SUMMARY
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Anger is a natural emotion that every human and many non-human animals experience. Mild forms of human anger may include displeasure, irritation or dislike. When we react to frustration, criticism or a threat, we may become angry - and usually this is a healthy response. Anger may be a secondary response to feeling sad, lonely or frightened. When anger becomes a full-blown rage our judgment and thinking can become impaired and we are more likely to do and say unreasonable & irrational things.

Anger is not just a mental state of mind. It triggers an increase in heart rate, blood pressure and levels of adrenaline and noradrenaline. Anger has survival benefits, and forms part of our fight or flight brain response to a perceived threat or harm. When a human or animal decides to take action to stop or confront a threat, anger usually becomes the predominant feeling and takes over our behavior, cognition and physiology.

In many cases humans and non-human animals express anger by making loud sounds, baring teeth, staring and specific posturing as a warning to perceived aggressors to stop their threatening behaviors. It is unusual for a physical attack to occur without these signs of anger appearing first. If a stranger approaches some newborn puppy-dogs the mother will most likely growl, bare her teeth and adopt a defensive or ready-to-attack posture, rather than silently attack without any warning.

If you trespass into the private land of a farmer in a remote area, his approach may be similar; his voice may be hostile, as may his body language, and posture. Instinctively, anger may surge in humans and non-human animals to protect territory, offspring and family members, secure mating privileges, prevent loss of possessions or food, and many other perceived threats. Experts say anger is a primary, natural emotion with functional survival value, which we all experience from time to time. The raised heart rate, blood pressure, and release of hormones prepare us physically for remedial action - which is either to fight or run away at top speed (fight or flight).

After all, adolescence is a long drawn out process of insurrection through which the young person actively and passively challenges and ultimately overthrows the rules and demands of parental authority. Parents can get angry in their frustrating
fight for influence, adolescents can get angry in their frustrating fight for freedom. However, the battle is finally lost and won as the new generation defeats the old.

At the end, parents are forced to adjust to their loss of primacy and influence and accept the young man or woman on his or her own individual and independent terms. Parents raise children only to have to let them go. Adolescents strive for independence only to discover that freedom isn't free. Now they have to take care of themselves.

Anger is a natural emotion everybody experiences it and everybody express it only some people out of 5 in 1 do it the “right way”. But most people, however, do it the “wrong” way. The problem is not anger. The “problem” is the mismanagement of anger. Anger is a natural and healthy human emotion when managed appropriately. But it can become the source of all kinds of various physical, mental, emotional, social and “legal” problems when not managed effectively.

Adolescent period is considered to be most critical in light of physiological development as well as changing psycho-social conditions. Therefore this age period is to be taken with utmost care. Same is the case of anger, anger in adolescent period is not only to be assessed but also to be effectively managed in order to live smooth life. Keeping in view the importance of anger in adolescents present study was planned with following research problem:

**Assessment and management of Adolescent Anger**

Researcher also further elaborated the subsequent objectives as stated under:

1. To assess the associations among anger parameters, body mass index, general health and subjective well being of the adolescents.

2. To assess the anger, body mass index, general health and subjective well being of the adolescents.

On the basis of the anger expression scores of the participants, two groups were formed i.e.(a) low anger group (n=120) whose score on anger expression was falling in first quartile and (b) high anger group (n=120) whose score on anger expression was more than the limit of third quartile, however, the intervention programs were designed and imparted only to the high anger group. At this stage following objectives were framed:
3. To compare the adolescents of low and high anger expression groups on general health, body mass index and subjective well being scores.

4. To study the effects of intervention programs (psychological, yogic, psychological+ yogic and no intervention) on the anger expression of the high anger group adolescents.

5. To study the effects of intervention programs (psychological, yogic, psychological+ yogic and no intervention) on the body mass index of the high anger group adolescents.

6. To study the effects of intervention programs (psychological, yogic, psychological+ yogic and no intervention) on the general health of the high anger group adolescents.

7. To study the effects of intervention programs (psychological, yogic, psychological+ yogic and no intervention) on the subjective well being of the high anger group adolescents.

8. To compare the efficacy of psychological, yogic and psychological + yogic intervention programs for anger management.

HYPOTHESES

In the light of review of literature, objectives and problem, the following hypotheses were formulated:

1. There would be significant associations among anger parameters, body mass index, general health and subjective well being of the adolescents.

2. The scores on anger parameters, body mass index, general health and subjective well being of the adolescents would fall in the normal norm range of respective measure of the adolescent population.

3. Adolescents of lower and higher anger expression groups would significantly differ on body mass index, general health, and subjective well being scores.

