotive stimulus is processed in the limbic area brings about a reactive behaviour which leaves an individual in a state of intense emotional feeling, impulse reaction, rigid and repetitive response and lack self reflection. But when the emotive stimuli is handled by higher cortical areas of the brain, it brings about reflective, rational thought process in the mind and thus produces the stable and mature emotional responses, as the cortical arousal generate conscious subjective awareness of feeling (Ravindra,2012). According to Vivekananda (2005), activity in the right middle frontal gyrus of the brain is highly associated with negative emotions such as pessimism, dejection, low energy, depression etc.

Therefore, the appropriate remedy lies in activation and arousal of the higher cortical areas of the brain along with the activation of left hemisphere of the brain; instead of over activation of limbic system, because a highly activated limbic system can overwhelm rational thought.

But in accordance with the Yogic methodology, the (1) Trigunas (three qualities) (2) Vasanas (desires) and (3) Snskars (accumulated imprints of various incarnations of individuals) collectively create the ground for generating the state of emotional instability. The Trigunas i.e., Sattva, Rajas and Tamas are the three basic qualities of human psyche (citta) which give form to one's life in its cycle of birth and shape one's emotional characteristics according to his past actions and experiences (Iyenger,2000,P.121). In the life of an individual, the gunas enter into enormous verity of combinations at different times, all of them irregular and one or other guna predominating at any point of time depending on the particular type of situation one is facing and the

emotional and behavioural characteristics are changed accordingly (Krishnamurthy,1999,P.228). Carak Samhita (Sarira Sthana,IV/37) expressed that in every one's life, the Trigunas of psyche play an important role in making behaviour. Of the Trigunas, Rajas and Tamas are the culprit of creating emotional instability. Person with predominance of Rajasic guna attains the emotional characteristics of restlessness, conceited, lair, egoistic, aggressive, lustful, concern and sorrowful (Carak Samhita, Sarira Sthana, IV/46,53). According to Bhagavad Gita (XIV/7) Rajasa guna reflects the emotional characteristics of constructive, physical courage and enthusiasm. Such people are sensuous, thirsty, little interested in spiritual pursuit, hatred, jealous, imitative, passionate, anxious, industrious and overambitious. Individual with the predominance of Tamasa guna found the emotional characteristics of ignorant, lethargic and delusional. They are destructive, drowsy, angry and fearful by nature (Gita, XIV/8). Tamas guna creates mental bogusness in which one displays his worst qualities i.e., sloth stupidity, obstinacy and helpless despair (Krishnamurthy, 1999, p.28). Vasanas are the desires deeply rooted in the strata's of sub-conscious and unconscious mind which make present consciousness of past perceptions. If an individual attains negative, unrealistic and illicit Vasanas (desires) during his past perceptions, he analyses and reacts with the every event or stimulus of the surroundings negatively and found to be remained in the state of emotional instability. The theory of karma postulates that the results of every action whether it is good or bad are carried forward to the next life called Sanskara and as a result of this, an individual's psyche is influenced and directed accordingly. Maharishi Patanjali has rightly stated that 'as long as the root of actions exists; it will give rise to class of birth, span of life and experiences'-

“SATIMULE TADVIPAKAH JATI AYUH BHOGA” (P.Y.S.-II/13). Thus, the state of emotional impulses of an individual’s psyche is greatly designed and shaped by the nature of gunas and of past desires, actions and experiences (Vasanas and Sanskaras).

Conventional Strategies for the Treatment of Unstable Emotion

Viewing the importance and need of stable and mature emotions in personal as well as in social development, various ameliorative techniques have been adopted to treat emotional instability, since the times immemorial. Many methods like psychotherapy, counselling, drug therapy etc. have been adopted to alleviate the problem but all of them have failed to yield any satisfactory result. The traditional techniques of psychotherapy and counselling which aim at a total restructuring of thinking and emotional pattern of an individual by eradicating all the irrational impulses arise from the layer of conscious and subconscious mind usually require a substantial period of treatment and yielded results are not permanent because the root cause remain untreated. Recently, the modern science has developed pharmaceutical wonderful drugs to correct irrational emotional impulses and mental agonies. But they give only a temporary relief because it has also no impact on the alleviation of the root cause of problem. Besides, the medicine itself creates many side effects on account of their long term usage.

However, the easy, secular and self-sustainable process of Yogic Pranayama which attempts to control and rectify the irrational impulses and all kind of emotional aberrations of mind by improving psychophysical functions through the down-regulation of hypothalamo pituitary adrenal (HPA) axis and by lessening hyper-activation of sympathetic nervous system. In this way, pranayama performs the act of total restructuring of mental faculties. From the

Yogic view point, pranayama removes all types of vasanas (desires) and sanskaras (imprints of past actions) by awakening the reasoning consciousness (Y.S.-II/52) and predominating Sattva guna in place of Rajas and Tamas guna in an individual’s psyche.

