

PHYSICAL WORK OUT: AN ALTERNATIVE THERAPY FOR STRESS & DEPRESSION

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خلاصہ

بڑھتی ہوئی تحقیق کے مطابق ذہنی دباؤ اور تناؤ، مناسب علاج اور ادویات کے باوجود خراب دماغی صحت کی عمومی وجہ ہے۔ ایک سروے کے مطابق پچیس فیصد امریکی ذہنی بیماریوں کا شکار پانے لگی اور دلچسپ حقیقت یہ ہے کہ ورزش کی باقاعدگی نے اس بیماری کی روک تھام میں اہم کردار ادا کیا اور انسانی دماغ کو مختلف جہتوں میں ڈالنے میں مدد فراہم کی۔ ورزش دماغ کی عملی صلاحیت کو بہتر بناتا ہے جس کے توسط دماغ سکھانے کے مواقع سے بھرپور فائدہ اٹھاتا ہے۔ اور فکری سرگرمیوں میں بھی خاطر خواہ اضافہ ہوتا ہے۔ جسمانی ورزش مزاج کے اتار چڑھاؤ پر قابو پانے والے نیوروٹرانسمیٹر کو قابو میں رکھتی ہے۔ حالیہ مطالعات یہ ثابت کر چکے ہیں کہ جسمانی ورزش نفسیاتی بہتری حاصل کرنے میں اہم کردار ادا کرتی ہے مزید یہ کہ ایروبک ورزش نے سکون اور ادویات کے مقابلے میں بہتر اثرات مرتب کئے ہیں اس نظریے کی استقامت کے لئے موجود تحقیق میں مختلف فنس مراکز میں ورزش کے لئے آنے والے مرد و خواتین سے سوالنامے کے ذریعے انکے ورزش کے اثرات کے بارے میں تجربات کا مطالعہ کیا گیا جس سے یہ ثابت ہوا کہ ورزش نے انکے مزاج پر بہتر اثرات مرتب کئے جسکے ذریعے انھوں نے تناؤ اور اضطرابی کیفیت پر قابو پایا اور دماغی صلاحیتوں میں بھی مزید استحکام میسر ہوا۔

Abstract

According to recent research, depression and stress, are the most common root causes of deprived mental health nevertheless with the contemptible cure. According to a randomized controlled, twenty-five percent of America natives are found to be victimized of this mental illness and interestingly the study comes out with an amazing fact that the illness is found to improve through physical exercise and workout. As the neuroplasticity, is the ability of human brain that helps to adapt the condition in different dimensions. It alters the functional capability of mind leading to high learning skills. However human and animal research studies reveals that physical activity facilitates neuroplasticity of brain structures and also results in enhanced intellectual activities along with mood elevation. Physical exercise support the brain to direct the neurotransmitters responsible for controlling the human mood. As recent studies claim that physical exercise have supportive psychological benefits. Outcomes of cross-sectional studies showed antidepressant and anxiolytic effects of aerobic exercise training and also provide protection against harmful consequences of stress and apprehension. The study was conducted to analyze the upshots of physical exercise on mood. For the purpose of questioning, interviews were conducted the population regularly going to fitness centers. The population was of age from 18 to 40 years including both genders and the after effects of physical work out, that they shared, in terms of relaxation and mood elevation, was actually the outcome of the study. Majority of population showed a positive response for exercise as they experienced the high feeling of cheerfulness and relaxation, that helped them to overcome stress and anxiety. The outcome of study strongly supported the phenomenon of brain neuroplasticity as stress-free environment promotes and supports the intellectuality and learning capabilities.

Key words: Physical exercise, neurotransmitter, brain, neuroplasticity.

