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The role of pranic energisation in modulating stress and energy in adolescents: A biowell perspective.

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Abstract- Adolescence, spanning ages 10 to 19, marks a critical developmental transition from childhood to adulthood, characterized by significant physical, emotional, cognitive, and psychological changes. In India, traditional cultural values are increasingly challenged by modern influences such as increased screen time, exposure to Western culture, nuclear family structures, and familial discord, which place additional strain on adolescents' mental well-being. The World Health Organization (WHO) identifies adolescence as a high-risk period for the onset of undetected mental health disorders, with identity formation, peer pressure, and academic stress acting as key contributing factors. Prana, the fundamental life force, is inherent in all living beings. It is acquired through nature, food, and breath, and possesses intrinsic intelligence. However, pranic energy can become imbalanced due to poor diet, negative thoughts, pollution, and unhealthy habits. Techniques such as pranayama, pranic healing, and the Pranic Energisation Technique (PET)-an advanced yogic meditation practice-can help regulate and enhance prana. This study investigates the impact of PET on adolescent health. Sixty-five students aged 13-14 practiced PET four times a week for eight weeks, followed by twice weekly sessions for another eight weeks. Data were collected at baseline, at eight weeks, and after 16 weeks in a single-group pre-post design. The Bio-Well instrument, based on Kirlian Photography, was used to measure Personal Energetic Homeostasis by capturing the luminous energy field (Corona effect) through a high-voltage, low-current electrical field, magnified 1000 times. Statistical analysis using Coefficient of Variation, Friedman's test, ANOVA, and LSD tests revealed significant stress reduction (p=0.000**) and increased energy levels (p=0.000**) at both the physical and chakra levels-except the Muladhara (root) chakra, which showed lesser improvement. Chakras shifted toward spinal alignment, enhancing pranic flow, which in turn revitalizes associated organs. Energy reserves were classified as low (<20%), optimal (20-60%), or high (>60%). Findings indicate that regular PET practice significantly reduces stress, enhances energy levels, and improves overall physical and psycho-emotional well-being in adolescents.

Keywords: Adolescence, Pranic Energisation Technique, Kirlian Photography, ANOVA, Corona effect

INTRODUCTION

Adolescence is a pivotal stage in human development, marked by dramatic physical, emotional, cognitive, and psychological changes. This transitional phase, typically between the ages of 10 and 19, presents unique challenges that affect adolescents' mental and emotional health. Unfortunately, this period also represents a time of heightened vulnerability to mental health issues such as stress, anxiety, depression, and substance abuse, many of which remain undetected and untreated (World Health Organization [WHO]). Adolescents face pressures related to identity formation, peer influence, academic demands, and hormonal shifts, all of which can undermine their

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psychological well-being. Globally, 10-20% of adolescents experience depression, approximately 6% deal with anxiety,[1] and 10% suffer from substance abuse. Additionally, issues like low self-esteem, peer pressure, identity confusion, and bullying-including cyberbullying-further complicate their mental health challenges. In India, approximately 23.33% of school children report facing mental health concerns, with 7.3% of cases occurring in urban areas.[2] These issues are compounded by academic stress and societal expectations, making it critical to find productive strategies for intervention.

While external challenges cannot always be controlled, research suggests that individual responses to these challenges can be shaped. Various interventions, including behavioural therapies, social support, counselling, and mindfulness-based practices, have been shown to improve mental, emotional, and physical well-being. In particular, yogic counselling and practices such as pranayama, meditation, Tai Chi, and Qigong have demonstrated positive effects on adolescents' mental health by regulating emotions and improving self-awareness.

However, while these practices are beneficial, the specific impact of the Pranic Energization Technique (PET)-a unique yogic technique-has not been widely studied in adolescents, presenting a gap in the current literature.[3]

PET, developed by Dr. H.R. Nagendra at SVYASA University, is a simple, accessible, and safe advanced meditation technique that harnesses prana, the vital life force, to improve energy flow within the body. Unlike techniques such as Pranic Healing or Reiki, which require guru initiation, PET can be learned through guided audio or video instructions, making it suitable for individuals of all ages, anytime and anywhere. PET involves eight steps, including chanting, breath balancing, hasta mudras, and mindful rotation of prana throughout the body, which is then visualized for healing and energy enhancement. This non-invasive, non-pharmacological technique has been shown to revitalize tissues by activating prana, promoting overall health and well-being. As noted in Indian culture, subtle energies play a crucial role in mental and physical health, and techniques like PET aim to balance these energies.

Given the increasing prevalence of mental health challenges in adolescents and the need for accessible, effective interventions, this study aims to evaluate the role of PET in modulating stress and energy in adolescents, focusing on its impact on pranic energy, stress reduction, and overall well-being. The effectiveness of PET in modulating stress, energy levels, and chakra alignment will be assessed using the Biowell system, which uses Kirlian photography principles to measure energy levels and chakra alignment. By addressing stress, anxiety, peer pressure, and substance abuse through an accessible, PET may offer a promising tool for promoting adolescent mental health.