Concept of Pranayama

The word pranayama is formed by the combination of two Sanskrit terms “Prana” means vital (bio) energy or life force and “Ayama” means to expanse, to lengthen or to control (Satyananda, 2001 p. 258). So the word Pranayama indicates the process of expanding and controlling the vital energy. Through the practice of Pranayama, the irregular flow of breath is controlled consciously by a deliberate process and it involves the stages of inhalation, exhalation and retention of breath (Shrikrishna, 1996, p.55). The practice of Pranayama is responsible for all the life activities in an individual ranging from life-sustaining mechanism of every systems of body to the very subtle psycho-spiritual functions of brain and mind. It is a powerful and systematic breathing technique of mental, emotional and physical relaxation also (Mahaprajna, 1989). Deshpande (2012) stated that Pranayama is help full for internal control and in managing the negative and stressful emotions.

Objective of Study

Keeping in view the above mentioned positive role of Pranayama in the management of physical and mental disorders, the present investigator has inspired to find out whether the pranayama has any role in stabilizing the unstable emotions. Therefore, the main objective of this theoretical study was to find out the efficacy of Pranayama (if any) in stabilizing the unstable emotions.

MATERIALS AND METHODS

In order to study the problem scientifically, the theoretical data was collected from various Yogic Texts and

also from the findings of various recent investigations. In this study, an analytical method was adopted.

RESULT

The vital body (Pranamaya kosha) with strong vital energy directly control the psychological body (manomaya kosha). This is because the mind is closely connected with the vital body. Hence, the ancient methodology declared that if anybody wishes to control his mind, he should deeply be attached with the breath:

“Hetudvayam hi cittasya vasana ca samiranah/

tayorvinasta ekasmin dvavapi vinasyatah //” (Yoga Kundali-I/1).

There are two causes of mental fluctuations: one is the vasana (desires) and other is the Samirana (irregular flow of breath). If a practitioner subdue one of them, he may conquer over the unstable nature of citta (mind). The Text again mentioned that out of them, a practitioner should control the process of respiration at the initiation- *“Tayoradau Samirasya Jayam Kuryannarah Sada” (Yoga Kundali-I/2).* Yoga Bija (verse-74) also made similar statement that in spite of contemplating or concentrating on various scriptures or religious discourse, one becomes unable to control one’s mind. It leads oneself towards desires as the body is connected with mind and breath. Therefore, the only means to control mind and body etc. is to have to control over the process of respiration. Because, there is no other method for controlling mind:

“Nanavidhaivichareistu Na Sadhyam Jayate Manah/

Tasmatasya Jayopayah Pran Eva Hi Nanyatha //” (Yoga bija-74).

The irregular process of breath can be controlled through the technique of Pranayama and the practitioner can be able to maintain his body along with the destruction of imperfections of his mind like desires, passion etc. after achieving perfection in Pranayama:

“Yasya Prano Vilinoatha Sadhake Jivite Sati /

Pindam Na Patitam Tasya Cittadosaih Pramucate //” (Yoga Bija-78).

Due to an obstacle in the natural flow of Pranapana (vital energy), one has to undergo innumerable agonies and consequently, the mind of such jiva (an individual) losses its equanimity and cannot concentrate in meditation:

“Pranapanavipatau Tu Kshovamayati Marutah /

Tato Dhukasati Vyaptam Cittam

Sangksuvyate Nrinam //” (Yoga Bija-38)

Gherand Samhita (G. S.), also emphasized on the practice of Pranayama for controlling the emotional fluctuations of mind. According to this text, Pranayama gives the ability to move in air, Pranayama destroys diseases; Pranayama helps to awaken Sakti (Kundalini). Through the practice of Pranayama, the practitioner achieves the state of Manonmani (steady or functionless state of mind) and mind experiences bliss and the practitioner feels happiness:

“Pranayamatkhecaratvam

Pranayamadrujam Hatih /

Pranayamacchaktibodhah

Pranayamanmanonmani /

Anando Jayate Citte Pranayami Sukhi

Bhavet // (Gh. S.-V/57).

The irregular and unstable state of vital energy (prana) is the main cause of emotional perturbation in mind. Svatmarama has rightly stated that so long as breathing goes on, the mind remains unsteady; but when irregular movements of breathing stops, the mind also becomes still and the practitioner attains the state of motionlessness. Hence, one should restrain one’s breath:

“Cale Vate Calam Cittam Niscale

Niscalam Bhavet /

Yogi Sthanutvamapnoti Tato Vayum

Nirodhayet //” (H.P.-II/2).

