



## **Effect of Yogic Intervention on Aggression Control Among Alcohol Dependent People**

**Poonam Verma<sup>1</sup>, Dr. Radhika Chandrakar<sup>2</sup>**

<sup>1</sup>Ph.D. Research Scholar, Department of Yoga, Shri Rawatpura Sarkar University, Raipur (Chhattisgarh)

<sup>2</sup>Assistant Professor, Department of Yoga, Shri Rawatpura Sarkar University, Raipur (Chhattisgarh)

Email id: [poonamverma7396@gmail.com](mailto:poonamverma7396@gmail.com)

---

### **ABSTRACT:**

The present study empirically analysed the effectiveness of yogic intervention on aggression control in alcohol dependent people. The methodology of this study used a pre-test research design. For this study, a total of 300 alcohol dependent adult males aged 30–50 years were selected as the sample through purposive sampling method. All individuals are recruited from different area of Bastar belt of Chhattisgarh. Consent was taken after a brief explanation about the study to the subjects and the family member accompanying the patient. The information was kept confidential. Subsequently, using another random sampling method, these selected subjects were divided into two groups, which were experimental group and control group. An equal number of subjects, n = 150, were included in each group. The control group was not given any kind of yoga practice, while the subjects in the experimental group were made to practice yoga intervention for 45 minutes every day for a total of 2 months. After the administration of yogic intervention, post level assessment of both groups participants was done again. To measure variables in this study, the “Buss-Perry Aggression Questionnaire (BAQ)”, developed and standardized by researchers Buss and Durkee (1957) was used. T-test was used for statistical analysis of the pre and post data obtained on the basis of the presented experimental research. The data was analysed using statistical package (SPSS) version 26.0. The present study showed a significant difference on pre and post intervention scores on aggression. Additionally, this study also revealed that yogic intervention resulted in significant decrease in aggression behaviour among alcohol dependent people. Conclusively, yogic intervention is non-pharmacological, non-invasive and a cost effective intervention to overcome from aggressive behaviours for alcohol dependent people. Yoga practices included in the Yoga intervention selected under the presented research study are an efficient, powerful, and effective practices which can be used for the management of Aggressive behaviour among alcohol dependent people.

**Keywords:** Aggression, Yogic intervention, Alcohol Dependent People.

---

### **INTRODUCTION**

Under the definition presented by the World Health Organization, it is clearly mentioned in relation to a person dependent on alcohol or any other drug that, a person is called dependent on alcohol or any other drug when he consumes alcohol or drugs regularly for some time and the person is unable to free himself from that alcohol or drug consumption even if he wants to. This dependence on alcohol can be both physical and mental. However, when a person is physically dependent on alcohol, unlike if he does not consume alcohol or stops consuming alcohol, he starts having many physical problems. Whereas mental dependence on alcohol increases the person's desire or craving to drink alcohol and displays aggressive behaviour when alcohol is not available to drink.

Various research studies have shown that alcoholics display aggressive behaviour under the influence of alcohol. Researcher Buss (1961) proposed aggressive behaviour as a combination of three categories, which are; passive-active, physical-verbal, and indirect-direct. Furthermore, a large number of previous experimental research works aimed at knowing the relationship between aggressive behavior and alcohol consumption present such results, a person may exhibit aggressive behavior after drinking alcohol, but experimental work based on the association of indirect and passive acts of aggression with alcohol has been found to be minimal (Heinz, et al., 2011; Bácskai, Czobor, & Gerevich, 2011; Garofalo, & Wright, 2017). According to Barron, aggressive behavior means hurting or causing harm to another person who is engaged to elude such behaviour (Baron, 2004). According to social scientists, aggression is defined as a person's negative behavior that is directed at causing harm to another person with the intention of doing so. Viewed from another perspective, the person who behaves aggressively may also do so to protect himself, so this harmful misbehavior may be aggressive and may not be from another perspective (Hinde, 2014).

