

**RELATIONSHIP OF AGGRESSION AND SPORTS
INJURIES IN SELECTIVE COMBAT SPORTS AMONG
UNIVERSITY PLAYERS**

A dissertation Submitted to
Department of physical Education
In partial fulfillment of the requirements for the award of
The degree of
Masters In Physical Education

By
Mr. Showket Ahmad Dar
Regd. No: 11311649
(M.P. Ed)



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DECLARATION

I do hereby declare that the dissertation entitled “*Relationship of Aggression and Sports Injuries in Selective Combat Sports among University Players*”, submitted in partial fulfillment of the requirement for the award of the degree of Masters in Physical Education is entirely my original work, and all ideas and references have been duly acknowledged. It does not contain any work that has been submitted for the award of any other degree or diploma of any university.

Signature

Showket Ahmad Dar,

Registration No.-11311649

CERTIFICATE

This is to certify that Showket Ahmad Dar has completed his dissertation entitled “*Relationship of Aggression and Sports Injuries in Selective Combat Sports among University Players*” under my guidance and supervision. To the best of my knowledge, the present work is the result his original investigation and study. No part of the dissertation has been submitted for any other degree or diploma to any other university. The dissertation is fit for submission for the partial fulfillment of the requirement for the award of Masters in Physical Education degree.

Signature

Dr. Vijay Prakash,

Assistant Professor,

Dept. of Physical Education,

Lovely Professional University.

ABSTRACT

Combative sports are the sports which involve full physical contacts of one player with the other. As a result of this close contact there are high chances of injuries and also one have to be aggressive to an optimum level. Therefore, current study has made an attempt to show how aggression is related with the injuries in combative sports. The present study was carried out on 30 inter-university players of boxing and judo. Simple random sampling technique was used. Aggression was the psychological variable and the selected injuries included Contusion, Concussion, Brain Injury, Facial Injury, Knee Injury and Dislocation. The data was analyzed with the help of descriptive statistical technique and t-test. Level of significance was taken at 0.05 significance level. The results revealed the significance difference between the aggression level of boxing and judo players. Judo players were seen to have more aggression level in comparison to the boxing players. A total number of 63 injuries were reported during this study, which included 11 contusions, 9 concussions, 14 facial injuries, 6 brain injuries, 9 dislocations, and 14 knee injuries. 30 out of 63 (47.61%) injuries were reported among the players whose aggression level was measured in the range of 155-204, i.e. average level, 16 (25.39%) injuries were reported in the players with low aggression level and 17 (26.98%) injuries were reported in the players with high level of aggression.

Although this study is based on small sample size, the findings revealed that there is an average aggressiveness among the inter-university level players of boxing and judo which lead them to the high risks of injuries.

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INVESTIGATOR

Showket Ahmad Dar

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CHAPTER-I

INTRODUCTION

Sports injuries are injuries that occur to athletes in major sporting events. These injuries occur to the overuse or misuse of body parts during the participation in a particular sport. Like if we talk that of runners' knee which is a painful condition and is caused due to the excessive running. And also the tennis elbow common in golfers caused due to large stress on the injury. There are also other types of injuries which are caused due to collision or fall or due to other certain factors. This can cause the injuries which may include the tearing of a ligament or the tearing of tendon.

Injuries are common in almost every sporting event whether professional or amateur and every team or every athlete has their physiotherapist who closes to the medical community. Injuries are expected where there is a physical activity and athletics. In some sporting events the risk of injuries is higher, the injuries sometimes can cost death of an athlete and in some sports the injuries are not fatal i.e. death causing injuries. To some extent the incidence of some fatal injuries has gradually decreased over the last many years. This decreased incidence has been made possible by performing the latest researches in the manufacturing of equipment's and understanding the techniques with help of laws and principles that are applied while performing any skill.

There has been the large number of increase in the occurrence of injuries due to the increased participation in the physical activity. The application of new modern techniques and also the enlargement of athletic activities have also helped the more incidences of injuries. Today if we look at the programs available for the physical activity, sports and physical fitness programs, they available in higher proportions and consequently resulting in higher chances of injuries.

Interest in physical activities and athletics continues to increase and participation in no longer limited to high school, college, amateur, and professional athletes. A greater number of organized athletic programs are available to the children in junior high schools and upper elementary grades. Youth sports competition, recreational programs, intramural activities and sports for the handicapped and all age groups are increasing in popularity.

The number of participants in all areas continues to increase dramatically. The development of many women's athletic programs is another factor that has greatly changed the number of sports activities and opportunities for participation. Because of all these developments, there are greater opportunities for the persons of all ages to participate in recreational and competitive activities. People are becoming more health and fitness conscious than ever before.

The awareness has produced an increased interest in the benefits of physical fitness. More people than ever before are participating in life-time activities such as walking, jogging, bicycling, golf, and tennis. People today have more factors, including shorter work weeks, mechanization, and time-saving devices. Many people are using this additional leisure time to participate in recreational activities requiring some degree of physical exertion.

Whatever the reason for the dramatic increase in the number of participants and activities available, injuries are a reality at every level of participation and in every type of program. Participants in all forms of athletic activity are subjected to many stresses and forces that can result in injury. It is important to remember that injuries to athletes are essentially no different from those suffered by non-athletes. A sprained ankle can result in the same severity of damage whether it is sustained by a competitive athlete or week-end jogger. However, the demands in terms of evaluation, treatment, rehabilitation, and return to activity are usually significantly greater for the competitive athlete.

Athletes refer to injuries in terms of the symptoms that keep them from participating, such as pain, a limp, or discomfort. Using symptoms as beginning, the person trying to make a diagnosis must place the injury into some type of category or define it so that it can be treated.

Medical community has largely helped in understanding the nature and grades of injuries through the repeated research works in collaboration with the sports medicine. Some common terminologies of the injuries in sports are listed below:

Acute and Chronic Injuries

An acute injury is the injury that occurs due to the sudden blow to the certain part of the body. A chronic may develop after the overuse of a particular body part.

Overuse Injury

This type of injury develops after the overuse of the particular body part. For example if the runner in athletics start to increase the distance in short time like if he was running 5 miles before a week and after the week he increase his distance by 5 miles, there will be the more chances of overuse injury.

Tendon

A tendon is band of tissues that connects the muscles with the bones.

Ligament

A ligament is also the band of tissues that connects the two bones across the joint.

Sprain

Sprain is the injury of ligament i.e. occurs when the ligament between the two bones is torn due to the over stretching of the joint. After the sprain the joint usually becomes loose and also weak

There are mainly three grades of sprain:

- Grade I
- Grade II
- Grade III

Strain

Strain is simply the tearing of tendon in the core of a muscle. Strains are classified into three degrees:

- Degree I
- Degree II
- Degree III

Contusion

A contusion is the condition when the blood capillaries inside the skin get ruptured resulting in the discoloration of the skin. It is caused by the direct blow to the particular body part and is remains for 2-3 days, causing a slight pain to the affected area.

Fracture

Simply when bone is broken due to the powerful collision. There are some special types of fractures:

- **Stress fracture**-a tiny break in one area of a bone, rather than one large break.

- **Avulsion fracture**-occurs when a fragment of bone is pulled off by a ruptured tendon or ligament.
- **Green stick fracture**-occurs when only one side of the bone is broken, like a green stick.
- **Growth plate fracture**-a break in the end of a bone where growth occurs.

Dislocation

This is the temporary movement of a bone out of its normal position in a joint. In a dislocation the ligament and the tendons are stretched and sometimes torn. Knee-caps, fingers, and shoulders are the most common areas of dislocation.

Inflammation

Swelling, redness and pain in a joint or muscle are indications that is inflamed. This is usually due to the presence of red and white blood cells and fluid. Inflammation normally occurs after an injury but can also be caused by a bacterial infection.

Edema

Edema is another word for swelling.

Hematoma

A hematoma results from a direct blow to a muscle that causes a blood vessel to burst internally and produce swelling or a lump in the muscle. This will later become black-and-blue mark as the blood comes to the surface.

Subluxation

A subluxation is similar to a dislocation, but the bone moves back into its socket without any treatment. Some, like shoulder subluxation, can be recurrent.

Atrophy

Atrophy is the loss of muscle mass that results when muscle are not used.

Hypertrophy

This is an increase in muscle mass commonly seen with exercise and weight training.

Medial

Medial is the inner part of the body segment.

Lateral

Lateral is towards the outside of the body.