Hathapradipika mentioned that respiratory process and mental functions are mixed up like milk and water. They are

interdependent. So, whenever marut (air moves through nostrils or breathe) is active, Manas (mind) is also fluctuated and vice versa (H.P.-IV/ 24).

When one ceases, the other also ceases. When one acts, the other also acts. If they are active, the whole group of Indriyas (sense organs) becomes active. Their stabilized state leads to the attainment of emancipation:

*“Tatraikanasadaparasya Nasa
Ekpravrterapravrttih /
Adhvastayoscendriyavargavrttih
Pradhvastayormoksapadasya Siddhih //”
(H.P.-IV/25).*

When the maruta (air moves through nostrils) passes through the Susumna, the mind attains the state of steadiness:

*“Marute Madhyasancare
Manahsthairyam Prajayate //” (H.P.-II/42).*

Whatever controls Pavana (vital energy), controls the mind and whatever controls the mind controls pavana:

*“Pavano Badhyate Yena Manastenaiva
Badhyate /
Manasca Badhyate Yena Pavanastena
Badhyate //” (H.P.-IV/21).*

Whatever diminishes mental activity, it diminishes respiratory activities also:

*“Mano Yatra Viliyeta Pavanastatra
Liyate/
Pavano Liyate Yatra Manastatra
Viliyate//” (H.P.-IV/23).*

Besides the above cited textual references, the findings of many recently conducted scientific investigations also confirmed that the technique of Yogic Pranayama can improve physical mental and emotional health. Nagendra (2003) stated that Pranayama alleviates tension and stress and cures mental imbalances. Pandya (2004) mentioned an important role of Pranayama in developing emotional balance along with physical and mental well being. Udupa (2000) stated that Pranayama is the only means to control and regulate the secretion of neurotransmitter and also makes nerves

healthy. According to Bollom (2004), the level of noradrenaline and dopamine increased due to pranayama practice which is beneficial for both body and mind. Gharote (2005) concluded that pranayamas are effective for conditioning the Autonomic Nervous System which is responsible for emotional behaviour. The long Pranayamic breathing activates the parasympathetic system which lowers the level of stress (Jarath et al., 2006) which in turn produce calmness and clarity of mind. Bist (2008) investigated the effect of Bhastrika and Bhramari Pranayama on academic anxiety of students and found positive results. Mudraroop (2011) mentioned that Surya-bhedan Pranayama is effective in producing positive emotions.

Kene (2012) experimented that Bhramari Pranayama significantly decreased the level of stress. Deka and kumar (2012) experimented that by controlling breathing activity through Pranayama, calmness and tranquillity of mind can be achieved. Bhavanani (2012) stated that Pranayama helps an individual to control his emotions which are linked to breathing and Pranayama kosha(the vital energy seath). He added that slow, deep and rhythmic breathing helps to overcome emotional perturbation. Rastogi and Kishore (2015) concluded through an investigation that Bhramari Pranayama significantly decreases the level of stress and increases the level of self confidence. According to Sharma (2015), as the mind is connected with breath, Pranayama are helpful for people who are depressed. Even circulation of prana throughout all parts of body-mind system enhances the health and happiness. The ancient Hatha Yogic Text ‘Hathapradipika’ has also made similar statement that by proper practicing of Pranayama, all diseases are annihilated (H.P.-II/16).

DISCUSSION

The above cited theoretical data confirmed that Pranayama is an effective

therapeutic tool which results in better physical and mental health. Physiologically, Pranayama ensures complete evacuation of lungs by a slow, deep and complete exhalation, maximum intake of fresh air by inhalation and full exchange of gases in the lungs by practicing Kumbhak (holding the breath). It improves the blood circulation and cleanses the waste materials that deposited within the muscles. Adequate oxygenation of blood and purification of cells enhance the degree and amount of the production of vital energy within the body. The whole body is nourished by extra supply of oxygen, and carbon dioxide from the body is expelled sufficiently. Consequently, blood becomes free from toxins, cells of the brain and body get energized and brain centres are stimulated to work at their optimum level. Practice of Pranayama, specifically the Anuloma-Viloma Pranayama properly balances the functions of sympathetic (Pingla) and parasympathetic (Ida) nervous (nadis) system. It removes the congestion in the flow of prana in the nadis.