METHODS

A total of 75 students from two sections of Class 7 at an English-medium school were informed about the study. Written consent was obtained from the parents of the students, and assent was granted by the principal of the school. The criteria we included were -No prior experience with PET, both boys and girls, Willing to participate, Healthy students, Students of the age range 13-14 years. We excluded the students, those who are already doing meditation or yoga, not regular to school (less than 75% attendance), Students with any specific learning deficiency if diagnosed, any kind of acute or chronic health issues or diseases. Long-term medication of any type, and if they are into any sports or physical activity. Thereafter, 75 students voluntarily participated in the study and were assigned to the experiment. The sample size was calculated using G-power, based on a previous study on PET. The sample size for one group was calculated to be 45, considering an effect size of 0.49, an alpha of 0.05, and a power (1-beta error) of 0.95. The PET group consisted of 75 students. After accounting for dropouts, long absences, and sick leave, 65 students completed the data collection.

The participants (n=75) were aged 13.46 ± 0.34 years for males and 13.49 ± 0.37 years for females. Of the initial 75 students, 10 dropped out due to illness and lack of attendance, leaving 65 students to complete the study. The final PET group (n=65) included 35 males and 30 females. The participants practiced PET four days a week for the first two months, followed by two days a week for the next two months, with 30-minute sessions each.

Biowell parameters were measured at baseline, after 8 weeks, and again after 16 weeks. Measurements were taken for all ten fingers of each participant in the same room at the same time during each assessment.

Study Design

This single-group quasi-experimental study investigates the effect of the Pranic Energization Technique (PET), an advanced meditation technique from SVYASA,

India, on adolescent well-being. Seventy-five participants (n = 75) were selected after screening based on inclusion criteria. The PET intervention lasted 8 weeks, with 30-minute sessions, 4 days per week. Following the intervention, an 8-week follow-up period with 2 sessions per week was conducted. Sessions were held in the mornings (9 AM to 11 AM) by a qualified yoga trainer, with over 10 years of training experience. Attendance was recorded regularly. The assessors and statisticians were blinded to the participants' intervention status. Ethical approval was obtained from the institutional ethics committee of SVYASA University, Bengaluru (IEC clearance certificate no. RAS/IEC-SVYASA/272/2022). The trial was registered in the Clinical Trial Registry, India (CTRI/2023/06/054410).

Conceptual Framework

The term prana, derived from the Sanskrit roots pra (forward) and na (movement), symbolizes a dynamic, ever-flowing force that animates all living beings. It is the vital energy that sustains every action, thought, and function of the mind and body. In modern terms, prana can be seen as a complex, multidimensional energy encompassing various forms such as electrical, magnetic, electromagnetic, photonic, ocular, thermal, and mental components.[4] However, it is important to note that prana, in its full spiritual and philosophical context, does not directly correspond to any single energy form recognized in Western science but is rather a holistic force.

Our existence consists of five layers or koshas: Anamaya Kosha (the physical body, made of food), Pranamaya Kosha (the energy field of an individual), Manomaya Kosha (the mental layer, related to external experiences), Vijnanamaya Kosha (the link between the individual and universal mind), and Anandamaya Kosha (the state of bliss). The Pranamaya Kosha serves as the vital link between the more tangible Anamaya Kosha and the subtler Manomaya Kosha. Awakening prana within this layer is a sign of spiritual progress and enhanced vitality, allowing a smoother transition between the various layers of existence. Prana flows through and nourishes all koshas, ensuring balance and harmony between the body, mind, and spirit.

There are five primary types of pranas, each governing a distinct function within the body: Prana, Apana, Samana, Vyana, and Udana.[4] Prana is responsible for the heart and lungs, located between the diaphragm and the base of the neck. Apana governs the pelvic region and controls elimination and reproductive functions. Samana regulates the digestive system between the navel and diaphragm, maintaining the balance of digestion and assimilation. Udana operates in the extremities, including the arms, legs, neck, and head, influencing the sensory organs. Vyana permeates the entire body, coordinating muscular movements, circulation, and energy distribution. Imbalances in Vyana can manifest as physical coordination issues or emotional instability, leading to erratic behaviour.[4]

Prana is believed to possess an inherent intelligence that governs the functioning of each layer of our being.[3] Disruptions in prana, whether due to excess or deficiency, can lead to both physical and mental disturbances. The flow of prana is also associated with seven energy centres, known as chakras, which are aligned along the spine: the root, sacral, solar plexus, heart, throat, third eye, and crown chakras. Each chakra acts as a concentration point for energy, influencing both physical and emotional health. Energy flows between these chakras, creating an energy field that impacts the overall well-being of the individual. These energy centres expand and contract depending on physical and mental states.[4]

In the traditional system of prana, energy is generated at the Muladhara (root) chakra, stored in the Manipura (solar plexus) chakra, purified at the Vishuddhi (throat) chakra, and distributed from the Ajna (third eye) chakra. The balance of the Ida and Pingala nadis (energy channels) is crucial for mental and physical harmony. Techniques like the Pranic Energization Technique (PET) are designed to enhance and balance prana. Prana is seen as both a macrocosmic and microcosmic force that underpins all life. Mahaprana, the great prana, is considered the all-encompassing energy of the universe.