As far as this study is concerned, main focus is given on the following injuries, these injuries are as under;

- Concussion.
- Contusion.
- Facial injury.
- Brain injury.
- Knee injury.
- Shoulder dislocation

Now let us understand these injuries a bit briefly;

CONCUSSION

Concussion is a blow to the brain which may cause the improper functioning of the brain. It is considered as the serious injury in sports as it may prove fatal for an athlete. Head, skull and brain are mainly involved in this injury. Temporary loss of the consciousness, blurred vision problem in respiration and memory loss may be the signs and symptoms of this injury. Direct or indirect blow to the head may be the cause of concussion. These injuries may occur in contact sports. An athlete should always wear a protective helmet or head gear to avoid the chances of risk of injury. When an athlete suffers this injury, he should be diagnosed properly and hospitalization should be done if the injury is more serious. The diagnosis may be done physical exam by a doctor and through the x-rays. The complications of this injury depend upon the severity of the injury. The complication may include permanent brain damage the healing time may be long from the expected time. The immediate treatment for this injury is the application of ice over the injured area. The injured athlete should be observed accordingly with occurrence of symptoms. One should not provide the medicines until and unless the extent of the injury is being examined. The participation in the physical activities should be avoided until there are there chances of improvement.

CONTUSION

Contusion is the injury in which the capillaries beneath the skin get ruptured following the powerful blow to the particular area. The body parts involved in this injury are faces which include blood vessels, tendons, nerves. Swellings, pain, discoloration of the skin, tenderness over the affected area are some of the signs and symptoms of the contusion. Contusion is mainly caused by the direct blow to the skin. The injury may be found in the sports like boxing and hockey also in fencing and baseball. In order to avoid this injury an athlete should make clear that he is wearing a protective face mask or any other thing which avoids the occurrence of this injury. The injury should be monitored according to the extent of severity. The diagnostic measures may include the athlete's own thoughts, medical history and physical examination and sometimes through x-rays. The injury should be treated immediately in order to avoid the possible complications which may include excessive bleeding, infection and prolonged healing time. The average healing time for this injury is normally 6-10 days. The immediate treatment is R.I.C.E i.e. rest, ice, compression and elevation. An athlete can use medicines like Acetaminophen or ibuprofen when there is minor discomfort. The activities should be stopped right after the injury and should be increased when there is low pain.

FACIAL INJURY (FRACTURE)

Facial injury or facial fracture is the breakage of one or more bones of the face. It may involve upper jaws, cheek bones, joints between these bones, teeth, eyes and nose. The signs and symptoms may include stark pain, swelling of the soft tissue which is around the fractured site. The person can feel pain when touching the injured area, numbness and bleeding from the nose can also occur. The injury can be caused due to the direct blow on the face, like in boxing, wrestling and baseball. The injury can be prevented by the use of certain equipment's like face masks and headgears. If an athlete receives this kind of injury, he should be immediately consulted to the doctor according to the area or site of an injury and should be treated accordingly by the specialist of that part, like oral surgeon, ophthalmologist or ENT specialist. The diagnosis may include the patient's own thoughts about the injury, medical examination and x-rays. This injury is followed by the serious complications like breathing obstructions, vision problems, after

shocks, infection. The immediate treatment for this injury is the application of ice packs which will help in reducing the swelling. The person should be kept under the warm temperature in order to avoid the shocks. The doctor may prescribe the pain relievers in order to get some relief from the pain. The activity should be stopped soon after the injury and then resumed gradually as the condition gets improved.

BRAIN INJURY, INTRACEREBRAL HEMATOMA

It is the condition when the blood gets accumulated inside the brain due to the extreme blow to the head. Brain and the blood vessels are mainly involved in this type of injury. Person who suffers this injury will feel the sense of unconsciousness, nausea or vomiting, the person may not be able to move the arms and legs. Main cause of this injury is blow to the head and that too of high intensity or this injury can be occurred during the contact sports participation like boxing, football, cricket and hockey. To avoid this injury an athlete should make sure that he is wearing a protective face mask or helmet. This injury can be diagnosed through the doctor's observation, medical history, x-rays and CAT scans. There are some serious complications regarding this injury which may include brain damage, partial or complete paralysis and sometimes death. As far its immediate treatment is concerned, remove the face masks or head gears or whatever the person is wearing and allow the neck to rotate, if the vomiting will occur support his head. After the injury is operated and there are symptoms of improvement, try to stay active as your strength allows you. It is important to eat a well-balanced diet which will be highly rich in proteins.

KNEE INJURY (SPRAIN)

The tearing or cut of a ligament due to the forceful over stretching in the knee. The sprain ,may be categorized into three types:

- Mild.
- Moderate.
- Severe.

Any of the ligaments of the knee may be involved in this type of injury and also tissues that surround the sprain are involved. The person who receives this injury will feel

severe pain, popping inside the knee, swelling as signs and symptoms of the injury. This type injury is found among the runners and in the sports where there are jumping movements like basketball, volleyball, skiing. The risk of this injury may increase due to the previous history of knee injuries, participation in the contact sports. The incidence of this injury can be prevented by building the strength of the body and also proper warming can also avoid the risk of injury. After this injury the person should be appropriately treated with the application of cast, tape or bandage. Surgery may be needed if the severe pain occurs otherwise it can be treated normally by the person himself if the severity of pain is less by rehabilitative process. This injury is diagnosed either with the person's own observation or by x-rays. The complications which follow this injury include prolonged healing time, inflammation, prolonged disability, etc. the immediate treatment may include the application of R.I.C.E. Normal activity should be resumed with the signs of improvement. The diet should be well balanced during the recovery process and should contain the extra proteins which will help in the rebuilding of damaged tissues.

SHOULDER DISLOCATION

When the bones of shoulder get displaced from their original position due to the direct upward blow or backward extension, the ligament in the shoulder gets torn leading to the condition called as shoulder dislocation. It mainly involves the displacement of humerus from its socket in the shoulder. The body parts involved in this injury is shoulder joint and humerus. This injury is followed by the extreme pain at the time injury, the affected shoulder can become dysfunctional, soreness over the dislocation as its signs and symptoms. Swelling and numbness can also be felt. The shoulder is mainly caused due to direct blow to the shoulder or backward force on an extended arm, and may also be caused due to the end result of shoulder sprain. The risk of shoulder injury can increase with contact sports participation like wrestling, judo and basketball. The risk may also increase due to the poor muscle conditioning. In order to prevent the incidence of shoulder injury one should be strong enough, proper warming up before any physical activity.

One can also use the equipment shoulder pads, etc. The diagnosis is mainly done by the persons own observation and with the help of x-rays. Temporary or permanent nerve or blood vessel damage may occur leading numbness, coldness, shock and excessive internal bleeding may be the complications of this injury. When a person receives this injury, he should be kept warm with blanket in order to avoid the shock, try to move the neck if possible, apply R.I.C.E. The doctor may prescribe narcotic pain relievers and antibiotics in order to avoid the infection. The activity should be resumed according to the improvement. The diet during the recovery process should be well balanced and also be rich in protein content.

AGGRESSION

Aggression and violence are the two phenomena which are widespread across the world in common man's daily culture and lives. Aggression may be useful in a sense to gain the access for the essential needs of human being like food, and shelter and then protecting these needs. Aggression in modern times proves quite destructive and is found everywhere in our everyday life or interactions. Aggression therefore is a very vast field to study for social psychologists. Many researches are being made in the aggression by many scholars. Every researcher tries to make most of the aggression by observing the human behavior in different situations whether in sports or in other situation. Psychologists conduct the researches on how aggression develops and the possible consequences of the aggression and how the aggression can be reduced.

The term aggression is often used when defining the angry violent behavior with mainly the intension to hurt the other person or damage the property. An aggressive person may be identified as the motivated by some people and hardworking by the others. Aggression is not accidental it is intentional act to harm. Aggression may prove very harmful in certain cases as sometimes an aggressive person can do severe damage to the other person in a cause of to win.

Enthusiastic athletic action can be categorized as powerful conduct, instrumental aggression, or unfriendly aggression (Tenenbaum, Stewart, Singer, & Duda, 1997; Wann, 1997). In powerful conduct, the player recompenses reliable power inside game guidelines. In influential aggression, the player attempts to enforce bodily harm as a step

in the direction of the advanced objective of endearing. In unfriendly aggression, the player is annoyed and primarily bent on bodily aching an rival. Even though such conducts have been related to team accomplishment (Caron, Halteman, & Stacy, 1997; Huang, Cherek, & Lane, 1999), unfriendly aggression is mainly arguable.

Aggression in sports can be triggered by a numerous of elements. The most distinguishable reasons are the rules of the game (level of bodily contact), hindrance, environment, occurrence, stimulation, environmental signs, self-control and also the conduct of those all over the place. Other factors in aggression comprise character, mass media linking, coaching, role representations and the civilization we live in. Fierce conduct can be seen as the strong-minded to wound or harm an rival. Bredemeir, 1983, demarcated aggressive conduct as the deliberate creation of fierce and injurious conduct. Fierce means any bodily, spoken and or even nonverbal doings (finger signals), whereas injurious conducts position for any injurious objectives or activities (bad tasks or disturbing). This too means that wounds produced by a wicked task accidentally will not be measured as aggression. Aggression maybe one of the peak vital difficulties in sports currently (Sacks, Petscher, Stanley, & Tenenbaum, 2003). There are several studies which have been made on the process of aggression in order to know the its mechanism. Aggression is considered to be the psychological phenomenon which sometimes prove effective for the athletic performance but sometimes prove harmful as many earlier studies revealed. The team level aggression has seen to be positive for the performance as in basketball. Aggression in some contexts has been described as the desire to enforce harm on the another person.