Abuse of drugs like alcohol directly affects the brain system, causing people who drink excessively to get excited in violent and aggressive behavior. Presently, increasing evidence of this habit can be seen that dependence on alcohol not only generates aggressive behavior in such a person but also gives

rise to many crimes and anti-social misdeeds like murder, rape and theft. Especially in the context of India, incidents like domestic violence can be seen as a result of aggressive behaviour of people who drink excessive alcohol, but currently such incidents have reduced compared to earlier.

To address this problem, several steps are currently being taken to reduce alcohol dependence and implement behavioral changes. These include; Brief opportunistic intervention, Motivational Intervention therapy, Cue exposure treatment, Cognitive Behavioral Therapy, Progressive Muscle Relaxation Technique, Mindfulness interventions (Rashid, & Srivastava, 2020). whereas yoga intervention is non-pharmacological, non-invasive and a cost effective intervention to overcome from aggressive behaviours for alcohol dependent people. Among the various interventions mentioned above for managing excessive alcohol consumption and resulting aggressive behavioural changes, yoga is a mind-body based natural therapy, which calms the mind of the person and also motivates him to control his behaviour. In this way, through yoga, along with gradually getting rid of habits like alcohol consumption through mind control, calm feeling, concentrated mind, the person also experiences positive changes in his behaviour and gets a feeling of health and happiness also promotes.

**Objectives:** To study the effect of yogic practices on aggression among alcohol dependent people.

**Hypothesis:**  $H_1$ : Yogic practices control the aggression level of alcohol dependent people.

## MATERIAL & METHOD

**Sample:** For the presented experimental study, a total of 300 adult men aged 30-50 years who were completely dependent on alcohol were selected as samples using purposive sampling.

**Inclusion criteria:** Only alcohol dependent people have been selected as the sample for this study. Adult men aged 30-50 years have been selected for this study. Patients meeting ICD -10 criteria for Alcohol dependence and who can read and understand Hindi language were taken in this study. Yogic practices and JPMR was only administered to experimental group but not to the control group.

**Exclusion criteria:** People who do not consume alcohol were not selected as samples for the study. Patients below 30 and above 50 years and the ones who were not cooperative and willing to participate in this study were omitted. Patients having any bone and muscles deformity as well as no history of aggression in pre-test was also not taken. Patients who are psychotic were also omitted.

**Tools:** To collect data, a self-reporting five-point Likert Scale based 29-items and 4-factor structure aggression questionnaire namely "Buss-Perry Aggression Questionnaire (BAQ)" developed by Buss and Durkee in 1957 was used to assess the aggression among the participants (Ando, et al., 1999). A total of 4 types of other subscales are also included under this scale which are; physical aggression, hostility, verbal aggression, and anger subscale.

**Variable:** Yogic intervention as an Independent variable & Aggression as a dependent variable in present study.

**Aggression:** "Behavior motivated to harm someone is called aggression." Aggressive behavior is behavior in which a person seeks to cause pain, hurt, or punish another person or persons. Aggression is found in all people to some extent. When weapons are used in the expression of aggression, aggressive behavior takes the form of violence and destruction (Anderson, & Bushman, 2002; Bandura, Ross, & Ross, 1963).

**Intervention plan:** Following the assessment of the variables, yogic intervention is administered once a day for 45 minutes every day for a total of 2 months to experimental group but not to control group. The yoga techniques included within the yogic interventions (Digambarji, & ML, 1978; Saraswati, & Saraswati, 1998; Saraswati, & Hiti, 1996; Saraswati, & Hiti, 1984) are explained in detail in the table below;

Yogic intervention plan	Time duration
○ Om Chanting	8 Minutes
○ Pashchimottanasa	30 Seconds
○ Janusurasana	30 Seconds
○ Vipritkarniasana	30 Seconds
○ Mandukasana	30 Seconds
○ Jacobson's Muscles Relaxation Technique	25 Minutes
○ Yoga Nidra	10 Minutes
<i>Total daily time for yoga practice</i>	<i>45 Minutes</i>