According to the Prashnopanishada, prana initiates all bodily movements, controls the mind, facilitates sensory perception, enables speech, and is the source of all feelings and sensory experiences. When prana is unbalanced, whether due to a deficiency or excess, it can lead to physical and mental health problems. For instance, disturbances in prana can interfere with cellular functions, resulting in disordered electrical balance within cells. The concept of desaturation in cells, necessary for maintaining the body's electrical balance, also ties into the understanding of prana's role at the cellular level.

Moreover, thoughts and mental formations are believed to exist as energy waves in the mind, which influence the flow of prana through the nadis and chakras.

If negative thought patterns, or vrittis, are left unchecked, they can deplete prana and create disturbances within the energy network. Therefore, cultivating positive mental states and balancing energy flows are essential for maintaining physical, mental, and emotional health.[4]

Intervention

Pranic Energization Technique (PET)

Pranic Energization Technique (PET) is an advanced meditation method developed by Dr. H.R. Nagendra at SVYASA University, Bangalore. It consists of eight steps designed to enhance and balance the flow of prana (vital life force) within the body, promoting physical, mental, and emotional well-being. Drawing on ancient principles, the present study investigates the impact of PET on adolescents' stress levels and energy. The central hypothesis posits that PET will significantly improve stress management and increase prana levels, thereby promoting better mental health through improved energy and reduced stress.

Human Biofield and Subtle Energy Assessment through Biowell

To assess subtle energy fields, the Biowell device is employed. This device, coupled with specialized software, captures real-time data based on the principles of Kirlian photography, which visualizes the corona discharge-a luminous halo surrounding objects-via high-voltage, low-current electrical fields, a technique known as electrophotography.[5] The human biofield, a form of subtle energy emitted by living beings, provides information about the body's energetic balance, helping to detect imbalances that may indicate potential physiological or psychological disturbances.[5,6]

The Biowell device captures images of all 10 fingers of each participant, generating a set of quantitative parameters. The images, produced under electrical stimulation, reflect a neurovascular reaction on the skin, influenced by the nervous-humoral status of various organs and systems. These images register a dynamic range of states. According to acupressure theory, each fingertip reflects the energy state of related organs, and scanning the fingertips allows for the assessment of overall health. The energy field is a sensitive indicator of both physical and emotional states. The mind, viewed as a form of subtle energy, plays a significant role in impacting health. Yogic practices like pranayama aim to regulate prana for enhanced health and environmental harmony. Mental focus practices such as Meditation, Reiki, Tai Chi, and Pranic Healing have shown that mental focus can influence autonomic functions and support healing. Studies indicate that healers and Qigong masters emit substantial voltage pulses during healing, suggesting significant energy release. These bioenergy fields, often perceived as non-physical patterns of light, are believed to reflect an individual's physical and mental health.

In the present study, participants placed all ten fingertips sequentially on a photographic plate. Each fingertip, corresponding to specific organs according to acupressure theory, provides insight into the energetic state of the body. As the fingertips are connected to nerve bundles that link to various organs, the energy patterns captured on the Bio-Well device reflect both the physical and emotional health of the participant. The images are magnified approximately 1000 times, offering insights into internal physiological states.

Chakras and the Psychosomatic Approach

According to Eastern metaphysical theories, there are seven chakras that influence an individual's physical, mental, emotional, and spiritual well-being. In the Bio-Well system, chakras are used to reflect a person's emotional and physical state. Chakras are closely related to the flow of energy, both internally and externally. The ideal balance of chakras is typically observed in individuals who engage in daily meditation and mental training. Shifts in the alignment of chakras, either to the right or left, can be linked to a person's internal emotional reactions or their responses to environmental factors, such as interactions with people, exposure to electromagnetic fields, weather conditions, and intense physical activities.[7]

Statistical Analyses

Normality tests were performed on all 65 data sets after accounting for dropouts. The Shapiro-Wilk test, along with the Skewness coefficient test, was used to assess the normality of the data. The p-value from the Shapiro-Wilk test was compared to the significance level ($\alpha = 0.05$). Since most of the p-values were less than the α value, it was concluded that the data did not follow a normal distribution. However, in some cases, the skewness coefficient was close to zero, indicating that the data might be approximately symmetrical. Given that most of the data did not meet the normality assumption, non-parametric tests were employed for analysis. Specifically, Friedman's test was used because the data involved repeated measures. According to

Friedman's test, significant differences were found between the pre-post and follow-up treatment mean values, suggesting that the PET treatments had an impact.