4. There would be significant effect of psychological intervention on anger expression, general health, body mass index and subjective well being of the higher anger group adolescents.
5. There would be significant effect of intervention programs (psychological, yogic, psychological+yogic and no intervention) on the body mass index of the high anger group adolescents.

6. There would be significant effect of intervention programs (psychological, yogic, psychological+yogic and no intervention) on the general health of the high anger group adolescents.

7. There would be significant effect of intervention programs (psychological, yogic, psychological+yogic and no intervention) on the subjective well being of the high anger group adolescents.

8. There would be no significant difference regarding efficacy of psychological, yogic and psychological + yogic intervention programs for anger management.

As stated above this investigation was planned to assess and manage adolescent anger. For this purpose a correlational and experimental design was used to find out whether psychological and yogic teachings are helpful to control the anger of adolescence.

**Design:**

In the beginning all the selected measures were administered to entire sample of five hundred adolescents. On the basis of scores on anger expression, one low anger expression group (Q1) and one high anger of expression group (Q4) were formed for comparison, however, anger management interventions were given to high group. These identified high scorers were randomly assigned to various groups on the basis of lottery system.

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<th>Group I</th>
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<td>N=30</td>
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<td>Psychological Intervention</td>
<td>Yogic Intervention</td>
<td>Psychological + Yogic Intervention</td>
<td>Control Group</td>
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<td>No Intervention</td>
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<td>Post intervention</td>
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GT= 120
Sample

A total of 500 subjects participated in present study to fulfill the requirement. Participation of the subjects in the present study was voluntary and informed consents were obtained from all the subjects. All subjects were of the age between 14 to 18 years (with the exception of 5 subjects of 13 year age) and from public schools situated at Najafgarh (New Delhi). They were selected for the present study on the basis of availability. Majority of the respondents i.e. 99 percent were of Hindu religion. All the students were regular students of (IX, X, XI or XII classes). The sample was represented by both the genders, however they were not with equal numbers. At the second stage two groups – (i) low anger expression and (ii) high anger expression group were formed on the basis of the scores of the respondents on anger expression. Since the anger expression scores were almost normally distributed so one hundred twenty subjects were identified as low anger group (first quartile) and one hundred twenty subjects were members of high anger group (fourth quartile). In the final stage only those 120 students were selected for anger management exercises, whose scores on anger expression was more than Q₃ points i.e. who belonged to ⁴th quartile of anger expression in the total sample of 500. These one hundred twenty subjects were further grouped in four groups randomly with thirty subjects in each. The four intervention programs (psychological, yogic, psychological + yogic and no intervention) were used for anger management of high anger expression participants. Which group will be given which intervention was also decided on random character. All the respondents were unmarried and 28.33 percent of them were form rural background and remaining belonged to urban background.

Measuring tools:

Following tests/ instruments were used for the purpose of data collection.

1. Personal Data Bank: The purpose of this Personal Data sheet was to collect personal and background information of the respondents. This sheet consists of information regarding the subject name, age, height, weight, religion, educational qualification, occupation, annual family income, address, class, marital status, background (urban/rural/metro), smoker/non-smoker, alcoholic / non-alcoholic, vegetarian/non-vegetarian, favorite color, favorite drink and consent to participate in research.
2. **Body Mass Index**: Body mass index (BMI) was used to assess general physical health of the participants. Body mass index of the subject was assessed individually by measuring his/her weight in kilograms (with the help of a standard weighing machine) and height in meter (with the help of a standard metre marked cm and feet on it).

3. **General Health Questionnaire (GHQ)-12**: The present investigation includes general health questionnaire -12 or as popularly known as GHQ - 12 (Goldberg and Hillier, 1979) a short screening tests for non-psychiatric disorder, to assess mental health. The GHQ - 12 is very quick to administer and score as it contains only 12 questions. Nevertheless, it is just as reliable, valid and sensitive as its other longer versions. The reliability and validity of GHQ - 12 are well established (Banks, Clegg, Jackson, Kemp, Stafford and wall, 1980; Goldberg and hillier, 1979 and Goldberg 1972). The items of GHQ - 12 are to be rated on a four point scale with a scoring weight of 0 to 3. Thus, the total score may range from 0 to 36. The results produce a single score that makes it an excellent resource for research studies. Higher the score poor is general and psychological health and vice versa. Mohal (1991) prepared the Hindi version of this questionnaire. As it was available and the subjects of the present study were proficient in Hindi also, therefore, Hindi version of questionnaire was used in the present study.

