

Research Article

THE EFFICIENCY OF YOGA EXERCISES ON THE LEVEL OF ADJUSTMENT AND INTERPERSONAL RELATIONSHIPS OF ADOLESCENTS IN REFORM SCHOOLS IN BUSHEHR

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ABSTRACT

The present research is semi-experimental with control and experimental groups which examines the efficiency of yoga training on adjustment and improvement of interpersonal relationship of criminal children and adolescents. The statistical population of the present study is the children and adolescents of reform school of Bushehr city who are 53 people. After running the adjustment test (Sinha and Sink, 1993) and Child And Adolescent Social And Adaptive Functioning Scale (Spens, 2002) on them, a number of 40 people who had less adjustment were randomly put in two experimental and control groups and yoga was thought to experimental group in 12 sessions. The instruments applied in this study, was Sinha and Sink test for high school students' adjustment and Child and Adolescent Social and Adaptive Functioning Scale. Analysis of the data by covariance analysis indicates that yoga training has a meaningful effect on the increase of criminal adolescents and children's adjustment. Also, the findings indicate that yoga training causes the improvement of interpersonal relation of criminal children and adolescents.

Key Words: *Yoga, Criminal Children and Adolescents, Adjustment, Interpersonal Relationships*

INTRODUCTION

Nowadays, Youths and adolescents need abilities and skills more than any other time in order to be able to recognize safe information from unsafe ones and find suitable solutions for complicated problems. Having life skills lead to the increase of individuals' adaptation ability and psychological capacity. Lack of information about correct lifestyle and poor life and social skills provides ground for outbreak of psychological disease and social problems whose main reason is lack of necessary trainings by parents (Clinicke, 1386). According to learning approach, adaptation is a collection of taught behaviors and maladaptation that occurs when the person has not learned necessary skills to adjust daily problems. Overall, learning processes plays main role in occurrence of adaptive or maladaptive responses and for a perfect adaptation people should learn social skills (Phares, 1991). Having life skills lead to the increase in individuals' adaptation power and psychological capacity. Lack of information about correct lifestyle and poor life and social skills provides ground for outbreak of psychological disease and social problems whose main reason is lack of necessary trainings by parents and school (Clinicke, 1386).

Nowadays most of our problems are not about objects rather they are in human territory and the biggest weakness in humans is inability to achieve cooperation and agreement with others. Lack of skills to communicate effectively, is the biggest problem in our age and the reason for failure of many people. From another point of view, prominent psychologists such as "Erich Fromm", "Careen Horney" and "Sullivan" believe that; inability to communicate effectively is one of the most important reasons for nervousness and psychological and behavioral disorders. Most of us get nervous, depressed and

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revengeful toward ourselves and others just because we do not know how to behave in dealing with others and do not know skills of human relations and effective communication, (Hashemi, 1385).

By relieving the body from anxiety and then feeling relaxed, yoga relieves the thought from shackles and relaxes it and goes forward to the extent that no interference can disturb one's thought. Yoga helps people to know themselves and be willful to adjust himself to the most difficult situations in life and tackle problems and becomes calm and balanced all the times (Niazi, 1388). Yoga helps us to become aware of great complexities of our nature and different powers that arose out of this nature (BahaGavad Gita, quoted by Talaie, 1386). Yoga can be effective in improving personal and social relations, avoiding violence and promotion of honesty and righteous (Faali, 1386). Research results indicates that, yoga training affect life skills and leads to appropriate social behaviors and reduces negative behavior (Elias *et al.*, 1991) (Tagenb *et al.*, 1997), (DorToj *et al.*, 1388). Yoga also causes comparable improvement by relaxation, balanced breathing and Asanaha (physical exercises) to reduce anxiety (Smith *et al.*, 2007), (Brvta and Dear, 1998).

MATERIALS AND METHODS

Research Method

The present research is semi-experimental with control and experimental groups. The statistical population of the present study is children and adolescents of reform school of Busher city. According to statistics represented by Bushehr Office of Prisons, the number of these adolescents was 53 at the time of research. Children and adolescents of Bushehr reform schools were aged 15 to 18 years who kept in Bushehr reform school for committing robbery, kidnapping, rape, participating in murder, sodomy, and drug storage.