In psychology aggression may be imposed by two ways that is the hostile aggression and the instrumental aggression depending upon the situations in the playing conditions. Hostile aggression is that type of aggression in which one athlete tries to harm other by physical means. The best example can be quoted that of Zinedane Zidane, of France when he hit the opponent with head, during the FIFA World cup of 2006, and another of hostile aggression can be from the Cricket when Mohammad Yusuf of Pakistan hit Irfan Pathan of India with the bat during the India Pakistan match. The other type of aggression is instrumental aggression in which one player tries to provoke the other player in order to achieve the goal or win. Hostile aggression is also called as

controlled aggression. The goal of instrumental aggression is however, not to harm the opponent, but to indulge or provoke him in order to make a mistake and the other player takes the advantage of his mistake and attains his goal.

COMBAT SPORTS

Sports form where there is complete or full physical contact of one individual with the other. The combat sports vary from the other sports by several ways. The combat sports involve the fights or bouts which are held under some genuine rules and regulations, and every individual involved in these sports have to abide these rules and regulations. There are proper set of techniques under which these sports are played. The combat sports have very long history; the combat sports like boxing and wrestling were the sporting competitions which were held during the Ancient Greece Olympics long time ago. There also other forms combative sports like Pugilism which was introduced by the Romans. China also introduced some combative sports about two hundred years ago. It is thus believed that there has never been any kind of scarcity of athletes who ever desire to check their skills in the participation of these sports forms and also the spectator participation has been phenomenal. Many countries have established so many forms of these combat sports like in Asia establishment of Muay Thai. This form was established in the Asia from the ancient Martial Arts which involved Fencing, Kung Fu and also Ju-Jitsu.

With the establishment of the several forms of these combative sports, many of them which originated from Ancient Martial Arts were used for the self- defense. There are many clubs and academies all over the world especially in China and Japan where the techniques of these sports are being taught. Well with the increased participation in these sport forms there has been the considerable increase in the amount of injury occurrence. The injuries involved in these sports are serious and may prove life-threatening in some cases.

1.2 STATEMENT OF THE PROBLEM

The statement of the problem is stated as “Relationship of aggression and sports injuries in selective combat sports among university players”.

1.3 SIGNIFICANCE OF THE STUDY

The study will contribute to the society in the following ways:-

1. The findings of the study may be used to highlight the relationship between the aggression and sports injuries.
2. The results of the study may highlight the difference between aggression level of boxing and judo players of university players.
3. The study may act as an aid to the coaches and mentors to know the strength and weaknesses of the boxing and judo players and also help to adopt preventive measures in these combative sports.
4. The results of the study will be helpful for the coaches, athletes, and sports psychologists to identify the psychological variables i.e. aggression in boxing and judo players.
5. The findings of the study will provide a guide-line to the future research investigators in sports medicine in relation with the sports injuries.
6. The results of the present study will add to the existing body of knowledge in the respective areas of sports psychology and sports medicine.

1.4 DEFINITIONS OF THE OPERATIONAL TERMS

- **Contusion:** Contusion is also known as bruise, it is an injury which is caused by the direct blow to the skin and results in rupturing of capillaries.
- **Concussion:** A concussion is a serious sport injury in which the blood clots are formed inside the brain.
- **Facial Injury (Bone Fracture):** when the bones of face break due to the powerful blow it is called facial injury.
- **Brain Injury (Intra cerebral Hematoma):** Internal bleeding of the brain due to the direct blow to the brain.

- **Knee Injury (Sprain):** A condition when the ligaments of the knee get torn or cut as a result of forceful stretching.
- **Dislocation:** A dislocation is a state in which the bones of shoulder get displaced from each other as a result of the direct upward blow.
- **Aggression:** Aggression is a phenomenon or channel to achieve the goal or win against all odd.

1.5 OBJECTIVE OF THE STUDY

1. To find out the level of aggression and its relation with the sports injuries among boxers and judoka of inter- university level.
2. To analyze the level of aggression and sports injuries between boxers and judokas of inter- university level.

1.6 DELIMITATIONS

1. The study was restricted to 30 subjects i.e. 15 from boxing and 15 from judo from All India University participants.
2. The study was further restricted to the age ranging from 18-25 years.
3. The study was restrained variables
 - A) Psychological variable – Aggression
 - B) Sports injuries
 - Concussion.
 - Contusion.
 - Facial injury.
 - Brain injury.
 - Knee injury.
 - Shoulder dislocation.

1.7 HYPOTHESIS

On the basis of the literature reviewed, an available research finding, expert's opinion and scholar's own understanding of the problem, it was hypothesized that:

1. There will not be any significant difference among Combative sports players and their aggression level.

CHAPTER-II

REVIEW OF RELATED LITERATURE

It can be productive and fruitful to go through the written philosophies and suggestions of the expert scholars. The investigator, keeping this thing in his mind went through the written literature which was available in the libraries and internet and made an attempt to support his study with that literature.

The investigator traced out all the literature from the associated investigation works printed so far here and abroad. There is large range of the literatures which is available in the readings of psychology and sports psychology. The relative studies which the investigator find relative are discussed below.

Cezary, Kuśnierz, Wojciech, J Cynarski., Artur, Litwiniuk., (2014), the purpose of this study was the level of aggressiveness between persons involved in combat sports and martial arts, associated to their aristocrats, who are not tangled in physical activity. The research involved 150 males. In the study, the aggression feedback form by A.H. Buss, M. Perry was used. Attained outcomes indicated variances in aggressiveness levels among the group involved in training. The highest aggressiveness level was noted in the group involved boxing, while the lowest was detected in the group of ju-jitsu athletes. The age group of modern Polish boxers is considered by higher level of the aggressiveness than the earlier age group. The highest level of aggressiveness was conveyed in the form of spoken aggression. The total aggressiveness consequence should be measured as the most momentous one and its highest level was noted in the control group.

Siewe,J., Rudat.J., et.al, (Nov 2014), the purpose of this was to discover the occurrence of injuries in competitive boxing. A total number of 44 competitive boxers were examined to record their injuries once a month From October 2012 to September 2013. The questionnaire gathered overall evidence from training and competition. The total number of bouts, total number of injuries number of lost days was recorded. 192 injuries were recorded, 133 injuries of which give rise to interruption of training or competition. The results show that each boxer received 3 injuries per year on regular. The rate of

injury occurrence was measured to be exact 12.8 injuries per 1000 h of training. More injuries ($p=0.0075$) were sustained among the boxers who had 3 bouts per year. The injury frequency does not is not a function of age ($\text{age} \leq 19$ vs. $> 19a$, $p=0.53$). Head and upper limb injuries were common. The other mutual injuries are soft tissue lacerations and contusions. Head injuries with nervous signs occur seldom (4.2%).

Poecco, E., Ruedl, G., Stankovic. N., et.al, (Dec, 2013), the purpose of the study was to scientifically examine systematic writings on the occurrence and features of injuries in judo. The writings which were accessible were searched up to June 2013 for the purpose of prospective and reflective studies on injuries in judo. The data mining and exhibition concentrated on the prevalence rate, injury danger, kinds, sites and reasons of injuries. The mean injury danger of about 11-12% was detected during the Olympic Games 2008. The injuries which were often recorded included sprains, strains and contusions generally of knee, shoulder and fingers. The serious injuries were quite rare which generally contained brain and spine injuries. The common injuries in the young judo were contusions or abrasions, fractures, sprains and strains.

Bhardwaj, Sudesh., Rathee, N. K., (June 2013), the purpose of this research was to examine the principal practical applicability of aggression in combat sports and to know how the combat sports makes the actual use of aggression. Total 120 subjects ($N=120$), male international boxers and female international boxers, wrestlers and judokas were directed on the aggression scale (Pal and Naquavi, 1980), to assess the level of aggression. The assessment of inter-sport difference was done by applying the univariate analysis of variance. Descriptive statistics and t-test was also applied. The results revealed the significant inter-sport differences between the three sports groups. The international male boxers were find to possess lower level of aggression in relation with the two other sport groups. The significant differences were found in female players, the female wrestlers were found to have higher levels of aggression in relation with the female boxers. Though, no significant gender difference was found.

Takeshi, Kamitani, Yuji, Nimura, et.al, (Jun 2013), the purpose of this study was to govern the characteristics of disastrous head and neck injuries in judo. A total number of 72 injuries in judo were recorded in between the year 2003 and 2010, in which 30 injuries were reported as head injuries 19 were neck injuries and 23 among the other injuries, the factors which were examined included the mechanism of injury, age at the injury time, span of judo involvement, diagnosis and results. The results revealed that 27 of 30 head injuries happened in players who were below age of 20 years. Significant relationship was found between the age, mechanism and the location of injury when the players below 20 years receive head injury when thrown ($p = .0026$). The players having more than 36 years of involvement in judo were to have recorded 13 out 19 neck injuries. More significant difference was found between experience, mechanism and location of injury when the players having more than 36 months of involvement in judo experienced neck injury while executing attacking movement ($P = .0294$). A percentage of 94 head injuries were examined to have acute subdural hematoma. The results of head injuries that 15 persons lost their lives, 5 were tenacious vegetative state, 6 needed supports because of higher brain dis functioning and 4 recovered completely. In the neck injuries, 18 were examined with cervical spine injury, 11 had fracture or dislocation of cervical vertebrae while 1 person had atlantoaxial suluxation. The results of neck injuries were like that; 7 players had fully paralyzed, 7 were partially paralyzed and 5 had complete recovery.