4. **STAXI (State trait anger expression inventory)**: The original STAXI test was developed by C. D. Spielberger in 1994 and was published as STAXI in 1994. This scale consists of 44 items The STAXI State Anger scale assesses the intensity of anger as an emotional state at a particular time. The Trait Anger scale measures how often angry feelings are experienced over time. The Anger Expression and Anger Control scales assess four relatively independent anger-related traits: (a) expression of anger toward other persons or objects in the environment (Anger Expression-Out); (b) holding in or suppressing angry feelings (Anger Expression-In); (c) controlling angry feelings by preventing the expression of anger toward other persons or objects in the environment (Anger Control-Out); and (d) controlling suppressed angry feelings by calming down or cooling off (Anger Control-In). The STAXI provides easily administered and objectively scored measures of the experience, expression, and control of anger for adults and adolescents. The STAXI was developed to assess
components of anger and anger expression for a detailed evaluations of normal and abnormal personality and to measure the way these components of anger contribute to medical conditions such as hypertension and coronary heart disease. Recent studies on the nature of anger and its effects on mental and physical health guided the development of STAXI. To investigate the effects of anger on mental and physical disorders, the experience of anger must be clearly distinguished from anger expression and control." The STAXI is scored by hand using a two part carbonless form. The STAXI is quick and quite simple to administer and to score. It can be administered in 5 to 10 minutes to individual and scored in about 5 minutes. State-Trait Anxiety Inventory (STAXI) : Trait anxiety was measured by the Hindi-Language version of STAXI (Spielberger, Sharma and Singh, 1973).

5. Subjective Well-Being Inventory (SUBI): To assess the mental health of the SUBI (Sell and Nagpal, 1992) was used. This is a very robust and comprehensive instrument for assessing positive indicators of health, including perceptions of well being, happiness, life satisfaction, positive affect and feeling about social life. The SUBI has been standardized on adult Indian population. Developed by 'stepwise ethnographic exploration' process, this inventory, initially consisted of 130 items that were supposed to be measuring various areas of concern possibly related to or parts of well and ill being. This item pool was subjected to statistical treatment and factor analysis. The result was a 40 item version that assesses the subjective well being of the subjects on 11 factorial dimensions.

Since the subjects of the present study were proficient in Hindi, a Hindi translation of SUBI prepared by Sharma (2002) was used to assess well being of the respondents. While preparing the Hindi version Sharma (2002) translated the statements in Hindi and these were assessed by 6 experts (from Hindi and English departments of M.D. University, Rohtak and Vaish P.G. College, Bhiwani). After modifying the Hindi translation as per the views of the experts, the two versions were comparatively evaluated by 2 experts.

The final Hindi version of SUBI was administered on 100 bilingual college students of Bhiwani. The original English version was administered on the subjects after an interval of 5 days. After a gap of one month, the translated test was administered on these subjects. The Pearson Product Moment correlation between
original and translated versions of SUBI was .86. The test-retest reliability coefficient of correlation (over 1 month interval) of SUBI was .79.

**PROCEDURE:**

The data was gathered in small group (20-30) situations. At the first the investigator approached the group in school and a good rapport was established for creating congenial environment to extract authentic information from them, it was especially ascertained that no particular subject has undergone any major and significant life change. The selected subjects were requested to answer frankly and honestly as the information provided by them was to be kept confidential and would only be used for research purposes. When the subjects were comfortable and ready for the test then after obtaining consent of the subject to act as respondent, firstly, following instructions were given: “you will be given a set of questionnaire in which there are some personal questions regarding your personal data and you have to respond on the basis of your preference. Please read questions carefully before filling the information. There is no time limit but you have to fill it rapidly. Success of present work directly depends upon your valuable cooperation and sincerity.”

Firstly Personal Data Blank, GHQ, SUBI and STAXI were administered to the participants (N=500) in a small group of 20 -30 subjects in their class room settings after obtaining due permission from school administration and informed consent’s from participants. On the bases of their scores on anger expression, 120 subjects of low anger expression (Q1) and 120 subjects of high anger expression, whose score is above Q3 - were selected for comparison. However, management/ intervention part of the study subjects of high anger expression group were selected. Subjects were informed about the general nature of the study as well as what would be required of them during the study. They were further divided randomly 30 each in four groups. These groups were administered SUBI, GHQ along with measurements of weight and height for BMI. After that anger management intervention programs were administered as per the design. For the first three groups three months training (twice in a week) for anger management was given. The first group (GI) was given Psychological training, the second group (GII) was given Yogic training, the third group (GIII) was given both Psychological and Yogic training while The fourth group (GIV) was taken as the control group and remained without any kind of formal
intervention. Then after three months all the four groups were reassessed on dependent variables and training was given once in a week. The effect was then checked and measured carefully to know if the training was helpful to them. Approximately after another three months after giving training of anger management SUBI, GHQ, BMI and STAXI was given to all the 120 subjects to see stability of the effect. This was repeated after another three months. A total training of nine months was given and effects were assessed 3 times.