To further investigate which treatments showed significant differences, post-hoc tests were conducted. Since Friedman's test depends on the ranks of observations, a repeated measures ANOVA approach was used to determine the least significant difference (LSD) or critical difference (CD) values. The LSD was calculated using the formula, where MSe represents the error mean square, r is the number of replications, and t is the tabulated value for the 5% or 1% significance level based on the degrees of freedom of the error mean square. This method allowed for the identification of which treatments were significantly different from each other.

Table 1- Normality Test, Skewness Coefficient, and Friedman's Test Results

Variables		Mean	Sd	Coefficient of variation %	Shapiro-Wilks test p value	α value	p value	α value	χ2 tabulated value
Stress	PRE	3.453	0.721	20.894	0.0033	0.05	0.0000**	0.05	5.99
	POST	2.821	0.697	24.719	0.0129	0.05			
	F. UP	2.337	0.570	24.398	0.0004	0.05			
Energy	PRE	52.390	15.481	29.549	0.0000	0.05	0.0000**	0.05	5.99
	POST	63.487	16.165	25.463	0.4186	0.05			
	F. UP	54.571	13.649	25.010	0.0000	0.05			
Area Front	PRE	74492.415	13457.061	18.065	0.9325	0.05	0.0008**	0.05	5.99
	POST	69061.323	11267.405	16.315	0.7525	0.05			
	F. UP	65514.262	10527.651	16.069	0.2124	0.05			
Muladhara Energy	PRE	4.746	3.119	65.718	0.0000	0.05	0.3944	0.05	5.99
	POST	5.381	1.423	26.438	0.0015	0.05			
	F. UP	5.074	1.103	21.744	0.0030	0.05			
Manipura Energy	PRE	7.313	1.818	24.865	0.0091	0.05	0.0000**	0.05	5.99
	POST	5.258	1.399	26.607	0.0185	0.05			
	F. UP	4.920	1.185	24.092	0.0289	0.05			
Anahata Energy	PRE	7.308	1.711	23.415	0.0095	0.05	0.0000**	0.05	5.99
	POST	5.325	1.573	29.536	0.0001	0.05			
	F. UP	4.836	0.994	20.558	0.0869	0.05			
Vishuddha Energy	PRE	5.130	1.159	22.589	0.0001	0.05	0.0023**	0.05	5.99
	POST	5.253	1.170	22.275	0.4999	0.05			
	F. UP	6.374	1.927	30.224	0.2248	0.05			
Ajna Energy	PRE	5.758	1.545	26.832	0.1391	0.05	0.0000**	0.05	5.99
	POST	4.654	1.303	27.999	0.0000	0.05			
	F. UP	4.181	0.942	22.531	0.0000	0.05			
Sahasrara Energy	PRE	5.949	1.621	27.242	0.0310	0.05	0.0000**	0.05	5.99
	POST	4.724	1.360	28.792	0.0000	0.05			
	F. UP	4.344	0.912	20.999	0.0007	0.05			
Ajna Alin	PRE	82.532	16.155	19.574	0.0000	0.05	0.0005*	0.05	5.99
	POST	89.378	10.990	12.296	0.0000	0.05			
	F. UP	90.212	11.444	12.685	0.0000	0.05			
Chakra Alignment	PRE	82.686	9.656	11.677	0.0003	0.05	0.0457*	0.05	5.99
	POST	86.217	8.256	9.575	0.0000	0.05			
	F. UP	86.270	7.579	8.786	0.0000	0.05			

Table 2. Results of Friedman's Test and ANOVA

Variables	Periodicity	Mean Value	±SD	Friedman's Test Result	Anova Test Result	LSD value	post-pre	follow-pre	follow-post
				χ2 tab	**F tab**				
Stress				**χ2 cal = 107.108**	**F cal = 124.98**				
	Pre	**3.450**	**±0.697**	**H_0 Rejected**	**H_0 Rejected**	**0.140**	**-0.629**	**-1.113**	**-0.483**
	Post	**2.821**	**±0.570**	**Highly significant**	**Highly significant**	**0.185**			
	Follow	**2.337**	**±15.481**						
Energy				**χ2 cal = 23.287**	**F cal = 11.325**				
	Pre	**52.390**	**±15.481**	**H_0 Rejected**	**H_0 Rejected**	**4.892**	**11.097**	**2.181**	**-8.915**
	Post	**63.487**	**±16.165**	**Highly significant**	**Highly significant**	**6.473**			
	Follow	**54.571**	**±13.649**						
				χ2 cal = 14.246	**F cal = 9.657**				