Bernardo Garcia Barroso (2013), the purpose of this study was to assess the history of injuries among 95 wrestlers. The history of injuries, clinical and demographic data was assessed through the planned questionnaire. The results showed that 81 athletes reported 145 abrasions, the body parts which reported the most number of injuries were knee (25,5%), thigh (25,5%), shoulder (20%) and ankle (14,5%). The other most frequent injuries included Sprains (34,5%) and muscle lesions (30.4%). About 9% of abrasions were treated with the surgical processes. The mainstreams of abrasions were lower limbs.

Elena et.al, (2013), the purpose of this study was to assess the injuries in judo during the Olympic Games in 2008 and 2012. It was perceived that an injury risk of about 11-12% was involved. Among the most common injuries were sprains, strains and contusions and

their sites were knee, shoulder and fingers. Being thrown was the chief machinery of the incidence of these injuries. The occurrence of serious injuries was rare which generally affected the brain and spine, while as chronic injuries characteristically exaggerated the finger joints, lower back and ears. Contusions or abrasions, fractures, sprains and strains were the most shared injuries in judo players.

Devon du Preez (Dec 2012), the purpose of this study was to classify and define the frequency and machinery of the injuries that happened to judo at a South African National Tournament. 141 samples were taken both males and females comprising of three groups. The groups were named as 4(14-16), 5(17-19), and 6(20+). This permitted for the surveillance of more injuries but also permitted one to associate injuries attained by younger judoka to that of older judoka. For the purposes of this reading groups 4 (ages 14 to 16), 5 (ages 17 to 19) and 6 (ages 20 and older) were used. The aim for choosing these three age groups was due to the element that they would be taking part under international guidelines with smothering and armlocks allowed for in a fight. Group 4 comprised of 49 judoka; the smallest group studied was that of group 5 and comprised of 28 judoka with group 6 being the largest sampled group with 64 judoka. Of the 141 sampled judoka 103 injuries were recorded with males attaining more injuries than that of female judoka. A total of 103 (73.0%) of the sample group were injured once or more. Group 4 judoka (age 16 to 17) had the highest injury occurrence for experiencing an injury at least once at 75.5%. The injury occurrence for groups 5 (age 18 to 19) and 6 (age 20 + years) for experiencing at least one injury was 71.4% and 50.0% correspondingly.

Antoinette Curran(2012), a study directed to examine the violence heights in seeing dealings in male college sportspersons establish that college sportspersons, dealing in interaction sporting, testified greater heights of mannerism irritation associated to sportspersons dealing in non-contact sporting (Burns, 2010). A current reading presented that violent game conduct was definitely related with interaction sporting and males (Conroy, Silva, Newcomer, Walker & Johnson, 2001). Violence may be motivated extra over interaction sports, particularly side sports, as there is extra stress to success for your colleagues.

Elena et al (2011), in this study, the accessible works up to June 2013 was examined for forthcoming as well as reflective readings on injuries in judo. Records mining and demonstration concentrated on the occurrence degree, injury danger, kinds, site and reasons of injuries.

Ghlo mreza, Shirani, et.al, (Oct-Dec 2010), the main objective of this work was to measure the occurrence , frequency and rate of injuries among the athletes who were involved in combative sports and relate the incidence, and kinds of oral and maxillofacial trauma in these athletes. A total number of 120 male subjects were taken in this study from combative sports, Muay Thai, Kickboxing, boxing, and Taekwondo. These subjects had experienced constant body trauma. Out of 120 subjects, 95 male subjects were of the age group between 18 and 25. These 95 male subjects had complaints of one traumatic face injury and they demanded the medical treatment. The injuries mainly consisted of bone fractures of face i.e. nose, mandible, and zygomatic bone, the dental injuries i.e. dislocations, luxation, fracture, avulsion and the mandibular displacement which were recorded in 83, 55 53, and 8 cases individually. Significant differences were found between several injuries and sports. Maximum maxillofacial injuries were reported in kickboxing and were established as more harmful. Among the common facial injuries were tooth breakages (59.7%), Nose (84.7%) was the most often fractured facial bone. Lacerations were extra mutual in Thai-boxers (93.3%). Injuries were ominously more in specialized fairly than unprofessional athletes.

Carryn Smith, (Oct 2009), the purpose of this study was to establish in how boxers speed up their information with regard violence and anger. On the basis of results three refrains were established i.e. ferocity and violence, authority and rank and maleness. The boxers used defenses, justifications and evasion to weaken the ferocity and aggression. That encouraged the social suitability and continuous uniformity of their games.

H. Clausal, P., McCroyl, V., Anderson, (2005), the purpose of the study was to examine the change in boxing with regard to the past and see if the current boxers are at risk of chronic trauma brain injuries. Subsequently the 1930s, the regular period of a specialized pugilist's profession has fell from 19 years to five years, and the average amount of profession sessions has condensed from 336 to 13. This is in spite of no momentous deterioration in involvement degrees from 1931 until 2002.

T. R. Zazryn, C F Finch, P McCrozy (2003), the purpose of this study was to unleash all the data of professional boxing contests and the injuries in all combative sports contests from August 1985 to 2001 which were found in the Victorian Specialized Boxing and Battle Sporting Panel. A number of total of 107 injuries were noted from 427 contest involvements, consistent to a wound degree of 250.6 injuries per 1000 contest involvements. The greatest usually injured figure area was the head, neck, and face (89.8%), tracked by the superior margins (7.4%). Exactly, injuries to the eye area (45.8%) and concussion (15.9%) were the most shared. Near three stations of all injuries were cuts/open injuries or superficial. No info was accessible on the machinery of wound.

Craig A. Anderson and Brad J. Bushman (2002), study on social violence has advanced to a fact at which uniting outline is desirable. Main domain-limited concepts of violence comprise mental neo connotation, societal knowledge, societal communication, writing, and excitation trans-fer models. By means of the common violence classical (GAM), this appraisal postulates thought, touch, and stimulation to arbitrate the belongings of situational and being rational variables on violence. The evaluation too systematizes new concepts of the growth and per-sistence of violent character. Behavior is abstracted as established of steady information assemblies that persons use to understand proceedings in their societal sphere and to monitor their conduct. In count to establishing what is previously recognized around social violence, this evaluation, by means of the GAM outline, too helps the experiential purpose of signifying what investigation is desirable to seal in academic holes and can be used to produce and test interferences for dipping violence.

Scott, M., Lephart, et.al, (Jan 1997), the Part of Proprioception in the Administration and Recovery of Sporty Injuries. Restoration lasts to grow through the improved stress on patient administration and proprioceptive physical activity. Proprioception can be demarcated as a focused deviation of the sensual modality of hint that includes the feeling of combined association (kinesthesia) and joint location (joint site sense). Frequent detectives have detected that afferent response to the mind and vertebral ways is refereed by skin, articular, and muscle mechanoreceptors. Investigating the properties of ligamentous injury, medical interference, and proprioceptive arbitrated events in the restoration database delivers a sympathetic of the difficulty of this structure answerable for motorized regulator. It seems that this neuromuscular response machinery develops intermittent through injury and irregularities, and tactics renovation after medical interference and restoration. Restoration databases should be intended to comprise a proprioceptive constituent that speaks the subsequent three stages of motorized regulator: vertebral impulses, mental software design, and brainstem action. Such a package is extremely suggested to encourage lively joint and practical constancy. Therefore far, existing information concerning the elementary discipline and scientific claim of proprioception has ran the occupation of sporting remedy one step nearer to its eventual objective of returning purpose.

Howard, L, Nixon, (1997, the purpose of this study was to assess the attitudes, and participation related with the bodily aggression of college sports persons outside the sports. Data was collected from about 200 male and female subjects from the inclusive university. The bodily aggression was measured on the basis of the responses which the investigator received. The responded items mainly included the questions in which it was asked that “did you receive injury outside the sports participation. The study was exploratory in nature. The study tried to relate the bodily aggression of gender inside and outside the sports involvement. The attitudes, team and contact sports participation of male sportspersons was related with the bodily aggression of male sportspersons, where as in females the involvement of sports alone was related with the bodily aggression outside sports.