The various yoga exercises selected under the yoga intervention are as follows; *Om Chanting*- Om is the short name of Brahma Beej and Omkar which even the common man takes in some form or the other in his daily life. Om has been considered highly in Sanatan tradition. The word Om is formed by combining the words 'A', 'U' and 'M' and in the Veda Puranas, God is known by the name Om. Because 'a' The words 'U' and 'M' have many names of God such as from Akara, Virat, Vishrava Agni etc. from Ukara Hiranyagarbha Tejas, Vayu etc. from Makara Aditya PragmaIshwar etc. According to Mandukyupanishad, the present, past and future of all times are present in Om and all the powers and principles of the world are stored in it. "The work of controlling the soul can also be done by chanting Omkar, because this chanting along with spiritual practice brings unity with God." The seeker gets strength in his thoughts by chanting Omkar and he can gain control over the soul. As a result of Pranav chanting, man's senses remain under control. The face glows and the mind remains happy. A person who chants Pranav gets mental peace as well as concentration. By chanting Pranav, the yogi gets rid of all the obstacles in yoga and gets the benefit of initial samadhi.

*Pashchimottanasa*- For this asana, first of all, while inhaling, take both the hands towards the ears and keep your spine straight. Sitting, stretch your legs forward and move your hands upward. Now exhale and bend forward and hold the toe of your foot with the middle and index fingers of your hands. The breath should be drawn inward and the head should be upward. Lift your chest and look between the eyebrows. Now while exhaling, bend forward, pull the elbows towards the sides and try to bring the chest towards the thighs. Now take the nose till the knee. Now remain in this posture for about 10 minutes and come back to normal position. Paschimottasana done under Shivananda Yoga helps in reducing obesity. Stimulation of the thyroid gland during this process helps in the nutrition and development of the body.

*Janushirshashana*-To practice Janushirshashana, first sit in a secluded place on a mat or seat. Now spread the legs in front and bend the left knee, after this bring the sole of the left foot inside the right thigh. Now bend forward and extend your hands towards your right leg. After this, hold the toe of the right foot with the left hand. And bring your head as close to your right knee as possible. Remain in this position as per your capacity and take deep breaths, this is the final position and thus one cycle is completed. Now repeat the same sequence with the other leg also. The practice of Janushirshasana helps in getting relief from obesity, it is a very beneficial asana for diabetes, gastritis, irritable bowel syndrome patients. It makes the muscles of the spine and legs flexible.

*Vipritkarniasana*- For the practice of Vipritkarniasana, the seeker should spread a yoga mat in a clean place and lie straight on the back. Hands should be kept straight and next to the body. Now raise both the legs and make a 90 degree angle. Close your eyes. Remain in this position for at least five minutes. To get comfort, place a pillow or blanket under your hips. Practicing Vipritkarniasana relieves symptoms of mild depression, migraine and insomnia. It helps in pleasing and calming the mind. This asana also regulates the flow of blood. This asana is very effective in curing urinary disorders, high blood pressure and low blood pressure and arthritis etc.

*Mandukasana*- This posture is called Mandukasana because of its resemblance to a frog. To practice this, first sit in Vajrasana and spread your knees. These knees should be spread so much that their dorsal parts touch the ground and the toes of both the feet touch each other face to face. The head, neck and torso should be in a straight line and both hands should be on the knees. Wait like this for 5 minutes. As a result of Mandukasana, there is coordination and flexibility in the joints of knees and ankles. Its practice reduces constipation, diabetes, and other digestive disorders.

*Yoga Nidra*-The main purpose of Yoga Nidra is the mental, physical and emotional relaxation of the individual. It is a state in which the seeker is in between the sleep and the waking state. This comfortable state establishes a connection between the subconscious and the unconscious mind. Yoga Nidra can also be called the Yogic Tranquilizer as it restores harmony and well-being in the individual in a natural way. The practice of yoga nidra leads to renaissance of the nervous system and prana.

