SUMMARY

Today man is not living in a happy state of mind. Most of the men run after money. Money is everything for the most of them, it is mother, it is father it is God. Some of them keep themselves busy in unhealthy competitions. They want to leave others for behind in the race of how to be ahead of others. So men remain so much busy that he can not spare a span of time to maintain health. Results of this are that he creates lot of diseases in this body due to lack of exercises.

Here, it may be pointed out that yoga is not only physical exercises but also a mental exercise through which one can maintain his health with span of time. Yoga exercises can be done even in one's residential room, there are people who have all material comforts and modern amenities at their command but even than their life are full of worries and disturbances. They can not go to bed without taking sleeping pill even the teacher are not exception. Thus, we find that every one is sick having mental tension in are or another form. Under the circumstances yoga can play a vital role to reduce, eliminate tensions and to maintain motor fitness.

MEANING AND CONCEPT OF YOGA:

The word 'yoga' has many etymologically, it means integration. The term Samatva of Bhagavad-Gita
conveys the same meaning certain other terms like homostatics equilibrium, balance, harmonious development etc. more or less suggest the something. The word yoga has been derived from the root "Yuj". It means to join two thing is known as Yoga.

'Joining Prana and Apana.'

Prana is situated in the heart and Apana is situated in Anus. Joining these and talking then to Sahasra Chakra is known as yoga.

'Joining Shakti with Shiva'
'Joining Soul with God.'
'Joining moon with sun.'

The science which gives us knowledge about all these is called the science of yoga.¹

The Geeta defines² yoga as the evenness of temper "Sidhyasidhayoh Samo Bhuta Samatvan yoga uchyate" (Geeta II. 48).

**Definition of Yoga:**

According to Patanjali³ "Yogashchitta vritinirodha" i.e. withdrawal of sense organ from the worldly objects and their control is yoga. Therefore, it can be said that control of sensory and motor organs and mind, is called yoga.

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2. Sri Bhagvad Gita, Verse -48, Chapter 2
3. Patanjali Yoga Sutra, Verse-3, Chapter1
According to Geeta⁴ "Yogakaramsukaushlam"

To get excellence and the perfectness in any Karama is yoga. Patanjali has attempted to define the term "yoga" therefore carries the sense of purposeful action, an action undertaken in order to achieve a specific end.

**Modern Definition⁵:**

"Yoga is that type of education in which we can get all round development of human being through yogic activities like health development, mental development. Physical development, emotional balance, social development and to attain the moksha is called yoga."

Anxiety considered as a block to an activity. A person who suffers from anxiety may not be able to devote his full energy in the performance of sports. It is, therefore, considered by many that anxiety interferes in sports performance. This nation is however, based on an enormous understanding of the role of anxiety. In fact anxiety might learning of performance or might also stimulate it.

According to Spielberger (1966),⁶ “Anxiety has been divided into state and trait dimensions.”

According to Hardman and Johnson (1952),⁷ “Anxiety is an emotional reactivity.”

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4. Sri Bhagvad Gita, Verse -50, Chapter 7
Psychologists define aggression as “any form of behaviour directed toward the goal of harming or injuring another living being who is motivated to avoid such treatment.” (Baron, 1969)⁸

Aggression is any act done with the intent to harm another living being either physically or psychologically. Other social psychologists have presented more elaborate definitions of aggression but at the heart of most definitions is the intent to harm another individual.

Among the socio-psychological factors, self-concept is an important variable that has attracted considerable research attention. More recently, a body of research is beginning to merge that indicates a positive relationship between the concept of a person and his achievement in life. The self awareness that the child develops in the process of interaction with people and environment leads to comparing himself with his peers in competition and also the feeling of confidence and courage as a result of success or failure in his endeavors.

The innovation of the term ‘self’ can be traced as early as in our ancient Vedic literature and also as early as the discussion of human personality found place in the literature. But it gained impetus in 1937 with Allport, since

then there has been many approaches to explain the term ‘self’ with different perceptive and points of views.

Self-concept is the means by which we create our image and identity (Chauhan, 1978). Therefore, self-concept is the core of the personality pattern. It determines the kind of adjustment the person will make. A change in the self-concept will bring changes in the entire personality. Changing one’s self-concept requires tremendous insight. This means that a person must be able to see himself as he actually is, not as he would like to be or as others perceive him.

Psychologically, adjustment implies a constant interaction between the person and his environment. Although, most persons resemble the average of the group in many characteristics, there are those who divide widely from the average in certain traits. These deviations create certain problems of adjustment. “Some time adjustment is accomplished when the person yields, at other time it is achieved when environment yields to person’s constructive activities. In most cases, adjustment is a compromise between these two extremes and maladjustment is a failure to achieve a satisfactory compromise” (Robert W. Whites, 1956).