Gregory James and Willey Pieter, The purpose of the study was to measure the injury profile among the junior male and female players of judo who were competing in National Level sports meet. Total numbers of subjects were 687 in which 417 were boys and 270 were girls. The subjects took part in UK National Competitions of Judo in 1996. The injury data was measured through simple check-off methods and the also the location, type of injury, mechanism of injury was also noted down. In order to establish the variances in the injury rates in both boys and girls and also location or site of the injuries, non-parametric stats were used. The results revealed that girls received more injuries than boys ($p=0.047$). The injury location among boys was the head and neck regions. The girls experienced more injuries in the upper extremities. Sprain was the most common injuries among the boys and contusion was the common among girls. Receiving the throw was main injury mechanism in boys and among girls the main mechanism of injury was groundwork.

CHAPTER-III

METHOD AND PROCEDURE

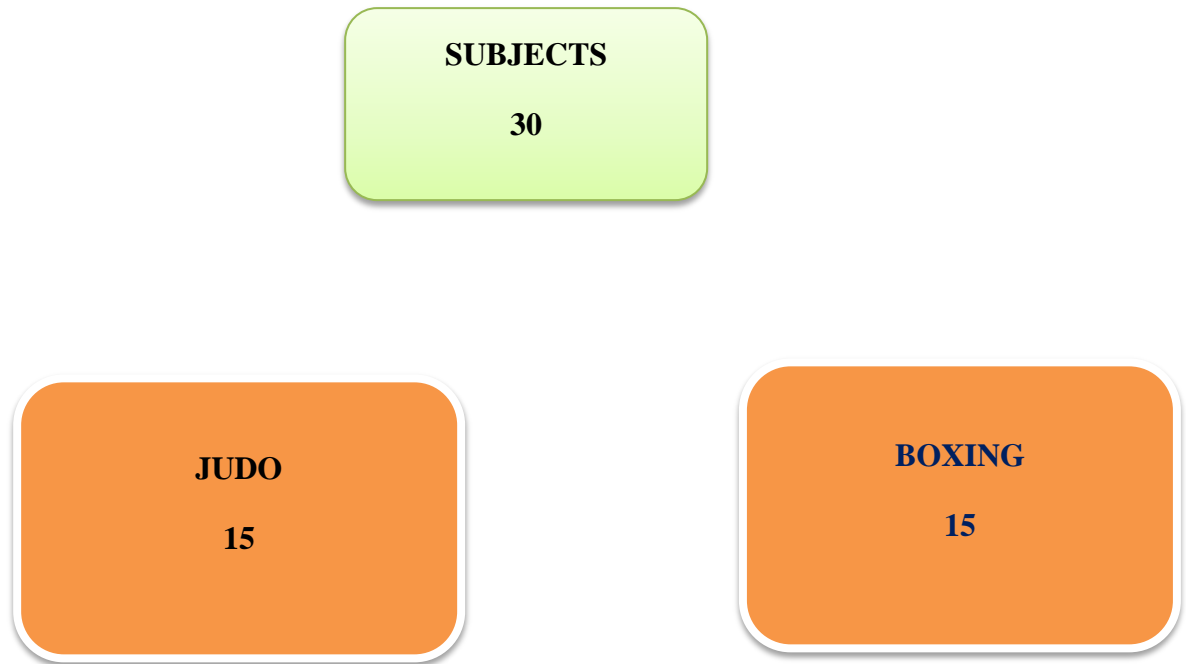
Methodology means the method by which the study followed the approach or it is scientific procedure which is taken into account by every research scholar. The methodology may contain the various steps or path taken by the researcher to attain his objective productively and fruitfully. The methodologies mainly involve selection of subjects, selection of variables, tools for data collection, administration of the tool, data collection method and statistical technique used.

3.1 SELECTION OF SUBJECTS

For the purpose of the study, 30 Male Subjects, 15 from boxing and 15 from judo, (N=30), were selected randomly on the basis of simple random sampling. The subjects were taken from different universities players who participated in the judo and boxing event. The judo and boxing competitions were held at Guru Nanak Dev University, Amritsar and Lovely Professional University, Phagwara, Punjab respectively. The age level of the subjects ranged from 18 to 25 years.

The subjects, male university level boxers and judokas (N=30), were administered the Aggression Scale (*Dr. G. P. Mathur and Dr. Raj Kumari Bhatnagar*) to find out their levels of aggression. After the administration of the scale, the incidence of the injuries was observed. The injuries which were reported included wrist sprains, elbow sprains, knee sprains, cuts, neck sprains, shoulder dislocations. Contusion and the concussion were amongst the rare injuries. There was no brain injury in the competitions. The subjects were further asked about their previous histories of the injuries in which many players complained about the past histories of injuries. The distribution of the subjects has been numerated below in diagram no. 3.1.

Diagram 3.1
Details of the Subjects Distribution with regard to subjects, combative sport and university



3.2 SELECTION OF THE VARIABLES

The psychological variables and other variables which were related to the purpose of the current study were taken into the account and these variables are given as below:

Psychological Variables

- Aggression.

Sports injuries

- Concussion.
- Contusion.
- Facial injury.
- Elbow dislocation.
- Knee injury.
- Shoulder dislocation.

3.3 SELECTION OF THE QUESTIONNAIRE

The under described questionnaires will be used in this study for the collection of the data because this is found to be most valid and reliable and have been widely used

in the profession of physical education and sports throughout the world. The detailed descriptions of the questionnaires are as follow: *Aggression Scale by Dr. G. P. Mathur and Dr. Raj Kumari Bhatnagar.*

Description

Aggression scale is used to study the level of aggression in any group (above 14 years). Aggression scale is finally prepared. Now it consists of 55 statements. Each statement describes different forms of individual's aggression in different situations. It is Likert type 5 point scale statements are in two forms i.e. positive and negative.

Reliability

Reliability co-efficient of the Aggression Scale was calculated by 'Test Retest Reliability' method. To assess the reliability of the statements, 300 males and 300 females of urban areas have been re administered the Reliability was .88 in males and .81 in females.

Validity

To obtain concurrent validity co-efficient of the aggression scale the scale was compared with statements in questionnaire of aggression borrowed from Murray. Validity is .80 in males and .78 in females.

Instructions and Administration

1. It is a self- administered questionnaire. It is administered to a group as well as to an individual.
2. No item limit is for completing the test. However, usually, an individual takes 25 to 30 minutes in completing the test.
3. It should be noted that there is no right or wrong response to the statement. It is only to the individual's reactions in different situations.
4. It is emphasized that each statement has to be responded in one of the five alternatives.

(SA)	(A)	(U)	(D)	(SD)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

5. No statement is to be left out.
6. They should assure that their answers will be kept secret.

Scoring

As described above, it is a 5 point scale. In this scale, statements are in two forms i.e. positive and negative. 30 statements are in positive form and 25 in negative form. In positive form of statements, scores will be given as 5, 4, 3, 2, 1 respectively and in negative form of statement, scores will be given as 1, 2, 3, 4, 5 respectively as showed below:

POSITIVE FORM (Scoring process)

(SA) Strongly Accepted	(A) Accepted	(U) Undecided	(D) Disagree	(SD) Strongly Disagree
5	4	3	2	1

Item number- 1, 2, 3, 5, 7, 8, 10, 12, 14, 16, 19, 22, 23, 25, 28, 29, 32, 34, 36, 38, 39, 42, 43, 48, 49, 51, 52, 53, 54, 55.

NEGATIVE FORM (Scoring process)

SA	A	U	D	SD
1	2	3	4	5

Item number- 4, 6, 9, 11, 13, 15, 17, 18, 20, 21, 24, 26, 27, 30, 31, 33, 35, 37, 40, 41, 44, 45, 46, 47, 50.

The total number of answers constitutes the final score. Maximum score is 275 and minimum is 55, higher scores show higher aggression level and lower score show lower aggression level.

Maximum score -----275
Minimum score-----55

Below 154	-----	Low aggression
155-204	-----	Average Aggression
205 &Above	-----	High Aggression

3.4 COLLECTION OF DATA

With the help of the questionnaires related to psychological variables necessary data was collected. Data was collected with regard to various psychological variables from 15 Male Boxing players and 15 Judo university players at their respective venues. The data was collected with regard to psychological variable aggression and injuries from January 2015 to February 2015.

3.5 STATISTICAL TECHNIQUES

1. To find out the level of aggression, Descriptive Statistics will be used.
2. To relate the aggression level and with sports injuries tables and graphs will be used.
3. To achieve the objective of this study percentage will be used with appropriate bar and pie diagram to represent the status of the players and to compare the status after getting the sports injuries and aggression.

CHAPTER IV

ANALYSIS AND INTERPRETATION

In this chapter the level of aggression and its relation with the injuries in combative sports-boxing and judo among university players is discussed with the help of statistical analysis. The comparison of aggression in boxing with the aggression in judo in relation with the injuries has also been discussed. The discussion of finding has also been described in this chapter.

After the tabulation of data, in order to test the hypothesis the data were analyzed and compared with the help of statistical procedure in which mean and standard deviation were used to compare the data. The t-test was applied to find out the significance difference of aggression of boxers and judoka of university level.