*Jacobson's Muscles Relaxation Technique*- The Jacobson relaxation technique was invented by Dr. Edmund Jacobson, 1920. This therapy consists of several sequences that focus on tightening and relaxing specific muscle groups. This technique is also known as relaxation therapy. This by focusing on particular areas and tensing them and then relaxing them, you can become more aware of your body and physical sensations. Relaxing the muscles can also help the mind relax. This technique involves tightening and then releasing the tension of a muscle group while relaxing the rest of the body. Jacobson relaxation technique provides relief from anxiety. It reduces work-related stress, it lowers blood pressure, it reduces the chances of seizures and improves sleep.

## PROCEDURE APPLIED FOR DATA COLLECTION

a total of 300 alcohol dependent adult males aged 30–50 years were selected as the sample through purposive sampling method. All individuals are recruited from different area of Bastar belt of Chhattisgarh. Consent was taken after a brief explanation about the study to the subjects and the family member accompanying the patient. The information was kept confidential. Subsequently, using another random sampling method, these selected subjects were divided into two groups, which were experimental group and control group. An equal number of subjects,  $n = 150$ , were included in each group. The control group was not given any kind of yoga practice, while the subjects in the experimental group were made to practice yoga intervention for 45 minutes every day for a total of 2 months. After the administration of yogic intervention, post level assessment of both groups participants was done again. To measure variables in this study, the "Buss-Perry Aggression Questionnaire (BAQ)", developed and standardized by researchers Buss and Durkee (1957) was used to measure 'Aggression Behaviour' selected as the dependent variable.

**Techniques of statistical Analysis:** The data was analysed using statistical package (SPSS) version 26.0. 't-test' was used to assess the significance in pre and post-test on aggression control.

## RESULT

**Hypothesis -1( $H_1$ ):** Yogic practices control the aggression level of alcohol dependent people.

Table: 1- Aggression Questionnaire based Paired Samples t-test

			N	M	standard deviation	SE	t	df	significant level
	Experimental group	pre	150	94.6	13.00	13.35	3.57	298	0.01
		post	150	46.99	13.70				

<b>Aggression Level</b>	Control group	pre	150	94.41	8.62	1.05	3.78	298	0.01
		post	150	90.48	11.47				

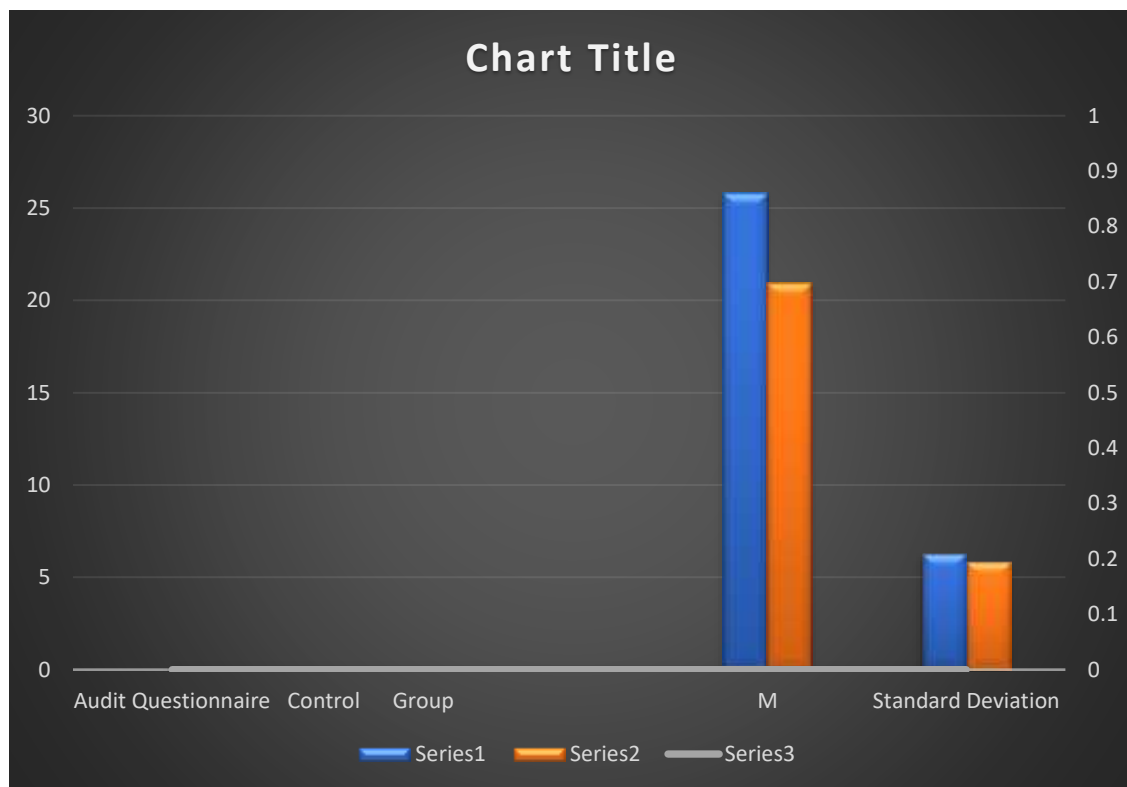
As a result, based on the demographic details of the subjects selected for the present research work there is no significant difference was found in the demographic data of the subjects selected by purposive sampling method.