Adjustment attempts to satisfy needs by overcoming both inner and outer obstacles and by adapting to circumstances. Learning about adjustment means analyzing two things: internal make-up and internal personal or social behaviour. Adjustment is the dynamic process by which organisms meet their needs. Physical education and related activities satisfy many of these needs. The behaviour of human beings is difficult to investigate because of the complexity of the subject matter. This complexity of human behaviour is best illustrated by the fact that the adjustment process involves a number of basic and applied fields of knowledge, such as Psychology, Genetics, Sociology, Anthropometry, Medicine and even Religion.

**Yogasanas:**

This is the traditional system of doing exercises and this forms a part of Hath yoga, comprising asana, pranayama and kriyas. Asana are poses assumed by the body by slow stretching movements, the final pose being held for sometime steady and relaxed. The specific asana practiced by the subjects in this study are Bhujangasan, Sarvangasan, Dhanurasan, Paschimottasan, Uttanpadasan, Chakrasan, Surya Namaskar, Matsyasana, Shavasan, Matsyandrasan, Gomukhasana, Mayurasana, Vrikshasan, Shalbhasan, Ushtrasan, Bakasan, Halasan, Supta-Vajrasan, Shrishasan, Nokasana, Pawanmuktasana, Kukutasana, Makarasana and Gurudasana.
Pranayama

Surbhedan, Chanderbhedan, Bharamri, Bhastrika, Ujjai, Shittalee, Shitkari

Shatkaramas

Kapalbhati and Nauli.

Statement of the Problem:

“Effect of Specific Yogic Exercises on Psycho-Physiological Variables of Post Graduate Girls Students.”

Objectives of the study

The objectives of the study are the following:-

1. To see effect of the yogic training on the psychological variables of the post graduate girls students.
2. To see effect of the yogic training on the physiological variables of the post graduate girls students

Hypotheses:

On the basis of related literature and discussion with senior research experts and academician the researcher selected the yogic exercise keeping in the view the recent trend of yoga education. The following hypotheses are framed by the researcher:-

1. Effects of yoga training on psychological variables will be positive.
2. Effects of yoga training on physiological variables will be positive.
Delimitation:-

1. The study is limited to 120 regular P.G. girls’ students of C.D.L.U., Sirsa.

2. The study was delimited to female students only.

3. The study is delimited to four psychological variables i.e. anxiety, aggression, self concept and adjustment.

4. The study is delimited to four physiological variables i.e. pulse rate, blood pressure, red blood cells and white blood cells.

5. Training was given to the experimental group up to six month in the morning.

6. The girl students are between 19-25 years of age.

Limitation:

1. Caste bar was out of control during the research programme.

2. Socio-economical and cultural status of students could not be controlled because the students were various categories of society.

3. Past history of the students families were remained unknown.

4. Level of the intelligence of samples was also out of control.

Methodology:

For the conduct of present research, a purposive sampling method was used to select sample from CDLU
Sirsa university of Haryana as many as one hundred twenty girl students (60 for experimental group and 60 for Control group) were selected from CDLU Sirsa Haryana. These 120 girl students from classes M.B.A., M.A. English, M.Tech., M.A. Education, M.A. Economics, M.C.A., L.L.B. Were selected on random basis. These students were further divided into two age groups. Group ‘A’ and Group ‘B’. Girl students from age group 19 to 22 formed Group ‘A’ and girl students from age group 22 to 22 formed Group ‘B’. Both the groups had 60 girl students each i.e. Group ‘A’ had 60 girl students and Group ‘B’ also had 60 girl students. Of the 60 students in ‘A’, 30 were taken randomly in experimental group and 30 were taken on the similar basis in control group. Similarly Group ‘B’ was also divided into experimental and control group each group having 30 girl students. Further, students of experimental group from both the Groups ‘A’ and ‘B’ were put in one group and similarly, students of control group were put together in another group. The nomenclature of the new groups were kept as Group ‘C’ and Group ‘D’ now has 30 students of the experimental group ‘A’ and 30 students of the experimental group ‘B’ making a total of 60 girl students. Therefore, the new group – Group ‘C’ henceforth shall be called as ‘Experimental Group’. Similarly, Group ‘D’ has now 30 students of control group ‘A’ and 30 students of control group ‘B’ making a total of 60. Thus, the new group – Group
‘D’ henceforth shall be called as ‘Control Group’, Group ‘C’ (the experimental group) has now 60 girl students and Group ‘D’ (the control group) has 60 girl students. Now the Experimental Group – Group ‘C’ has 60 girl students ranging from age group 19 to 25 and similarly, the Control Group – Group ‘D’ has 60 girl students ranging from age group 19 to 25. The stratification of the sample can be seen below:

Table Showing Number of Girls Students

<table>
<thead>
<tr>
<th>Group ‘A’</th>
<th>Group ‘B’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>Control Group</td>
</tr>
<tr>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Table Showing Number of Girls Students

<table>
<thead>
<tr>
<th>Group ‘C’</th>
<th>Group ‘D’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group ‘A’</td>
<td>Experimental Group ‘B’</td>
</tr>
<tr>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

There are two groups in an experimental study, one is experimental group and the other is control group. It was necessary to educate both the groups as per term and condition of the study. So, every type of instructions in respect of the study was given to both the group i.e.
experimental and control group. Unless both the groups are educated, one can not arrive at a conclusion, which can be said to be authentic. Experimental study is a bit different from other types of studies. One has to be extra careful in matching both the experimental and control groups.

In the present study, which is an experimental on two groups have been taken. Group C from the experimental group and group D from the control group. To the best of her capacity and knowledge, the researcher tried to get both the groups educated. The following factors, which might have asserted the study, were the main concern of the researcher.

1. Urban-Rural
2. Caste, Creed and Religion.
3. Socio-Economic condition.
4. Height and weight
5. Intelligence
6. Education of the subjects

The above factors could not be controlled by the researcher because, some subject were belonged from the rural and some from urban area. Similarly cast, creed, religion, socio-economic status and their educational standard etc. could not be delimited. These factors were remained out of control while selected the sample for the present study. These all subjects for experimental and
control group were fresh and untrained about yogic activities.

**Training Schedule:**

Only the experimental group was called for training in the morning session from 06:00 to 07:15 daily including holiday.

**Training session for experimental group**

Suryanamaskar 10 Minutes  
Specific yogic activity 60 Minutes  
Cooling down 05 Minutes  

**Selected yogic activity for experimental group**

Yogasnas:

Total 17 asnas were classified according to the position of body and further sequence of yogasnas had given for easy, smooth, and effective performance while practicing. Principle of counter-posture and similar position was used for sequence.

Sequence also shows a simple flow of position from standing vertical to inverted vertical. Selected yogasnas from Hatha yoga are widely acclaimed throughout indo spiritual culture, very effective for improvement in motor fitness. Following cultural asana was selected:

1. Cultural asnas: Salabhasana, Nokasana, UttanPadasana, Mayurasana, Bhujangasan, Dhanurasan, Halasan, Sarvangasan, Matsyasana,
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Supta Vajrasana, Gomukhasana, Chakrasana, 
Kukutasana, Paschimottasana and Pawanmuktasana.

2. Relaxative asanas: Makarsana and Shavasanas

3. **Pranayama**: Ujjai, Bharamri, Bhastrika, Suryabhedi, 
Chandrabhedi, Shittli, Shitkari, Bhrahmri

4. **Shatkarmas**: Neoli, Kapalbhati

5. **Cooling Down**.

**Cooling down**

One relaxing yogasnas was necessary to be included because according to principle of yoga before doing every asana practitioner should relax. Lying on back with complete relaxed position and breathing in normal manner. This may be said as Shavasana i.e. a posture for deep relaxation.

**Tool Used:**

The present study was an experimental study, to achieve the objectives; the investigator was used psychological test and Laboratory test i.e.

1. Questionnaire for the state-Anxiety – inventory constructed by spiel – Berger (1983)
2. Questionnaire for the Adjustment constructed by Prof. D.N. Srivastava of Dr. Govind Tiwari – 1986.
3. Questionnaire for the aggression constructed by Dr. – G.L. Pati.

**Collection of Data:**

The researcher took 60 P.G. girls students in experiment group and 60 P.G. girls’ students in the control group. The stratification of the sample has already been given in the chapter 'Plan and Procedure'. The investigator started the work and collected data as per the instruction given in all the tests. The details of which are already given in the preceding pages entitled, instruction and administration of Tests', the researcher noted down all the results of the tests in his record sheets which form the data of the present work.

**Statistic Used:**

Mean S.D., T-test.

**Main Findings:**

The main purpose of the present study is to find out the effect of yogasana on the psycho-physiological variables. During the whole research work investigator has gone many practical situations and has felt new dynamics emerging out, which may open new horizons for future research work.