After running adoption test and Child and Adolescent Social and Adaptive Functioning Scale on all the volunteers, a number of 40 people who were less adjustable than others were chosen and randomly put into two experimental and control groups. Experimental group received yoga exercises by two experienced trainers, for a 12 session period, three sessions a week, every session lasting 1.5 to 2 hours and the control group did not receive any training. After the test, one and half month training was held for two groups as follow up.

Data Collection Tools

To determine the amount of adaptation in adolescents Sinha and Sink questionnaire for students' adaptation (AISS) was used; this questionnaire was provided by Sinha from Shatkar University and Sink from University of Pantai, india and includes 60 questions that examines 14 to 18 years old students in three areas of emotional, social and educational (20 questions in each area). Reliability of the test reported through Split-half method 95%, retest method 93%, and Kuder– Richardson method 94%. Validity of the test was determined by double-stranded correlation and just for the questions whose double-stranded correlation was verified in both criterions (total score and score of each area) at the meaningful level of 0.001% (Karami, 1380). In order to evaluate interpersonal relations, we used Child And Adolescent Social And Adaptive Functioning Scale questionnaires (CASAFS) of 2002 Spence et al. this test is a self-report instrument of 24 statements that examines individual performance in 4 areas: School Performance, Peer Relationships, Family Relationships, Home Duties and Self Care (Spence *et al.*, 2002). Internal consistency coefficient and reliability of test-retest method in a sample composed of 320 adolescents was examined. Cronbach's alpha coefficients were reported as follows: total scale – 0.81, school performance – 0.81, peer relations – 0.59, family relations – 0.74 and home duties/ self-care-0.48 (Spence *et al.*, 2002). Validity of this test obtained through factor analysis of four dimensions of social performance that was mentioned under scales. Total score of Child and Adolescent Social and Adaptive Functioning Scale and three of its sub-scales (school performance, peer relations, and family relations) had a meaningful negative correlation with a depression scale. Also the scores of testables with clinical problems and normal testables were different in Child and Adolescent Social and Adaptive Functioning Scale, in other words this test could differentiate these two groups (Spence *et al.*, 2002).

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RESULTS AND DISCUSSION

Findings

In this research effectiveness of yoga exercises on the rise of adaptation and improvement of criminal children and adolescent's interpersonal relationships was examined. In order to analyze the meaningfulness of the difference of score change of two groups, covariance analysis was used.

Table 1: The mean and standard deviation of adaptation in pre-test and post-test of experiment and control groups

evidence Adaptation aspects	Experimental group				Control group			
	Pre-test		Post-test		Pre-test		Post-test	
	mean	Standard deviation	mean	Standard deviation	mean	Standard deviation	mean	Standard deviation
Emotional adaptation	9.55	4.66	5.65	4.40	9.75	4.35	9.80	4.37
Social adaptation	7.75	2.95	3.37	3.37	8.05	2.78	7.95	2.91
School adaptation	8.20	6.05	3.15	3.15	8.45	3.08	8.60	3.20
Total adaptation	25.5	19.35	8.43	8.43	26.25	7.34	26.35	7.24

Table 2: Mean and standard deviation of adolescent's Interpersonal Relationships in experimental and control groups

Evidence interpersonal relations	Experimental group				Control group			
	Pre-test		Post-test		Pre-test		Post-test	
	mean	Standard deviation	mean	Standard deviation	mean	Standard deviation	mean	Standard deviation
School performance	13.90	3.37	15.60	2.50	14.30	2.57	14.1	3.07
Peer relations	16.15	3.31	17.55	2.35	16.55	2.89	16.35	2.88
Family relations	16.35	3.82	19.05	2.56	16.45	2.98	16.55	3.17
Home duties, self-care	16.10	3.75	18.45	2.83	16.3	3.29	16.4	3.25
Total	61.8	10.67	70.20	8.72	63.60	8.52	63.0	9.75

Results of covariance analysis of effectiveness of yoga training on the increase of adaptation (and its elements) in children and adolescents are shown in table 3.

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Table 3: ANCOVA analysis of inter-testable factors

evidence					
	Total squares	df	Mean of squares	F	Sig.
sources					
Model	21937.233	3	7312.411	187.009	0.001
Pre-test	792.733	1	792.73733	20.247	0.001
Group	454.74	2	272.870	66.987	0.003
Error	1446.767	37	39.102		
total	23384.00	40			

As it can be seen from table 3, the effect of yoga training on adaptation (emotional, social, educational) of adolescents is verified on the level of $P < 0.01$.