Area Front	**Pre**	**74492.415**	**±13457.061**	**H_0 Rejected**	**H_0 Rejected**	**4074.560**	**-5431.092**	**-8978.154**	**-3547.062**
Energy	**Post**	**69061.323**	**±11267.405**	**Highly significant**	**Highly significant**	**5391.589**			
	Follow	**65514.262**	**±10527.651**						
				$\chi 2$ cal = 1.861	**F cal = 1.627**				
Mooladhara	**Pre**	**4.746**	**±3.119**	**H_0 not rejected**	**H_0 not rejected**	**0.698**	**0.636**	**0.328**	**-0.308**
Energy	**Post**	**5.381**	**±1.423**	**No significant**	**No significant**	**0.924**			
	Follow	**5.074**	**±1.103**						
				$\chi 2$ cal =46.590	**F cal = 55.333**				
Swadhishtana	**Pre**	**7.244**	**±1.886**	**H_0 Rejected**	**H_0 Rejected**	**0.506**	**-2.146**	**-2.477**	**-0.331**
Energy	**Post**	**5.098**	**±1.447**	**Highly significant**	**Highly significant**	**0.670**			
	Follow	**4.767**	**±1.094**						
				$\chi 2$ cal = 52.687	**F cal = 56.94**				
Manipoora	**Pre**	**7.313**	**±1.818**	**H_0 Rejected**	**H_0 Rejected**	**0.481**	**-2.055**	**-2.393**	**-0.338**
Energy	**Post**	**5.258**	**±1.399**	**Highly significant**	**Highly significant**	**0.636**			
	Follow	**4.920**	**±1.185**						
				$\chi 2$ cal = 56.734	**F cal = 52.366**				
Anahata	**Pre**	**7.308**	**±1.711**	**H_0 Rejected**	**H_0 Rejected**	**0.507**	**-1.983**	**-2.473**	**-0.489**
Energy	**Post**	**5.325**	**±1.573**	**Highly significant**	**Highly significant**	**0.670**			
	Follow	**4.836**	**±0.994**						
				$\chi 2$ cal = 12.147	**F cal = 13.360**				
Vishuddha	**Pre**	**5.130**	**±1.159**	**H_0 Rejected**	**H_0 Rejected**	**0.525**	**0.123**	**1.244**	**1.121**
Energy	**Post**	**5.253**	**±1.170**	**Highly significant**	**Highly significant**	**0.695**			
	Follow	**6.374**	**±1.927**						
				$\chi 2$ cal = 35.189	**F cal = 27.335**				
Ajna	**Pre**	**5.758**	**±1.545**	**H_0 Rejected**	**H_0 Rejected**	**0.433**	**-1.104**	**-1.577**	**-0.473**
Energy	**Post**	**4.654**	**±1.303**	**Highly significant**	**Highly significant**	**0.573**			
	Follow	**4.181**	**±0.942**						
				$\chi 2$ cal =42.541	**F cal = 26.227**				
Sahasrara	**Pre**	**5.949**	**±1.621**	**H_0 Rejected**	**H_0 Rejected**	**0.459**	**-1.225**	**-1.605**	**-0.380**
Energy	**Post**	**4.724**	**±1.360**	**Highly significant**	**Highly significant**	**0.607**			
	Follow	**4.344**	**±0.912**						
				$\chi 2$ cal = 1.689	**F cal = 0.483**				
Mooladhara	**Pre**	**83.144**	**±16.828**	**H_0 not rejected**	**H_0 not rejected**	**5.128**	**2.022**	**2.351**	**0.329**
Align	**Post**	**85.166**	**±16.108**	**No significant**	**No significant**	**6.786**			
	Follow	**85.495**	**±14.066**						
				$\chi 2$ cal = 2.171	**F cal = 1.354**				
Swadhishtana	**Pre**	**79.276**	**±18.035**	**H_0 not rejected**	**H_0 not rejected**	**5.236**	**2.681**	**4.310**	**1.629**
Align	**Post**	**81.956**	**±16.040**	**No significant**	**No significant**	**6.929**			
	Follow	**83.586**	**±12.364**						
				$\chi 2$ cal = 3.6498	**F cal = 1.711**				
Manipoora	**Pre**	**86.871**	**±14.443**	**H_0 not rejected**	**H_0 not rejected**	**4.515**	**3.530**	**-0.235**	**-3.765**
Align	**Post**	**90.401**	**±10.412**	**No significant**	**No significant**	**5.974**			
	Follow	**86.637**	**±11.975**						
				$\chi 2$ cal = 1.008	**F cal = 1.220**				
Anahata	**Pre**	**77.706**	**±21.212**	**H_0 not rejected**	**H_0 not rejected**	**6.273**	**3.913**	**4.580**	**0.668**
Align	**Post**	**81.619**	**±19.471**	**No significant**	**No significant**	**8.300**			
	Follow	**82.287**	**±15.246**						
				$\chi 2$ cal = 8.727	**F cal = 4.336**				
Vishuddha	**Pre**	**81.335**	**±16.269**	**H_0 Rejected @ 5% and not rejected**	**H_0 Rejected @ 5% and not rejected at 1%.**	**4.861**	**5.690**	**6.707**	**1.017**
Align	**Post**	**87.025**	**±12.048**	**at 1%. Significant difference at 5%**	**Significant difference at 5%**	**6.432**			
	Follow	**88.042**	**±13.617**	**no significant difference at 1%**	**no significant difference at 1%**				
				$\chi 2$ cal = 15.102	**F cal = 6.931**				
Ajna	**Pre**	**82.532**	**±16.155**	**H_0 Rejected**	**H_0 Rejected**	**4.482**	**6.846**	**7.680**	**0.833**
Align	**Post**	**89.378**	**±10.990**	**Highly significant**	**significant**	**5.930**			
	Follow	**90.212**	**±11.444**						
				$\chi 2$ cal = 2.016	**F cal = 1.016**				
Sahasrara	**Pre**	**84.590**	**±16.303**	**H_0 not rejected**	**H_0 not rejected**	**4.831**	**2.979**	**3.044**	**0.065**
Align	**Post**	**87.569**	**±13.635**	**No significant**	**No significant**	**6.393**			
	Follow	**87.634**	**±11.141**						
				$\chi 2$ cal =6.173	**F cal = 3.973**				
	Pre	**82.686**	**±9.656**	**H_0 Rejected @ 5% and not rejected**	**H_0 Rejected @ 5% and not rejected**	**2.886**	**3.531**	**3.584**	**0.053**
Align	**Post**	**86.217**	**±8.256**	**at 1%. Significant difference at 5%**	**at 1%. Significant difference at 5%**	**3.818**			
	Follow	**86.270**	**±7.579**	**no significant difference at 1% level**	**no significant difference at 1% level**				