Table 4.1

Comparison of aggression between the boxing players and judo players of the university level

Group	N	Mean	SD	Df	t-value
Boxing	15	175.13	19.07	28	2.0015*
Judo	15	190.33	22.39		

*Significant at 0.05

Graph 4.1

Graphical representation of aggression level

between the boxing players and judo players of university level

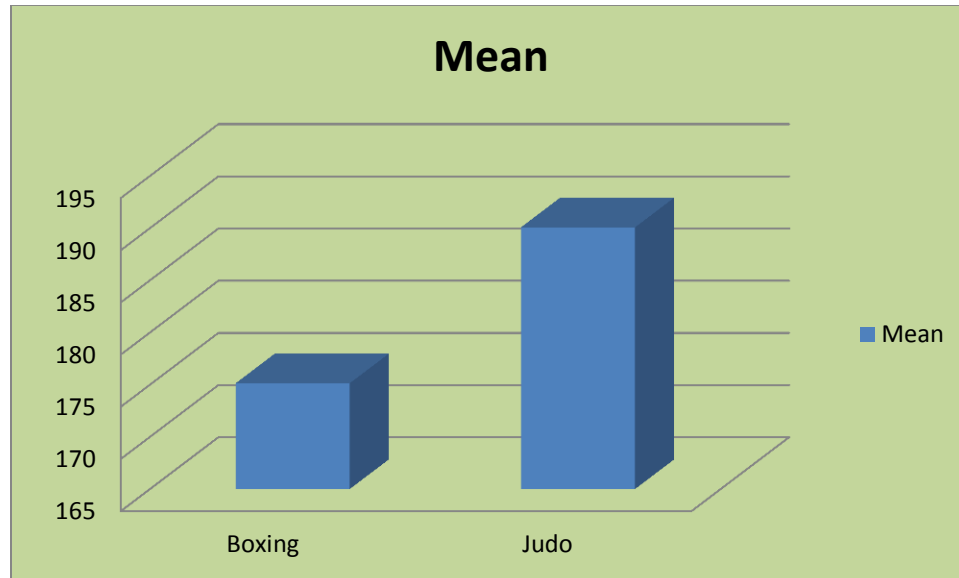


Table and figure 3.1 show the comparison of aggression level between the boxing players and the judo players of university level. The table and graph clearly shows that the mean of boxers and judoka was found to be 175.13 and 190.13 respectively, which was statistically found significant ($t=2.0015$). Results show that judo players have more aggression level in comparison to the boxing players, which means there is the significance difference between the aggression level of boxing and judo players. The hypothesis.1 stated, there will not be any significant difference between aggression levels. The result show there is significance difference of aggression level between the boxers and the judoka, hence hypothesis is rejected.

Similar study was carried out by Bhardwaj, Sudesh Rathee, N. K, (June 2013), “Optimizing Aggression in Combative Sports - an Analytical Approach”. In their study the results indicated significant inter sport differences among the three male sports groups. The international male boxers had significantly lower level of aggression as compared to the wrestlers and judokas. Among female players, significant differences have been found and only the wrestlers have been found to have significantly higher level of aggression as compared to the international female boxers.

Graph 4.2

**Graphical representation of the aggression levels
among selective combat sport players**

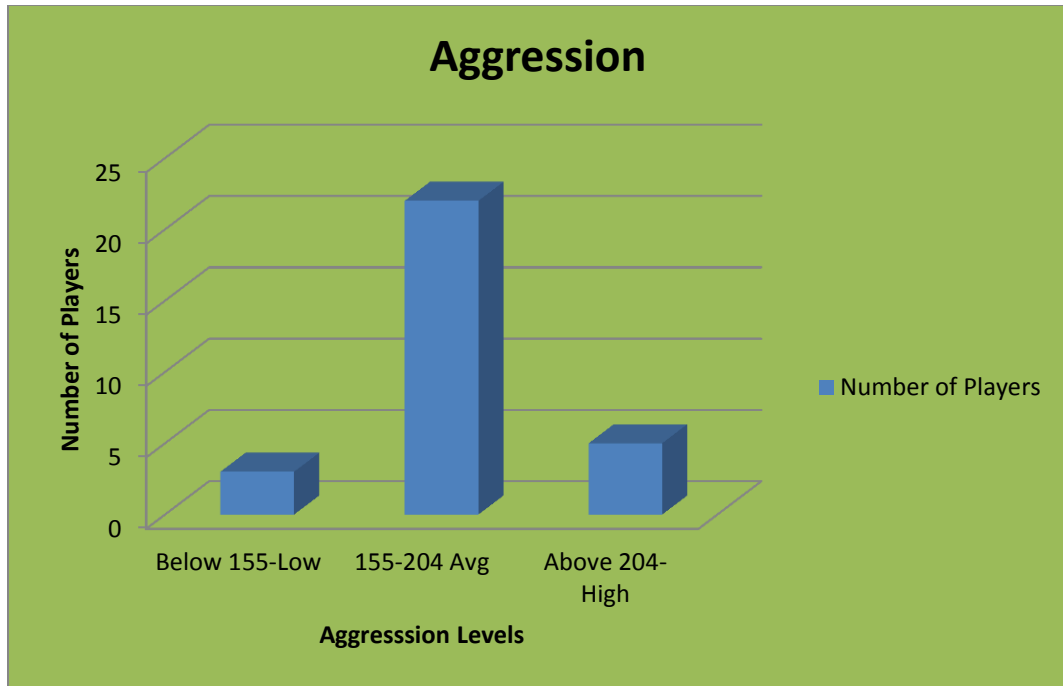


Figure-3.3 showing the different levels of the aggression among the total number of players (samples) from boxing and judo i.e. below 155 which signifies the low aggression, 155-204 the average and above 204, the high aggression. 3 players fall under the low aggression level , 22 under average aggression level and 5 players under high aggression level.

Graph 4.3

**Graphical representation of relationship between
the aggression levels and the sports injuries**

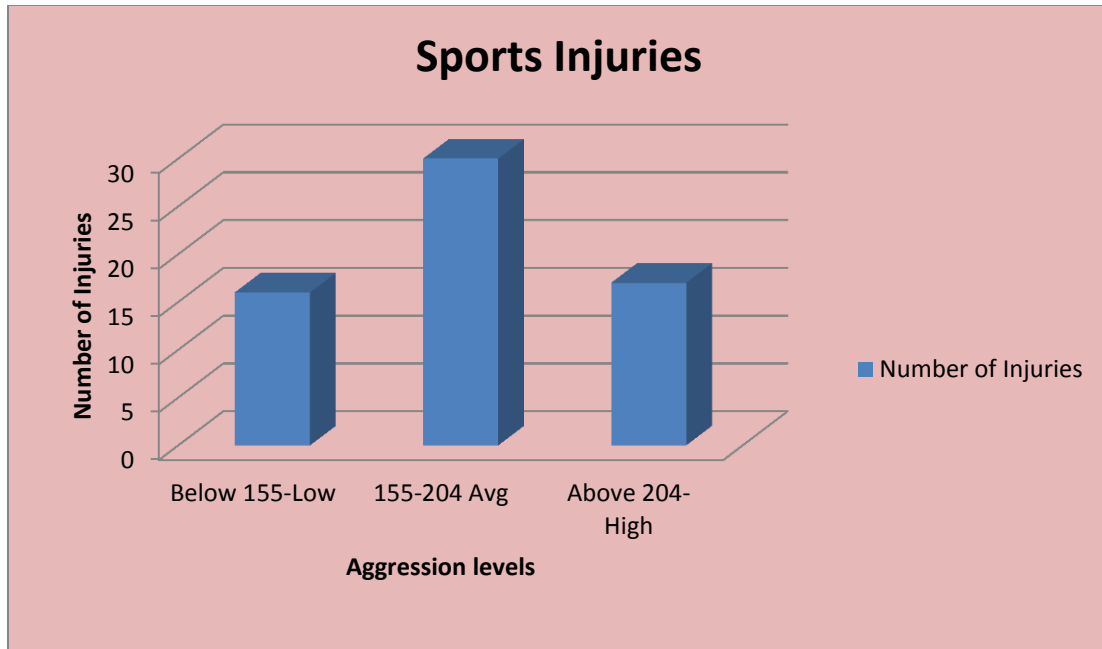


Figure 3.2 shows the relationship between the three levels of aggression and the sports injuries. The graph shows the number of injuries recorded in three different aggression levels. A total number of 63 injuries were recorded during the study in the selective combat sports i.e. boxing and judo. 16 injuries were recorded among the players whose aggression level was in the range of 1-155 i.e. the low level, 30 injuries were recorded in average level and 17 were in the high level of aggression. The graph clearly shows that the players whose aggression level was between the range of 155-204 i.e. the average, received the maximum number of injuries, which means high aggression did not lead to the maximum chances of injuries in the selective combative sports.