For first three months, total 24 sessions were given at the rate of 2 sessions per week. In the second spell of three months, 12 sessions, one per week were imparted whereas in the last leg of three months no intervention program was given to the subjects. Assessment of anger expression, body mass index, general health and subjective well being were done at Basic (Pre), Post-1 -after 3 months of intervention, post-2 after 3 months of post-1 and lastly post-3-after another three months. All the intervention programs were kept constant as per their group for the entire duration of intervention.

ANALYSIS PLAN:

Data was analyzed with the help of descriptive statistics, one way ANOVA for independent and repeated measure along with post hoc and t-test based mean comparisons. First of all means and standard deviation were computed and appropriate graphs were also prepared. Product movement correlations were also computed for checking of associations among the study variables. The statistical analysis was done with the help of SPSS 16.0 version.

Results and Conclusions

Results have been discussed in the light of correlational and experimental analysis based on t-test and ANOVA.

Results and discussion part of the thesis has explained the outcome as per the identified objectives. In sum, it may be said that understanding, assessment and management of anger is very important. It is crucial for general public but particular with teenagers. The overall picture of the findings indicate towards the significant associations between anger expression and health parameters. Anger control builds up the healthiness where as anger expression is the key factor to cause detrimental effects on health. Since the sample was large (N=500), therefore it almost represented its
population as most of the measure of adolescents were in normative range. It was also clearly demonstrated that low anger expression group was remarkably better on health and subjective well being indices than their counterparts who were high on anger expression.

Results consolidated the view that psychological, yogic and psychological + yogic interventions were effective in lowering down the anger expression level in adolescents. Findings further demonstrated that the effectiveness of the program was maintainable up to a longer period. The general health and subjective well being of the subjects was also significantly affected by psychological, yogic and psychological + yogic procedure. The only exception which was remained unaffected by the intervention program was weight and height based body mass index. As far as comparative efficacy of these intervention programs is concerned, the findings of present investigation has favoured the psychological and yogic techniques as better options when used in either / or i.e. independently but a good option when used in a combined mode.

In sum, the investigator has attained all the eight objectives and the corresponding proposed hypotheses have also been empirically tested. The research has a wide application in the area of school and clinical psychology.
CONCLUSIONS

The present research was aimed at the assessment and management of the adolescent anger. The major conclusions drawn from the study are as follows:

* State anger, trait anger, anger in, anger out and anger expression are significantly and positively.
* Anger controls and anger expression are significantly and negatively correlated.
* Findings reveal that anger expression is found to be significantly and positively correlated with general health. It means people who express their anger more possess poor health.
* Findings are indicating that anger expression is negatively & significantly correlated with subjective well being. It means that people who are having high anger expression their health will be poor. So it is clear that the person who is high on anger parameters his subjective well being will not be good.
* It is found that anger control is positively and significantly correlated with subjective well being, it means that person who control their anger well or not used to be angry will show good status of subjective well being.
* Results also show that state anger is negatively and significantly correlated with anger control. It implies that high state anger may result in poor anger control. But at the same time higher level of the state anger causes high anger expression.
* Anger in & anger out both are equally negative for health status as there are negative associations between them and subjective well being.
* Anger control is a good sign for good health and better subjective well being.
* It was found that people who are having high level of state anger, they are poor in health.
* There are insignificant correlations between anger parameters and body mass index.
* Sample average values on anger (state anger, trait anger, anger in, anger out, anger control and anger expression) and health (general health and subjective well being) fall in normative range.
Low anger expression group shows better general health and greater subjective well being in comparison to high anger expression group.

There are significant effects of intervention programs on anger expression. Psychological, yogic, psychological + yogic interventions have significantly reduced the anger expression.

There are significant effects of intervention programs on general health. Psychological, yogic, psychological + yogic interventions have significantly improved the general health.

There are significant effects of intervention programs on subjective well being. Psychological, yogic, psychological + yogic interventions have significantly enhanced subjective well being.

There are no significant effects of intervention programs on body mass index. Psychological, yogic, psychological + yogic interventions did not have significantly effect on body mass index.

Psychological and yogic interventions are better anger management strategies in comparison to combine approach.