The analysis of independent sample t-test (Table 1) based on the obtained scores, it was found that the pre-test and post-test values of Aggression questionnaire based experimental group were found to be very significant at  $p < 0.01$  level with 3.57 t-score on 298 degrees of freedom (df). Similarly, the pre-test and post-test values of Aggression questionnaire based control group were found to be very significant at  $p < 0.01$  level with 3.78 t-score on 298 degrees of freedom (df).

This difference between the calculated value obtained at the certain confidence limit (or degree of freedom) of the mean is greater than the Z score, indicating the significance of the difference of means ( $p < .01$ ). Accepting the directional hypothesis ( $H_1$ ) which is "Yogic practices control the aggression level of alcohol dependent people", it concludes that daily practice of selected yogic exercises can control aggression among alcohol dependent people. This means that the significant difference observed between pre and post intervention data on aggression control across all subjects is due to the effect of the yoga practices.

Along with this, the statistical plot obtained as a result of the analysis of the independent sample t-test, as shown in plot-1, can also be easily compared on the basis of the results of control and experimental group pre-post statistical analysis of the Aggression Control.

Plot: 1- Aggression Questionnaire based group Pre-Post statistics plots



## DISCUSSION AND INTERPRETATION

In the present research, experimentally investigated the effects of selected yoga exercises on the control of aggression in alcohol-dependent people. Herea experimental evaluation of yogic exercises, such as Om chanting, Paschimottanasa, Janusurasana, Viparitakarniasana, Mandukasana, JMRT and Yoga Nidra, as yogic intervention for controlling aggressive behavior among alcohol-dependent people was carried out. As a result, it was found that there was a reduction in the symptoms of aggression dimensions such as physical aggression, hostility, verbal aggression, and anger of the intervention group on the outcome basis, which is highly significant due to showing statistically high significance level ( $P < .01$ ).

Various research studies have shown that alcoholics display aggressive behaviour under the influence of alcohol, but experimental work based on the association of indirect and passive acts of aggression with alcohol has been found to be minimal. Abuse of drugs like alcohol directly affects the brain system, causing people who drink excessively to behave violently and aggressively. To address this problem, several step sinclude; Brief opportunistic intervention, Motivational Intervention therapy, Cue exposure treatment, Cognitive Behavioral Therapy, Progressive Muscle Relaxation Technique, Mindfulness interventions are currently being taken to reduce alcohol dependence and implement behavioral changes. Among the various interventions

yoga is a mind-body based natural therapy, which calms the mind of the person and also motivates him to control his behaviour. In this way, through yoga, along with gradually getting rid of habits like alcohol consumption through mind control, calm feeling, concentrated mind, the person also experiences positive changes in his behavior and gets a feeling of health and happiness also promotes (Rashid, & Srivastava, 2020; Jajoo, & Meshram, 2021; Greene, 2021).