Introduction

Stress is characterized as the body's response to detrimental situations and interestingly multidimensional mental and physical alterations are associated with the situation. Approximately more than 75% clinic visits are due to stress-related disorders or indirectly related to stress and anxiety as like overweight gain, hyperglycemia, nervousness, weak immunity response of the body, depression, headaches, muscular pain, and disturbance in sleep (1, 2). Diet schedule and sleeping habits are also get disturbed by stress. Research has proved that the Physical exercise is the best therapy for various disorders regarding physiological and psychological conditions (3). Like depression, a psychological disorder, that come out as the most incapacitating situation that accounts

for hindrances in social functioning (4). Further, it can develop a terrifying way when once established and possibly may lead to chronic consequences. Interestingly frequency of depression episodes spectacularly is found to increase from the age of adolescence into the period of early adulthood (5-8). All these related disorders could be managed by suppressing the stress through physical work out. Respectively 39 and 29% individual were found to be following unhealthy meal habits as taking more than required or skipping the meal. APA’s 2011 survey showed that 39% percent of respondents reported overeating or eating unhealthy food because of stress, and 29% reported skipping a meal. In addition, 44% reported lying awake at night because of stress (9-12). However, even walking routinely was found enough to overcome stress among 47% of victims of stress. Physicians and healthcare professionals always recommend physical work out that play a vital and beneficial role in reducing stress. As in ancient days the low availability of facilities and sources of recreation were enough to keep men and women busy and physically fit and active and consequently that lifestyle and environment was highly accountable and confounded for good health as due to no stress. In present era the living style specifically in the metropolitan city everyone is at high risk of complicated disorders like diabetes, hyperlipidemia, hypertension, obesity and interestingly all with one cause “stress.” Recreational activities like TV programs, dining out are considered as sources to release the stress to some extent, indeed these activities do not work mostly and sometimes become causative for overweight leading to stress multiple (13-15). The workout, yoga, physical exercise are the best and proved remedy for stress relief to make the mental condition better and strengthen the body to fight against diseases and disorders. Physicians endorse the principle of keeping oneself physically active and for the purpose, exercise is considered essential for sustaining mental fitness that consequently works significantly in reducing stress. The figures reveal that it has also an effective role for reducing fatigue, improving concentration and preparedness leading to enhancing of cognitive function and it specifically results when stress dominate the ability to contemplate (16-18). When stress affects the brain, with its many nerve connections, that the impact is felt by the rest of the body as well. Subsequently, it stands to reason that when the body feels better, the brain works remarkably good. Furthermore, exercise and other physical activity causes the release of endorphins in the brain, a natural analgesic, works by acting like morphine and improves the sleep mechanism that in turn reduces stress (19). Furthermore, aerobic activity heightens a neurotransmitter, norepinephrine, that is accountable for making the mood better. In short, exercise controls the depression and it works more or like similar to antidepressants because routine work out stimulate the brain directions to grow new neurons (20-23).

Table-1: Case Processing Summary According to Age

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
1 * age	50	100.0%	0	.0%	50	100.0%
1 * E.R	50	100.0%	0	.0%	50	100.0%

Crosstab

Table-2: Case Processing Summary According to Gender

	age												Total
	18.00	19.00	20.00	21.00	22.00	23.00	24.00	26.00	28.00	30.00	32.00	40.00	
Female	7	1	1	2	2	2	2	0	0	0	1	0	18
Total	17	4	3	7	7	3	3	1	2	1	1	1	50

Table-3: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.792(a)	11	.732
Likelihood Ratio	9.600	11	.567
No of Valid Cases	50		

Table-4: Crosstab Count

		E.R		Total
		Not Relax	Relax	
1	Female	5	13	18
	Male	5	27	32
Total		10	40	50

Table-5: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.063(b)	1	.302		
Continuity Correction(a)	.439	1	.507		
Likelihood Ratio	1.032	1	.310		
Fisher's Exact Test				.463	.251
N of Valid Cases	50				

a* - Computed only for a 2x2 table

b* - 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.60.

Table-6: Symmetric Measures(a)

	Value
No of Valid Cases	50

a* Correlation statistics are available for numeric data only.

Method

To examine the effect and outcome of physical workout the present research was conducted and focused the participants in the gym as doing different kind of exercises like yoga, aerobics and etc. Approximately fifty the participants were included from two different gym as eighteen female and thirty-two male having the age from eighteen to forty-five. Diabetic and hypertensive patients were excluded as they were on antidepressives. For conducting the study a seven-point questionair was asked after taking consent of participants. The questions were regarding the experiences and feeling of individuals that the gain after exercise. (24, 25) .