Table-4.2
Distribution of injuries in the aggression levels

Aggression Levels	Contusion	Concussion	Facial Injury	Brain Injury	Dislocation	Knee Injury	Total
Below 155-Low	3	2	3	1	3	4	16
155-204 Avg.	6	4	7	3	5	5	30
Above 204-High	2	3	4	2	1	5	17

Table 4.2, shows the distribution of injuries in the three aggression levels. In the first aggression level, a total number of 16 injuries were recorded in which, 3 injuries were recorded in contusion, 2 in concussion, 3 in facial injury, 1 in brain injury, 3 in dislocation, and 4 in knee injuries. In the second level of aggression a total number of 30 injuries which was the maximum among the three levels. In this level of aggression 6 injuries were recorded in contusion, 2 in concussion, 7 in facial injury, 3 in brain injury, 5 in dislocations and 5 in knee injury. And in the third level of aggression i.e. above 204, a total number of 17 injuries were recorded, in which 2 were recorded in contusion, 3 in concussion, 4 in facial injury, 2 in brain injury, 1 in dislocation and 5 in the knee injury.

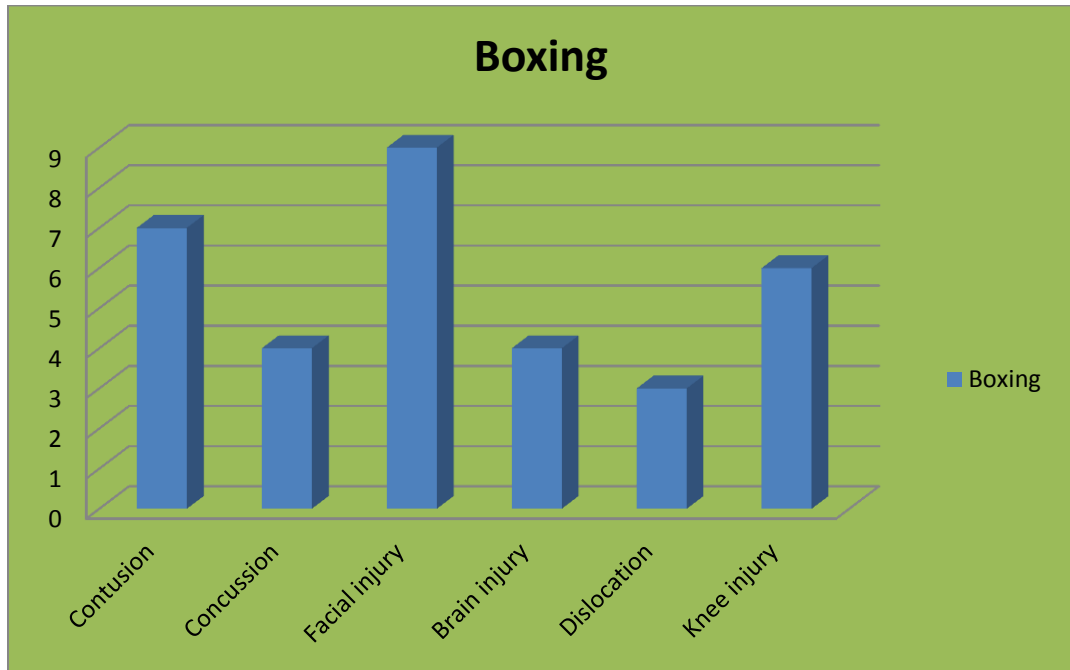
Table 4.3
Distribution of injuries in boxing and judo

Injuries	Boxing	Judo	Total
Contusion	7	4	11
Concussion	4	5	9
Facial injury	9	5	14
Brain injury	4	2	6
Dislocation	3	6	9
Knee injury	6	8	14
Total	33	30	63

Table 4.3 shows the distribution of injuries among the boxers and the judokas. It clearly shows the number of injuries recorded in each selected injury of the study. The table shows proportion of injuries in boxing and judo separately and the total of the particular injury. According to the table 11 injuries were recorded in contusion in which 4 were recorded in judo while as 7 in boxing. 9 injuries were recorded in concussion in which 4 were in boxing and 5 in judo. A total number of 14 injuries were recorded in facial injury in which 9 were recorded in boxing and 5 in judo. Similarly 6 injuries were recorded in brain injury in which 4 were recorded in boxing and 2 in judo. 9 injuries were recorded in dislocations with 3 in boxing and 6 in judo. And finally 14 injuries were recorded in knee injury in which 6 were recorded in boxing and 8 in judo.

Graph 4.4

Graphical representation of the distribution of injuries in boxing



Graph 4.5

Graphical representation of the distribution of injuries in judo

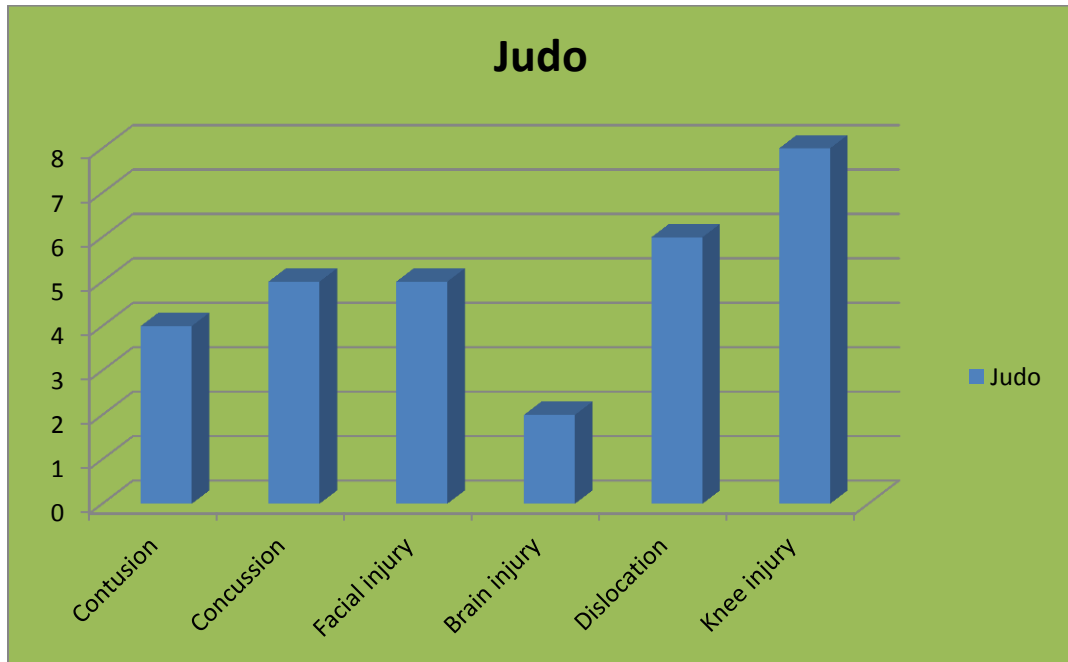


Figure 3.5 and 3.6 shows the graphical representation of the distribution of injuries in boxing and judo. . The figures show proportion of injuries in boxing and judo separately and the total of the particular injury. According to the figure, 11 injuries were recorded in contusion in which 4 were recorded in judo while as 7 in boxing. 9 injuries were recorded in concussion in which 4 were in boxing and 5 in judo. A total number of 14 injuries were recorded in facial injury in which 9 were recorded in boxing and 5 in judo. Similarly 6 injuries were recorded in brain injury in which 4 were recorded in boxing and 2 in judo. 9 injuries were recorded in dislocations with 3 in boxing and 6 in judo. And finally 14 injuries were recorded in knee injury in which 6 were recorded in boxing and 8 in judo.

Discussion of findings

The analysis of data revealed that there exist the significant difference between the aggression of boxing players and the aggression of judo players. The aggression level of judo players was found to be more than that of the boxing players.

Aggression is the psychological aspect that plays a vital role in the combative sports. Certain degree of aggression must be there in a player who is involved in the combative sports. Aggression may prove effective in the sports performance but in some cases it can be harmful. The players involved in combative sports are seen to be intrinsically aggressive and this aggression may lead them to injury. So, there absolutely exists the link between the aggression level and the incidence of injuries.

During the study, a total number of 63 injuries were reported among the 30 subjects, in which 33 injuries were reported in boxing and 30 in judo. The injuries involved which included 11 contusions, 9 concussions, 14 facial injuries, 6 brain injuries, 9 dislocations, and 14 knee injuries.

The aggression level of the subjects was then related with the occurrence or distribution of the injuries among the subjects. It was found that 30 out of 63 (47.61%) injuries were reported among the players whose aggression level was measured in the range of 155-204, i.e. average level, 16 (25.39%) injuries were reported in the players with low aggression level and 17 (26.98%) injuries were reported in the players with high level of aggression.

Moreover, the most common injuries reported among judokas were the knee sprains and among boxers were contusion (bruises) and cuts. The main mechanism of sprains among the judokas was the twisting movements and also being thrown while as in the boxing the main mechanism of contusion was punching the on the face.

Discussion of Hypothesis

It was hypothesized that there will insignificant difference between boxing and judo players in aggression level. The findings of the study showed that there is significant difference, hence hypothesis rejected.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

SUMMARY

The purpose of the study was to find out the level of aggression and its relation with the sports injuries among boxers and judoka of inter- university level.