In order to analyze the effectiveness of yoga training on the level of interpersonal relations of adolescents, covariance analysis was used whose results are shown in table 4.

Table 4: ANCOVA analysis inter-testable factors

evidence					
	Total squares	df	Mean of squares	F	Meaningful level
sources					
Model	179632.849	3	59877.66	1417.311	0.001
Pre-test	1692.049	1	1692.049	40.051	0.001
Group	1305.071	2	652.535	15.446	0.001
Error	1563.151	37	42.247		
total	181196.00	40			

As it can be seen in table 4, the effect of yoga training on adolescents' Interpersonal relationships is verified at the level of $P < 0.01$.

Conclusion

As it can be seen in table 3, the effect of yoga training on adolescents' adaptation (emotional, social, educational) is verified at the level of $P < 0.01$.

Results of the present study is consistent with researches done by Ama *et al.*, (1989), Brown (2005), Pusadezki *et al.*, (2008), Smith *et al.*, (2007), Rubin (2009), Balk (2009), Esfahani (1381), FathiAshiaei (1383), Khosravi (1385), Kaviani (1386), Qasmynzhad *et al.*, (1387). Existence of some mental or personality factors such as anxiety, violence, animosity and guilt is more in prison environment because of being apart from family, overcrowding, emotional deprivation, fear and frustration. In this period, individuals are under too much stress because of losing social status, uncertainty about trial result, fear of penalty, and residence in an abnormal place which then lead to worse mental status.

"By yoga and meditation, one is able to pay attention to his inner as it was reported in Kotic *et al.*, (2001). In those who are interested in spiritual involvement there is a high level of hope and optimism.

At the present time, spirituality in prison, around the world, provided a general interpretation of the prisoner from a criminal point of view, in order to look at individual as the one who needs reformation and prison is perceived as a place for training, internal growth and improvement. This shelter is for reformation. It is the criminal reformation that is considered as a supreme goal rather than prisoner's sentence. Rehabilitation of prisoners has become one of the most important goals of prison authorities. Nowadays, prison group in United States is identified as reformation group.

One of the measures taken by prison is to train yoga through which negative feelings such as violence, animosity, inability and so on is reduced. These constructive and reconstructive reformations happen through relaxation exercises so that one turn into a better person and to add humanistic aspects to him by

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strengthening those aspects to understand himself and his life better. Data of table 4 indicates that the effect of yoga training on interpersonal relationships of adolescents is meaningful. Balanced means shows that yoga training causes significant improvement in Interpersonal Relationships of adolescents; therefore, this hypothesis "yoga training has a meaningful effect on interpersonal relationships of adolescents" is verified at $P < 0.01$ level. Results of the present research is consistent with those of the researches conducted by Lucy (2011), Kim (2005), Ama *et al.*, (1989), Ismaili (1389), Sajedi *et al.*, (1383). In yoga exercises, one can prevail anxiety and negative feelings by breathing exercises and breath control over fear and this way one can develop fixed habits against annoying effects of excitement, ambition, disappointment and by consistent exercises the person not only gains peace of mind but also achieves success in personal and social communication, and consequently experiences a more peaceful life.

Those who exercise yoga because of having such tranquility, decide better in facing problems and crisis in life, are more logical and avoid rush and precipitance. Yoga provides a sense of self-satisfaction and happiness by providing the peace and establishing deep connection with deep layers of brain. Yoga causes relaxation. It increases mental energy and self-magnetism and then give the person wonderful attraction. One of the root causes of adolescent's deprivation, especially criminal adolescents, of satisfaction in activities particularly education and study is lack of self-confidence and mental conflicts and pressures and yoga can be helpful in this regard since it causes peace and relaxation which is the source of everything. Relieving anxiety and stress, self-confidence, happiness, creativity, fitness, beauty and youth are only a part of numerous benefits of yoga. Yoga gathers and coordinates all mental and physical powers of a person. By this definition, we see any method that leads to such mental and physical coordination and produces such material and energy coordination which is considered as yoga. Limiting yoga only to a series of movements is derived from one's misconception about yoga. Yoga, in its deepest meaning, is all the procedures and methods that lead one to coordination, relaxation and concentration.