In the present chapter the conclusion of the study are being presented followed by a few suggestions, educational, implications, findings, educational implications and suggestions for further research to be done by future researchers.
Findings

Experimental group v/s control group 19-25 age.

**Anxiety:** The selected yoga asana have positive effects on anxiety level of post graduate girls students.

**Aggression:** The selected yoga asana have positive effects on aggression of post graduate girls students.

**Self Concept:** In relation to self-concept specific yoga training has positive effects on self concept of post graduate girls students.

**Adjustment:** Specific Yoga training has positive effects on adjustment of post graduate girls students.

**Pulse Rate:** Specific Yoga training has positive effects on the physiological variable pulse rate of post graduate girls students.

**Blood Pressure:** The selected Yoga training has not positive effects on the blood pressure of the post graduate Girls students.

**Hemoglobin:** The selected yogasan training has positive effects on the development of Hemoglobin of post graduate girls students.

**Red Blood Cells:** The selected yogasan training programme has positive effects on the development of Red Blood Cells of post graduate girls students.

**White Blood Cells:** Specific yoga training has not positive effects on physiological variable (White Blood Cells) of post graduate girls students.
**Experimental group v/s control group 19-21 age.**

**Anxiety:** The selected yoga asana have positive effects anxiety level of post graduate girls students.

**Aggression:** The selected yoga asana have positive effects on aggression of post graduate girls students.

**Self Concept:** In relation to self-concept specific yoga training has positive effects on self concept of post graduate girls students.

**Adjustment:** Specific Yoga training has positive on adjustment of post graduate girls students.

**Pulse Rate:** Specific Yoga training has not positive effects on the physiological variable pulse rate of post graduate girls students.

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**Red Blood Cells:** The selected yoga asan training programme has not positive effects on the development of Red Blood Cells of post graduate girls students.

**White Blood Cells:** Specific yoga training has positive effects on physiological variable (White Blood Cells) of post graduate girls students.
Experimental group v/s control group age 22-25

**Anxiety:** The selected yoga asana have positive effects on anxiety level of post graduate girls students.

**Aggression:** The selected yoga asana have positive effects on aggression of post graduate girls students.

**Self Concept:** In relation to self-concept specific yoga training has positive effects on self concept of post graduate girls students.

**Adjustment:** Specific Yoga training has not positive on adjustment of post graduate girls students.

**Pulse Rate:** Specific Yoga training has positive effects on the physiological variable pulse rate of post graduate girls students.

**Blood Pressure:** The selected Yoga training has not positive effects on the blood pressure of the post graduate Girls students.

**Hemoglobin:** The selected yogasan training has positive effects on the development of Hemoglobin of post graduate girls students.

**Red Blood Cells:** The selected yogasan training programme has positive effects on the development of Red Blood Cells of post graduate girls students.

**White Blood Cells:** Specific yoga training has not positive effects on physiological variable (White Blood Cells) of post graduate girls students.
Experimental group age 22-25 v/s control group age 19-21

**Anxiety:** The selected yoga asana have not positive effects on anxiety level of post graduate girls students.

**Aggression:** The selected yoga asana have positive effects on aggression of post graduate girls students.

**Self Concept:** In relation to self-concept specific yoga training has positive effects on self concept of post graduate girls students.

**Adjustment:** Specific Yoga training has positive on adjustment of post graduate girls students.

**Pulse Rate:** Specific Yoga training has not positive effects on the physiological variable pulse rate of post graduate girls students.

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**Hemoglobin:** The selected yogasan training has positive effects on the development of Hemoglobin of post graduate girls students.

**Red Blood Cells:** The selected yogasan training programme has positive effects on the development of Red Blood Cells of post graduate girls students.

**White Blood Cells:** Specific yoga training has not positive effects on physiological variable (White Blood Cells) of post graduate girls students.
Experimental group age 19-21 v/s control group age 22-25

**Anxiety:** The selected yoga asana have positive effects on anxiety level of post graduate girls students.

**Aggression:** The selected yoga asana have positive effects on aggression of post graduate girls students.

**Self Concept:** In relation to self-concept specific yoga training has positive effects on self concept of post graduate girls students.

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**White Blood Cells:** Specific yoga training has not positive effects on physiological variable (White Blood Cells) of post graduate girls students.
(1) **Educational Implications:**

1. The researcher is of firm opinion that the yoga could be of great help to the students and should start at primary level schooling in yogic literature it is recommended to start at the age of 8 years. This will help in following ways: - (i) yoga enhance physical and mental discipline in students, (ii) yoga enhance stamina for longer duration sittings for study.