Exclusion criteria for the Study Population

All females that were pregnant were also excluded from the study. Patients having diabetes and hypertension were also not entertained.

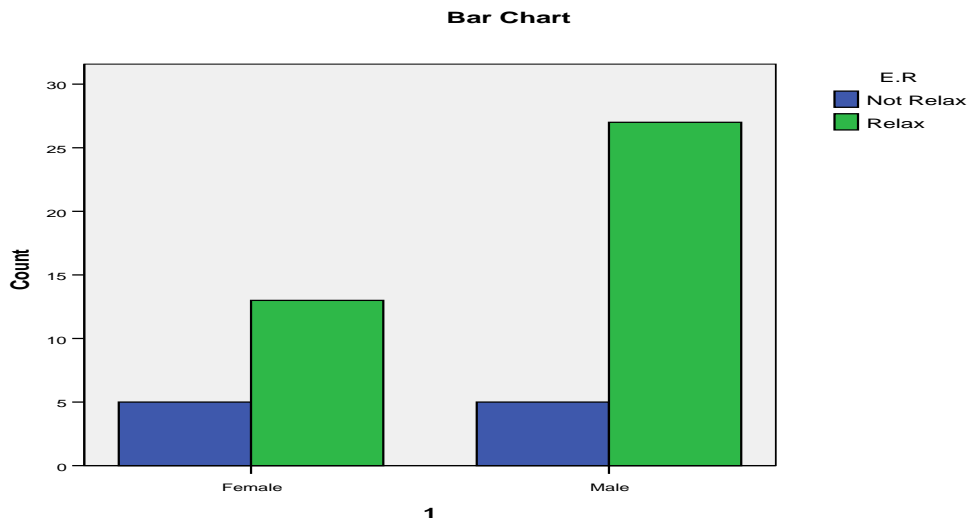
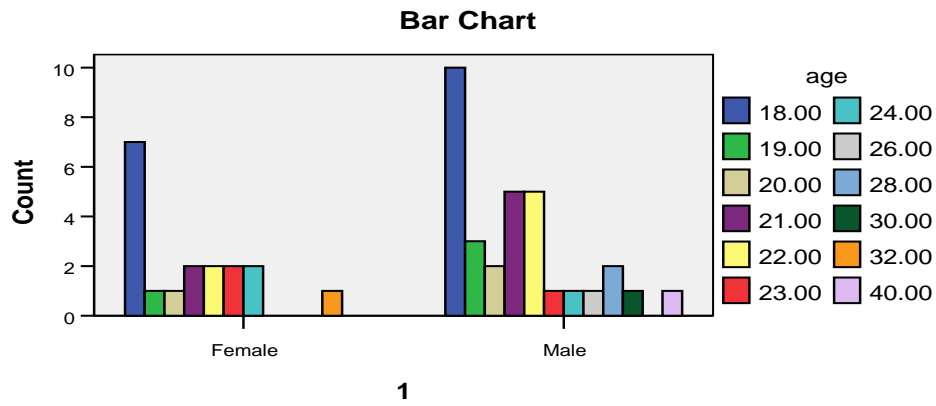
Data Assessment

After collection of all information, the data was filtered, coded and entered in SPSS version 20. Through the software descriptive statistics of the data was analyzed by applying the chi-square and correlation test.