Yoga is a meditation technique that helps to explore representation and painful feelings within people who have weak perception of themselves and others. Paying attention to all thoughts, feelings, without discrimination and or selection, causes a situation without clear structure. Spiritual techniques, yoga and meditation, is a part of native wisdom of India that its positive effects are properly recorded in ancient tracts. So far, Promising evidences of its usefulness, as a tool of reformation against detention stress and creating a sense of well-being and happiness in them with changes in their behavior and attitudes that reduces the possibility of returning to prison and improves their family relationships.

REFERENCES

- Anisi G et al., (2007).** Assessment of behavioral problems in adolescents, *Journal of Behavioral Sciences* 1(2).
- Emami S (2009).** Evaluation of the effectiveness of yoga on reducing anxiety and depression in spouses of veterans in Shiraz. MA Thesis, Shiraz University.
- Asci FH (2003).** The effects of physical fitness training on trait anxiety and physical self-concept of female university students. *Journal of Sport & Exercise Psychology* 4(3) 255-64.
- Baumrind D (1991).** Effective parenting during the early adolescent transition. In: *family transitions*, edited by Cowan PE and Hetherington EM, *Advances in Family Research*, Hillsdale, NJ: Erlbaum 2 111-163.
- Brislin R (1981).** Cross- cultural ecounter, New York, Pergamon.
- Broota A and Dhir R (1990).** Efficacy of two relaxation techniques in depression. *Journal of Personality and Clinical Studies* 6(1) 83-90.
- Burgess G, Grogan S and Burwitz L (2006).** Effects of a 6-week aerobic dance intervention on body image.
- Buri JR (1991).** Parental Authority Questionnaire. *Journal of Personality Assessment* 57 110-1190.

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Elias MJ (1991). An action research approach to evaluation "the impact of a social decision – making and problem solving curriculum for preventing behavior and academic dysfunction in children, evaluation and program planning, *Journal of Addiction and Offender Counseling* **14**(4) 397-401.

Faa'li M (1386). Teaching methodologies of physical education in elementary schools. Iran Textbook printing and publishing company, Office of Planning and writing curriculum.

Klinke L (2007). Life skills, translated by Mohammad Khani S, Specialized Media Publication, Tehran.

Fathi A and Dadsetan B (2004). Efficacy of yoga on anxiety and depression in bright and normal adolescents, *Cognitive Science* **2**(6) 8.

Fiers E et al., (1991). Clinical psychology translated by Firoozbakht M in 2006, Tehran, Roshd Publication.

Greenberg LD and Lanyon RI (1995). Adaptation behavior and personality. Arizona State University, 436.

Kalogiannis P (2006). The role of sport and physical education in self-concept development of children and adolescents. *Inquiries in Sport and Physical Education* **4**(2).

Kaviani H (2007). Effect of yoga training on reducing anxiety and depression among participants in the entrance exam classroom, *New Findings of Cognitive Sciences* **9**(2) 61-68.

Khosravi M (2006). How do we meditate? PayameMehr Publication **15**(20) 24.

Mendonca L (2001). Group counseling: Its effects on the perception of self and other on the adaptation of student from India. The University of Michigan.

Posadzki P and Parekh Sh and Glass N (2008). Yaga and gigong in the psychological prevention of mental health disorders. *Chinese Journal of Integrative Medicine* **62** 737-745.

Sharma S (2007). Yoga a path towards health, Translated by Talei M, Tehran: Paul, **2** 24.

Sinha AKP and Sink (2001). A user manual to the questionnaire for adaptation of high school students, Translated by Karami A, Sina Ravan Tajhis Institution, Tehran.

Smith C and Hancock T (2007). A comparative trial of yoga and relaxation to reduce stress and anxiety. *Journal of Australian Medicine Society* **13** 497-5 10.

Spence et al., (2002). Child and Adolescent Social and Adaptive Functioning Scale.

Stanton MD (1979). Strategic Approaches to Family Therapy.

Uma K, Nagendra R and Nagendrathna S (1989). The integrated approach of yoga, *Journal of the Mental Deficiency Research* **33** 415 -421.