Legends: Lsd- Least Significant Difference, H_0.Null Hypothesis,

RESULTS

Normality Test

The Shapiro-Wilk test was conducted for all variables, and the results indicated that the data were not normally distributed ($p < 0.05$ for all variables), see Table 1. Consequently, Friedman's test was employed to assess changes over time in stress levels, energy, chakra energy, and chakra alignment, see Table 2.

Stress Levels

The baseline mean stress level was 3.453 (SD = 0.721). After the intervention, stress levels decreased significantly to 2.821 (SD = 0.697) at post-treatment and further reduced to 2.337 (SD = 0.570) at follow-up. Friedman's test revealed significant differences ($\chi^2 = 107.108$, $p < 0.05$). Post-hoc LSD analysis confirmed significant reductions in stress from pre to post ($p = 0.0000$) and pre to follow-up ($p = 0.0000$).

Energy Levels

Baseline energy levels were 52.390 (SD = 15.481), increasing to 63.487 (SD = 16.165) post-treatment and 54.571 (SD = 13.649) at follow-up. The Friedman's test showed significant differences ($\chi^2 = 23.287$, $p < 0.05$), and LSD post-hoc tests confirmed significant changes between pre and post treatment ($p = 0.0000$), but the follow-up showed a slight decline ($p = 0.0022$).

Chakra Energy

Chakra energy in Manipura (solar plexus) decreased significantly from 7.313 (SD = 1.818) at baseline to 5.258 (SD = 1.399) post-treatment ($\chi^2 = 52.687$, $p < 0.05$). Similarly, Anahata (heart) chakra energy showed a significant reduction from 7.308 (SD = 1.711) to 5.325 (SD = 1.573) ($\chi^2 = 46.590$, $p < 0.05$). The LSD test for Manipura showed a significant difference between pre and post treatment ($p = 0.0000$). For Anahata, the difference between pre and post was also highly significant ($p = 0.0001$). Ajna and Mooladhara chakras did not show significant changes ($\chi^2 = 1.861$, $p > 0.05$ for both).

Chakra Alignment

Ajna chakra alignment improved significantly from 82.532 (SD = 16.155) at baseline to 89.378 (SD = 10.990) post-treatment ($\chi^2 = 2.016$, $p < 0.05$). The follow-up showed continued improvement to 90.212 (SD = 11.444). The LSD test for Ajna alignment showed significant differences between pre and post ($p = 0.0005$), as well as between pre and follow-up ($p = 0.0000$). In contrast, Sahasrara alignment did not show significant changes ($\chi^2 = 6.173$, $p > 0.05$).