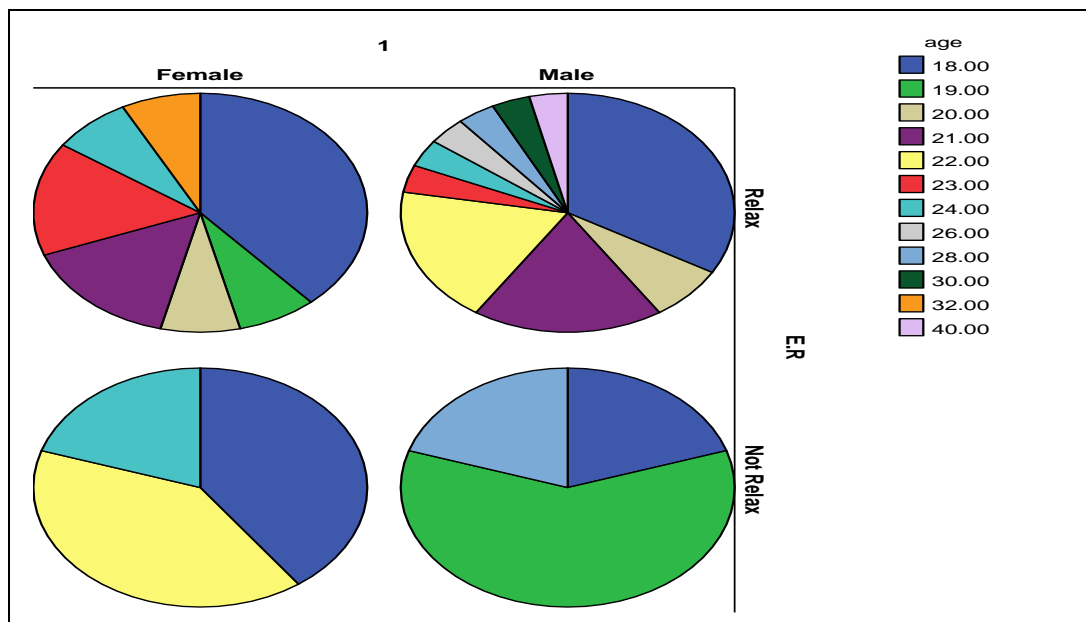
Results and Discussion

The physical exercise and psychological health are in high correlation from the last two decades and new outshoots of physical arts like aerobics, yoga, zombie and other kind of are in limelight. Depending on the significance of such health resource the present study was conducted to review the effects and outcomes of physical workout carried out by stress for male and female both. In study relief from tension and stress was the major component and for the same purpose, fifty participants from two gym were included. According to the results among eighteen female-only five not responded for being relaxed however rest found to be feel stressed out however among male participants approximately 25% were observed relaxed after physical work out. A wide range of studies and research regarding health, fitness and other metabolic standards were found in parallel with exercise, that can be more broadly defined by the concept of physical activity. Exercise and work out are form of physical activities that are planned and are performed repetitively on routine basis with a strong target to improve fitness. However, all the exercises come under physical activity but all type of physical activities are not exercise. Clinically, exercise is planned to gain a nonspecific therapeutic social and psychological treatment and may involve a clinical psychologists for better outcome (26) as research reveals a range and variety of specific psychological symptoms may be a strong consequent of future depression. Meditation, acupuncture, massage therapy, deep breathing causes your body to produce endorphins and it is proved that even a workout of low to moderate intensity helps to improve your feeling of new and good energy. Furthermore aerobic exercise is the best resource for normalizing the anxiety situations by improving sleep and self-esteem. Indeed all these tools for controlling stress are associated with neuroplasticity, the ability of neurons in the brain to work accordingly the demands of body and environment need. Furthermore, in general, depressive persons are physically sedentary in their daily life and have reduced physical work capacity compared with healthy individuals. This indicates that depressive state is associated with physiological

wellbeing and may predispose an individual to diseases related to physical inactivity and limited functional capacity.



Pie chart



Conclusion

Over recent years collected data and figure have robustly established the fact of strong association of general advantages of exercise with physical health and as a result promising good mental health as the present research outcomes are evidence of significant relation between physical exercise and depression that consequently improves anxiety, stress, self-esteem and mood state. Consideration should given to the phenomena of exercise addiction and its withdrawal as well because in society it is observed specifically among young generation population adopt the practice on urgent need as obesity hypertensions, diabetes, and osteoporosis but also found to observe that the practice become discontinue over a slight improvement in condition, however routine and regular adaptation of exercise is accountable persistence of good physical and mental condition therefore the patients and population should be emphasized and encouraged to continue as a routine. The positive aspects of physical exercise will play a vital role in the prevention and treatment of medical conditions that are result of poor life style like obesity, diabetes and coronary disorders.

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