Pranayama brings forth emotional stability in several ways. The use of Pranayama in Yoga practice is intended to bring about tranquillity and calmness in mind by stabilizing the flow of respiration making it slow, deep and rhythmic. The slow, deep and uninterrupted flow of vital energy cures the malfunctioning of physical organs as all the impurities are excreted from body. Flow of prana (vital energy) in the nadis achieved the state of tranquillity (H.P.-II/2). This condition evokes a real steadiness of the body and mind. Consequently, an individual feels inner tranquillity, psychic strength, strong will power and purity of consciousness. At this state of tranquillity, 'serotonin' (a tranquilizing hormone) is secreted within the brain, possibly by pineal gland and it acts to tranquilizing stressful, unsteady and wandering mind and also depresses aggressive behaviour and thus evokes

restful alertness, deep relaxation and reasoning conscious. (Zaveri and Muni Mahendra, 1994).

Practice of Pranayama leads to heightened arousability of higher cortical area and lessened limbic arousability simultaneously. When the arousability of limbic system (seat of emotion) is reduced, emotional reaction is automatically comes under control (Satyananda, 2001). The situation brings about rational thought process in the mind and a mature responsive behaviour to emotive stimulus or situations produced. This allows flexibility in response and an integrating sense of self awareness because the over activation of HPA axis and sympathetic nervous system is, now down regulated. This conscious subjective awareness of emotive situation is the key to emotional maturity and stability. Practice of Pranayama with awareness and mindfulness (non judgement moment to moment awareness) mind; activate 'anterior cingulate cortex' and 'medial prefrontal cortex' that are associated with processing of distracting events and emotional processing respectively. Further practicing of Pranayama with deep attention helps to activate 'putamen' which is associated with conscious regulation of attention. This attention regulation is a basic and most important means of developing deep insight and observation capacity. Thus, the activation of higher cortical area due to conscious and attentive regulation of breath through the practice of Pranayama plays an important role in bringing about emotional maturity and stability. Studies have demonstrated that yoga practices greatly influence and modify the activity of 'amygdale' and 'right anterior insula' the main neural structures associated with the function which brings forth more emotional stability (Ravindra, 2012).

According to Swara Yoga, the activity of 'Ida' nadi (air flow in the left nostril) is associated with right hemisphere

of brain whereas the activity of 'Pingla' nadi (air flow in the right nostril) is associated with left hemisphere of brain (Mudraroop, 2012). In accordance with this principle, practice of *Surya-bhedan* Pranayama activates the left hemisphere of the brain which is responsible for generating positive, mature and stable emotions (Vivekananda, 2005). Besides, the regular practice of Pranayama brings forth a distinct pattern of changes in the neural structures and connectivity (organs) associated with emotional response. This brings about positive changes in attitude and behaviour which ultimately produce the state of emotional maturity and stability.

Several investigations have proved that long term existence of tension plays an important role in the pathogenesis of emotional disturbance (Coleman, 1974). Because they accumulate in the subconscious mind as repressed impulses and adversely affect the emotional structure of mind. But the tranquil state of mind due to Pranayama practice helps the individual to dive down into the realm of subconscious mind and achieve the deep state of relaxation by releasing deep rooted tension. When the relaxation is achieved, the receptivity is greater and consciousness is elevated. The practice of Pranayama relaxes the mind and hence, the receptivity of mind is increased and all the emotional responses become appropriate, mature and stable.

From the Yogic (spiritual) standpoint, unfluctuating sound judgement with uninterrupted awareness is the essence of right knowledge- "*Vvekakhyatihrviplava Hanopayah*" (P.Y.S-II/26). Through the practice of Pranayama the seeds of false knowledge is burnt and simultaneously, it heralds the dawn of wisdom- "*Tatah Ksiyate Prakasavaranam*" (P.S. Y.-II/52). It removes illusion, consisting of ignorance, desire and delusion which obscure the intelligence and allows the inner light of

wisdom to manifest. Emergence of true knowledge diminishes the dominance of Rajas and Tamas guna and augments the degree of Sattva guna in an individual's psyche. In addition to these, in the light of true knowledge, practitioner can dissolve all the deep rooted seeds of Vasanas (desires) and Sanskaras (imprints of past life actions), those were responsible for generating irrational impulses and unstable emotions. Thus, the Yogic causes behind the generation of emotional instability are also solved through the practice of Pranayama.

CONCLUSION

As due to the practice of Pranayama, the over activated somatic functions and turmoil mind become calm and tranquil, an individual achieved deep insight and reasoning consciousness and ultimately attained the appropriateness. The regular practice of Pranayama offered the practitioner a feeling of equanimity, tranquillity and the knowledge for right judgement of the situations. Consequently, one becomes more accommodating, internally more controlled, more adjusted, more relaxed and more rational. Under this unique state of psychic steadiness, an individual achieved the state of emotional stability. Therefore, Pranayama is proved to be an effective and unique therapeutic tool of achieving the state of emotional stability.

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