---

## CONCLUSION

The present study experimentally reports the effectiveness of yoga intervention on aggressive behaviour of alcoholic individuals. Specifically, the present study presents the fact that the selected yoga intervention is a highly effective intervention with high statistical significance level in reducing aggressive behavior of alcoholic individuals, which is supported by the clear difference between the pre-test and post-test scores recorded in the experimental group as compared to the control group. This improvement may be due to the selection of yoga practices as a valid and reliable yoga intervention based on the facts presented in ancient yoga texts. Alternatively, it may reflect mean regression among alcoholics due to emotional control and lifestyle modification through selected highly applied yoga practices. In conclusion, based on the results of this study it can be concluded that yogic intervention is a highly effective practice for the management and control of aggressive behaviour among alcohol dependent people.

---

## REFERENCES

- [1] Digambarji, S., & ML, G. (1978). *Gheranda Samhita. Kaivalyadhama SMYM Samiti, Lonavla.*
- [2] Saraswati, S. M., & Saraswati, S. S. (1998). *Hatha Yoga Pradipika.* Yoga Publications Trust.
- [3] Saraswati, S. S., & Hiti, J. K. (1984). *Yoga nidra.* Munger: Bihar School of Yoga.
- [4] Saraswati, S. S., & Hiti, J. K. (1996). *Asana pranayama mudra bandha* (pp. 978-8186336144). Bihar, India: Yoga Publications Trust.
- [5] Rashid, R., & Srivastava, K. (2020). Effectiveness of progressive muscle relaxation training on aggression among the individuals with alcohol dependence. *International Journal of Indian Psychology, 8*(2), 226-237.
- [6] Buss, A. H. (1961). *The psychology of aggression.* Wiley.
- [7] Heinz, A. J., Beck, A., Meyer-Lindenberg, A., Sterzer, P., & Heinz, A. (2011). Cognitive and neurobiological mechanisms of alcohol-related aggression. *Nature Reviews Neuroscience, 12*(7), 400-413.
- [8] Bácskai, E., Czobor, P., & Gerevich, J. (2011). Gender differences in trait aggression in young adults with drug and alcohol dependence compared to the general population. *Progress in neuro-psychopharmacology and biological psychiatry, 35*(5), 1333-1340.
- [9] Garofalo, C., & Wright, A. G. (2017). Alcohol abuse, personality disorders, and aggression: The quest for a common underlying mechanism. *Aggression and violent behavior, 34*, 1-8.
- [10] Baron, R. A. (2004). *Workplace aggression and violence* (pp. 23-26). Jossey-Bass, San Francisco, CA.
- [11] Hinde, R. A. (2014). Aggression: integrating ethology and the social sciences. In *Violence And Suicidality: Perspectives In Clinical And Psychobiological Research* (pp. 66-78). Routledge.
- [12] Ando, A., Soga, S., Yamasaki, K., Shimai, S., Shimada, H., Utsuki, N., ... & Sakai, A. (1999). Development of the Japanese version of the Buss-Perry aggression questionnaire (BAQ). *Shinrigakukenkyo: The Japanese journal of psychology, 70*(5), 384-392.
- [13] Jajoo, S., & Meshram, A. (2021). The Effectiveness of Yoga Asanas in Alcohol De-Addiction. *Journal of Pharmaceutical Research International, 33*(61A), 446-451.
- [14] Greene, D. (2021). Yoga: A Holistic Approach to Addiction Treatment and Recovery. *OBM Integrative and Complementary Medicine, 6*(4), 1-8.
- [15] Anderson, C. A. & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology, 53*, 27-51.
- [16] Bandura, A., Ross, D. & Ross, S. (1963). Imitation of film-mediated aggressive models. *Journal of Abnormal and Social Psychology, 66*, 3-11.