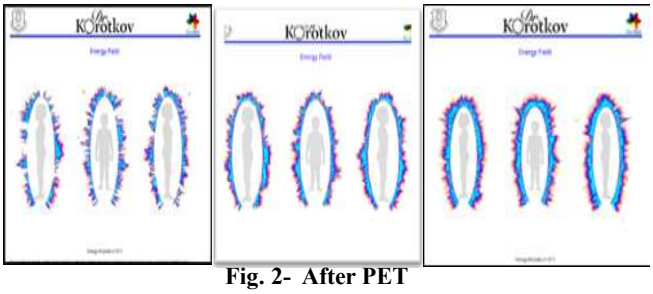


Fig. 2- After PET practice-37 joules

Fig. 5- Chakra alignment 87% Baseline

Fig. 6- Chakra alignment after 8 weeks 97%

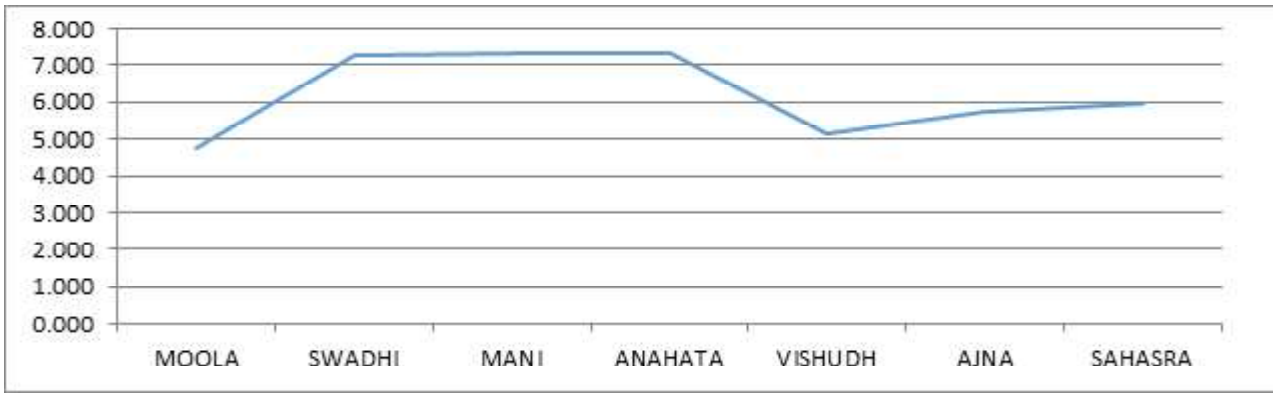
Fig. 6 After 16 weeks 93%

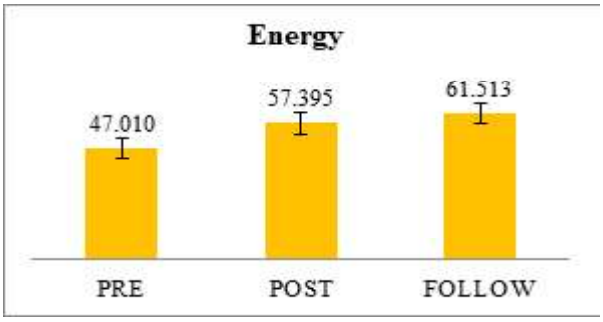
Through Shapiro-Wilks' test- result shows that after practicing Pranic Energization Technique, stress reduced significantly, energy enhanced significantly in the front area and at physical level. Apart from Muladhara, energy in all six chakras also enhanced significantly. Even there was a significant change in overall alignment of Chakras. Least Significant Difference (LSD) test Shows improvement in physical and chakras energy except Muladhara. Chakra alignment H0 rejected @ 5% and not rejected at 1%. Significant difference at 5% no significant difference at 1% level.

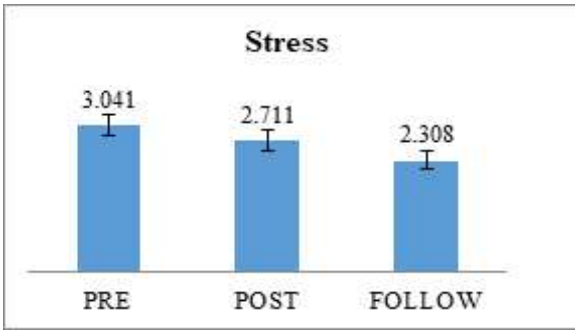
Implications

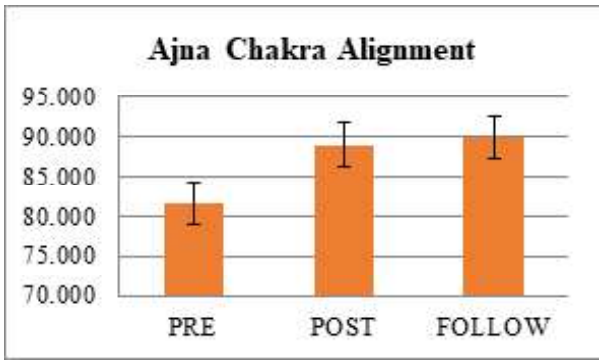
The results of Friedman's test and LSD post-hoc tests revealed significant improvements in stress levels, energy, and chakra energy across all time points. Significant reductions in stress and increases in energy were observed from pre to post-treatment, with sustained changes observed during the follow-up phase. Chakra energy in the Manipura and Anahata chakras showed significant improvements post-treatment, while Ajna chakra alignment also showed significant improvement. The findings suggest that Pranic Energization Technique (PET) can effectively reduce stress and enhance energy levels in adolescents, particularly through its positive effects on specific chakras. Significant reductions in stress and increases in energy were observed post-treatment, and these changes were maintained through the follow-up phase. PET's impact on chakra alignment was also significant for some chakras, although results were