Another purpose of the study was to analyze the level of aggression and sports injuries between boxers and judokas of inter- university level.

It was hypothesized that there will not be any significant difference between aggression level and sports injuries in players of boxing and judo.

For the purpose of the study, 30 Male Subjects (15 from boxing and 15 from judo),N=30, were selected randomly on the basis of stratified random sampling. The subjects were taken from different universities players who participated in the judo and boxing event. The judo and boxing competitions were held at Guru Nanak Dev University, Amritsar and Lovely Professional University, Phagwara, Punjab respectively. The age level of the subjects ranged from 18 to 25 years.

Keeping the feasibility aspect in mind and importance of psychological aspects, the following variables were selected for the purpose of this study:

Psychological Variables

- Aggression.

Sports injuries

- Concussion.
- Contusion.
- Facial injury.
- Elbow dislocation.
- Knee injury.
- Shoulder dislocation.

The criterion measures adopted for the study were as follows:

Aggression was assessed by total scores in Aggression Scale by *Aggression Scale* by Dr. G. P. Mathur and Dr. Raj Kumari Bhatnagar.

The data of injuries was collected either during the competition bouts or by the direct conversation with the players about their history of injuries in combative sports.

The data was analyzed by applying **Descriptive Statistics** i.e. mean, standard deviation, standard error, and achieve the objective of this study percentage was used with appropriate columns and pie diagram to represent the status of the players and to compare the status after getting the sports injuries and aggression.

CONCLUSION

On the basis of the findings of the study, the following conclusions are drawn:

1. Significance difference was found between the aggression of boxers and the aggression of judokas.
2. The aggression level of judokas was found to be more than that of the aggression level of boxers.
3. A total number of 63 injuries were recorded among 30 subjects in which 33 were recorded in boxing and 30 injuries in judo.
4. The players whose aggression level was in average range received the highest number of injuries and the players with low aggression level received the lowest number of injuries.

Hence, a certain level of aggression is must for every player especially in the combative sports like boxing and judo.

RECOMMENDATIONS

In the light of the conclusions drawn; the following recommendations are made:

1. Similar studies may be conducted by selecting other psychological variables like anxiety in relationship with the sports injuries.
2. The study may be repeated on subjects of higher/lower level and on professional players to assess their psychological characteristics in relation with the injuries.
3. The similar study can be done on female inter-university boxing and judo players.

4. Similar study can be done by observing the other common injuries in combative sports.

LIMITATIONS

1. The spectators violence during the competition cannot be under the control of research scholar, therefore was measured as the restriction of the study.
2. Instrumental aggression like hitting the other player with some object can cause the severe injury and this cannot come under the injuries on which the research scholar conduct the research, and cannot be under researchers control, thus, was considered as the limitation of the study.
3. Different ways of living, socio-economic conditions, nature of activity, daily routine & habits of Sports Persons in boxing and judo, which cannot be under the control of research scholar, were considered as a limitation of the study.
4. The questionnaire in itself has its own limitations. As such any bias opinion that might be given by the subject in the form of responses that affected the result of the study was considered as limitation of the study.

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Appendix-1

Aggression Scale (A S)

Name.....Sex.....

Age.....Caste.....Religion.....Married/Unmarried.....

Educational
 Status.....Rural/Urban.....

School/College.....

Occupation of Guardian.....Monthly
 Income.....Date.....

Sr. No	Statement	Strongly Agree	Agree	Un-decided	Disagree	Strongly Disagree
1.	When asked to do some work which is not liked, feel angry.	()	()	()	()	()
2.	When due to personal problems unable to complete work, feel angry.	()	()	()	()	()
3.	When engaged in irrelevant discussions with someone do not feel angry.	()	()	()	()	()
4.	When quarrelling with someone do not feel angry.	()	()	()	()	()
5.	When others do not agree with my views, feel angry.	()	()	()	()	()
6.	When others have different views then my views do not feel angry.	()	()	()	()	()
7.	Scolding without any reason, feel angry.	()	()	()	()	()
8.	When criticized by others, feel angry.	()	()	()	()	()
9.	When beaten without reasons do not feel angry.	()	()	()	()	()
10.	When others do not complete my work, feel angry	()	()	()	()	()

11.	When the things which I love is taken away, do not feel angry	()	()	()	()	()
12.	When I was disbelieved by my own people, feel angry.	()	()	()	()	()
13.	When deceived by others again and again don not feel angry.	()	()	()	()	()
14.	When someone tells a lie again and again with confidence, feel angry.	()	()	()	()	()
15.	When things, you love is broken do not feel angry.	()	()	()	()	()
16.	When old friends break confidence feel angry.	()	()	()	()	()
17.	When held guilty without any reason, do not feel angry.	()	()	()	()	()
18.	When someone steals very confidential important papers, do not feel angry.	()	()	()	()	()
19.	When it comes to my knowledge that someone who is considered faithful and confident is cheating, feel angry.	()	()	()	()	()
20.	When it comes to my knowledge that someone who is considered, ideal, is culprit or bad person do not feel angry.	()	()	()	()	()
21.	When relative who is considered to be very close hurt by breaking confidence, do not feel angry.	()	()	()	()	()
22.	When gets all the time false assurance by others, feel angry.	()	()	()	()	()
23.	When see partial treatment by parents in their behavior, feel angry.	()	()	()	()	()
24.	When disturbance is created by relatives, friends or colleagues in doing work unnecessarily do not feel angry.	()	()	()	()	()

25.	When unnecessarily pressurized by parents, relatives, friends, colleagues, feel angry.	()	()	()	()	()
26.	When unnecessarily pressurized by parents, relatives, friends, colleagues to work against rules and norms, do not feel angry.	()	()	()	()	()
27.	When see immoral behavior or corruption in the society, do not feel angry.	()	()	()	()	()
28.	When see dis-respect of elders in society, do not feel angry.	()	()	()	()	()
29.	When unable to see insult of elders by youngsters, feel angry.	()	()	()	()	()
30.	When there is no reason do not feel angry.	()	()	()	()	()
31.	When see misbehavior with old persons, handicap persons, feel angry.	()	()	()	()	()
32.	When see behavior against religion and the insult of religion, feel angry.	()	()	()	()	()
33.	When useless advice and counseling is given by the people, do not feel angry.	()	()	()	()	()
34.	When insulted without reason, feel angry.	()	()	()	()	()
35.	When someone who is committed to help in case of need refuses, do not feel angry.	()	()	()	()	()
36.	When hear criticism of others, feel angry.	()	()	()	()	()
37.	When someone steals luggage and other things, do not feel angry.	()	()	()	()	()
38.	When it comes to knowledge that friend or dear one's is deceiving you, feel angry.	()	()	()	()	()
39.	When work is not completed in time or see that cannot prove without completing	()	()	()	()	()

	work, feel angry.					
40.	When wait eagerly for someone after leaving some important work and he does not turn up, feel angry.	()	()	()	()	()
41.	When see wrong opinion or rumor is being spread among people, do not feel angry.	()	()	()	()	()
42.	When beaten after caught while cheating or stealing, feel angry.	()	()	()	()	()
43.	When hopeful and dependent on the assurance of someone and that person refuses, feel angry.	()	()	()	()	()
44.	When punished without reason, do not feel angry.	()	()	()	()	()
45.	When noticed partially in behavior, do not feel angry.	()	()	()	()	()
46.	When see corruption and norms breaking, do not feel angry.	()	()	()	()	()
47.	When someone pushed while going in the way and fell down, do not feel angry.	()	()	()	()	()
48.	When see corrupt, immoral, mean mentality people, feel angry.	()	()	()	()	()
49.	When someone praises others to whom you do not like.	()	()	()	()	()
50.	When see opportunist people who cause loss for their own gain, feel angry.	()	()	()	()	()
51.	When someone advise without asking to show that he is well-wisher, feel angry.	()	()	()	()	()
52.	When engaged in some important work at the same time someone comes and waste your time, feel angry.	()	()	()	()	()
53.	When someone forcefully interfere personal life, feel angry.	()	()	()	()	()
54.	When you lose the game, feel angry.	()	()	()	()	()

55.	When insulted for others fault in the classroom or work-field, feel angry.	()	()	()	()	()
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Appendix-2

Raw Scores of aggression in Judo and Boxing

SUBJECT	SCORE	SUBJECT	SCORE
Vipin Sharma	202	Lalit	217
Harpreet Singh	185	Lalit	167
Ashwani Rawal	195	Sanjit	150
Sijaj-ud-Din	218	KP Singh	166
Gurmail Singh	219	Karun	150
Shivam	201	Beyant	189
Ayat-ullah	170	Deepak	176
Chaman Gaur	166	Gurlal	151
Asad Rizwan	180	Vijay	189
Mohammad Amir	161	Shubham	175
Mohammad Khader	217	Taj Sheikh	175
K Tarun Kumar	190	Lank Devgan	172
Shubham	222	Jugal kishore	157
Happy Singh	157	Sahil Sharma	192
Jaspal Rana	172	Sahil Jhangda	189