2. At higher education, level yogic literature become instrument to search roots of many humanity sciences like Ethical System, Legal system, Sociology, Ancient Education, Healing, Naturopathy and Ayurveda etc. Study and practice of Yoga create deeper insight in the investigation of evolution of all these discipline.

3. Yoga can help in concentration, mind alertness, increasing memory power, increasing self-confidence and determination etc. Therefore, yoga is the bone for the students.

4. Various principal of Psychology, Medical Science, Engineering and Computer Science etc. may he traced back into yogic literature. Further Yoga may provide help for students of all professional streams.

5. Yogic activity should be implemented in the entire educational curriculum from the primary to higher education because it creates physical and mental fitness of the individual so that learning and teaching capacity may be increased among the teachers and students. There is no doubt yogic activities
implementation in all the institution because physiological disordered can be removed by performing them should have to be adopted the yoganic schedule in the routine activities of the educational system.

6. The yogic activities always increase the degree level of intelligence memory. Positive attitude, concentration will power and working efficiencies etc. of the students as well as the teachers.

7. The yogic activities are the only activity which is very commercial and can be done by all the age, sex and social and mental level of the students.

(ii) Recommendations:

1. Yoga must be included in the curriculum right from primary school to high and higher educational institutions.

2. It is also recommended that more and more yoga institutions be established in our country. Good yoga teachers with good professional training must be appointed in such institutions.

3. Institutionalization and formalization of yoga education is necessary to discourage self-styled and fake yoga teachers and so called yoga experts. For his certification and monitoring at governmental level is must.

4. It is also recommended that yoga asana be made compulsory for industry workers and other personnel. The hunch is that yoga asana could improve working
capacity and could increase productivity as it has been experimented in Japan.

5. To start and propagate yoga in education system physical education teachers are not recommended but full time yoga teachers should be appointed. This is because yoga teacher need special mental and emotional attitude and dedication with more humbleness. Physical education teachers are trained with little bit more aggressively which is not suitable for yoga.

6. Yoga as a subject must be included in the curriculum right from the primary school to higher educational systems.

7. Under U.G.C. scheme more special yoga universities like Bihar Yoga Bharti and Dev Sanskriti Vishwavidalya, should be opened to bring more specialization in this stream.

8. It is also recommended that yogic activities schedule can be implemented in the industry units as well as various offices of the Govt. and Private sector so that working efficiency of the working people can be increased and output of the work may be more effective.

9. There is no doubt yogic activities can be included in the treatment schedule of various pathies like Ayurveda allopath, electrotherapy and homeopathy so that cure process of various pathies can be more and more scientific, effective and natural. It is also
recommended that yogic activities have to be included to remove mental disorders like anxiety, tension, stress and depression etc. Because of this inclusion, psychological treatment will certainly be more effective through performing the meditative activities with the medicinal aspect.

10. It is also recommended that yogic activity can also be implemented on old age persons to make more and better health.

In the light of preceding chapters, where researcher done a mountainous research-work and in this chapter presented further-analysis, discussion and conclusions, now researcher is in position to provide suggestions. Also during the whole research work investigator has gone many practical situations and has felt new dynamics emerging out, which may open up new horizons for future research work.

Here suggestions are not just based upon popular belief but rests upon well tested scientific research-work and factual findings. These will provide basis for further future research investigations in this area.

(iii) **Suggestions for The Future Research:**

1. Researcher suggests that the same research could be done at different level students, i.e. at primary, secondary and college levels.

2. Similar study could be conducted taking sample from sex different as of only Boys or taking mixed sample from any co-educational institution
3. Further more experimental study may be conducted taking industrial workers, clerks and other officials as sample to establish whether yoga asana increase productivity in the factories, industries, etc.

4. A comparative study between these yogic asana and some other physical exercises, like, gymnastic exercises may be taken to examine there respective efficacy.

5. An experimental study may be conducted to see the effects of these yoga asana on self-discipline, brotherhood, hostility and national integration, etc.

6. The above researches could be conducted by taking asana other than the present ones. Specific effect of just one or two asana also can be studied in relation any particular problem or parameter.

7. An experimental study could be taken up to see whether these yoga asana increase subjective qualities of the sample members like creativity, intelligence, social adjustment, level of satisfaction and co-existence etc.

8. All above mentioned research works may be done further adding pranayama’s and kiryas to the asana, an experimental study could be conducted to see its effects on the physical ability and the mental ability.

9. Some literary descriptive and analytical researches are also recommended which prepare ground for further stage experimental researches.