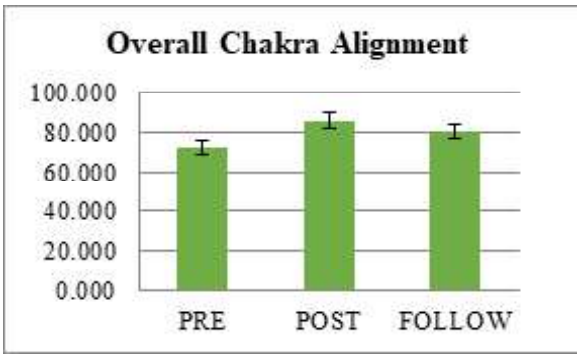
more mixed for others. Overall, the study highlights the potential of PET as a non-invasive, cost-effective intervention for improving mental and physical well-being in adolescents.











DISCUSSION

The present study explored the effects of Pranic Energization Technique (PET) on adolescent stress, energy, chakra energy, and chakra alignment. The results indicated significant reductions in stress and increases in both chakra energy and physical energy within the PET group. Specifically, stress levels decreased significantly over time, with sustained reductions during the follow-up phase. Energy in the Manipura and Anahata chakras showed significant improvement post-treatment, and Ajna chakra alignment was significantly improved following the intervention. These findings support the idea that practices focused on subtle energy can positively influence both mental and physical health.

From a theoretical perspective, the results align with the biopsychosocial model, which posits that mental, emotional, and physical health are interconnected and influence one another. By improving chakra alignment and energy flow, PET may help regulate physiological processes like the stress response and autonomic nervous system function, which are known to affect overall health outcomes. This connection between energy practices and physiological regulation supports theories of the mind-body connection, where mental practices like meditation and

yoga improve both mental well-being and physical health.[8] Moreover, Tiller's (1993)[9] concept of subtle energy as part of the broader spectrum of energy influencing human consciousness and intention further aligns with the observed effects of PET.

The Biowell instrument, used in this study, measured energy emissions from the skin through electrophotography, providing valuable insights into chakra energy and alignment. This method supports the notion that chakra energy and physical health are closely linked to the nervous system and endocrine system. By measuring the electron and photon emissions from the skin, the Biowell instrument provided real-time data that correlated energy changes with emotional and psychological states. These results align with previous research suggesting that chakra alignment plays a significant role in regulating stress and improving overall well-being.

In practical terms, PET offers a non-invasive, cost-effective intervention that could be easily integrated into adolescent mental health programs, particularly in schools or community centres. Given the increasing mental health challenges among adolescents, PET can serve as a preventive tool to mitigate stress, anxiety, and related conditions. By incorporating PET into daily routines, adolescents can enhance their vital energy, improve stress management, and promote better mental and physical health. Future studies should explore how PET compares to other mindfulness-based interventions, such as Mindfulness-Based Stress Reduction (MBSR) or Cognitive Behavioral Therapy (CBT), to determine its relative effectiveness and feasibility for broader application.

Limitations and Future Directions

Despite the promising results, the study has some limitations. The sample size was relatively small, and the study's duration was short. Future research should involve a larger, more diverse sample to confirm the generalizability of these findings. Additionally, while PET was shown to significantly affect chakra alignment, stress levels, and energy flow, the long-term effects remain uncertain. Future research should investigate the sustainability of these improvements and explore the neurobiological mechanisms underlying PET's effects. Specifically, studying the impact of PET on brain activity, hormonal regulation, and autonomic nervous system functioning would deepen our understanding of how pranic practices influence mental and physical health.

CONCLUSION

This study demonstrates that Pranic Energization Technique (PET) is an effective and non-invasive intervention for reducing stress and enhancing energy levels in adolescents. By improving chakra alignment and regulating prana (vital energy), PET promotes overall mental, physical, and emotional well-being. The findings suggest that PET could be integrated into school wellness programs and community mental health initiatives as a practical tool for improving adolescent health.

Further research is needed to explore the long-term effects of PET, its comparative effectiveness with other interventions like MBSR or CBT, and its broader applications in clinical settings. The study also opens avenues for investigating the neurobiological mechanisms involved in chakra alignment and energy flow, providing new insights into how mindfulness-based practices can promote health and well-being.

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CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest associated with this study. No financial relationships, affiliations, or interests were involved that could have influenced the design, implementation, or interpretation of the research. The study was conducted objectively, and the authors have no personal, professional, or financial conflicts that could potentially bias the findings.

DECLARATION OF AI-ASSISTED COPY EDITING

During the preparation of this work, the authors used ChatGPT in order to improve the grammar, readability, and style of the manuscript. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

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