Chapter - 1

INTRODUCTION

Nothing unites people, nations, societies, individuals quite like sports and games. It is the modern opium of the masses; a lingua franca common to men and women, old and young, those lives are otherwise so different that might be living on different planets. First World, Third World, ...... at all extremes of the human spectrum, athletes can be found dunking the basketball, smashing the volleyball, clearing the cross bars or striving for an Ippon in Judo and imagining winning the Gold in the Olympics.

Competitive sports have become a passion of the Universe. It is the denomination between nations of political and armed antagonism. It is an alternative or an accompaniment to the smile which breaks down barriers. People with no other social or cultural connection may suddenly discover that the invocation of magic names such as Pele, Mohamed Ali, Michael Jordan, Magic Johnson, Martina Navrathilova etc. can work or spell.

Sports have now acquired an important place in the culture of the society and this culture is valued through achievement in sports. At the international level, winning the medal enhances the prestige of a nation. Victory in Olympic and World Championships are celebrated throughout the country and the winners are honoured by the entire nation. Lots of incentives are provided to the athletes who attain higher international standards. Those who succeed become national heroes. Large number of
youths are motivated to take sports more seriously and dedicatedly. India is no exception to this international phenomenon.

Technology has covered every aspect of human life including sports. Nowadays sports have become highly scientific. Consequently, new records are being created shattering the old ones at a higher rate. Every country wants to exhibit its superiority. This challenge stimulates and inspires men and women, young and old to sweat and strive to run faster, jump higher and to throw farther than others, and to exhibit greater strength, endurance and skills to dominate over others. In modern life those who participate in sports attach great significance to winning as the philosophy of participation in games and sports has undergone a notable change. This excellence and success can be achieved only through a scientifically well planned and systematic sports training programmes. Minimizing the element of chance by trying to leave no stone unturned in the quest for coaching excellence is the corner stone of all sports scientist’s thinking. When athletes roughly equal in skills meet, the one with the higher overall fitness level will have the advantage of being more able to cope with the demanding pace of the competition.

There is an increasing demand with regard to fitness, skill and related capabilities of sportsmen, since performance has been considered as a major aspect of competition. Hence, there is a need to pay attention to physical fitness in general and specific fitness in particular which
determines performance to a great extent. Countries leading in Judo such as Japan, Korea, France etc. have well developed systems of promoting the scientific approach over a period for several years, but in India this area of training is not fully explored.

Fitness is one of the most misused and overused words in the English language. It can be used for the feeling of pleasure which a person experiences. Physical fitness is an individual matter and, as such, has little meaning unless viewed in relation to the specific needs of each individual. Many people do not realize and even do not know, the level of physical fitness which is actually required. Keeping in view the importance of fitness, Guild\(^1\) said: "Without Motherhood, there is extinction, Without Justice, there is slavery, Without Honour, there is swindling, and Without Fitness, there is death".

Many researchers, scientists and physical educators have written much about the "Principles of specificity", but very few have defined specific fitness. As Singh\(^2\) has stated, each sport activity demands different types and levels of different motor abilities and when a sportsman possesses these he is said to have specific fitness.

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Any performance might be formally or informally analysed to determine its components in terms of general or specific factors. Once these are identified, they can be developed through training programme for the players which can later be evaluated by the scientific method. Therefore, the discussion of fitness focuses on the question, "fit for what purpose?". Fit to be a champion? Short or long distance runner? The requirement of fitness is highly specific to sports. A hockey player needs a different type of fitness than a judoka or a volleyball player. It generally implies the ability to perform a dynamic or specific task and to recover quickly on completing it. The fitness of one sport differs from that required for another, as the demand of one sport is different from that of another sport, i.e. a Judoka requires strength whereas volleyball player requires explosive leg and arm power. A number of well known researchers, coaches, trainers and physical educationists had advocated the doctrine of "Specificity" in sports training, that is, training for fitness must relate to that sport.

Furthermore, Thirstrup\(^3\) and Berger\(^4\), contended that fitness is specific to the activity / game. They say that specific fitness is the key point of success for sportsmen in the higher level competitions. The development of specific fitness requires the appropriate level or amount of

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motor abilities in relation to the requirement of the game concerned. The limitation of the sportsmen concerned have also to be kept in view.

Henson also opined that the training is effected by the specificity and so, it must be specific to the requirements of the event. For example, if the event requires strength, the training must be given to develop strength.

Judo is an exciting unarmed combat sport that originated in the orient as a means of self-defence which has since grown into an international competitive sport. Judo developed out of Ju-jitsu, a form of unarmed combat believed to have been introduced into Japan by a Chinese monk, Chen Yuan-Ping in the early seventeenth century. Various Ju-jitsu schools developed and young samurai were instructed in art. This was in the days of chivalry among Japanese Knights.

The skills of unarmed combat were saved by Dr. Jigaro Kano who studied at various Ju-jitsu schools. He brought together the best techniques of each to develop his own style, introducing it at his school and called the style Kodokan Judo. The Kodokan was founded in 1982. He formed a principle which Ju-jitsu had also earlier discovered Tskuri-Komi, the art of getting a fighter off balance before throwing him, Kano described the difference between Judo and Ju-Jitsu as, ‘the elevation of an art to a

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5 Phil Henson, “Physiology of Training”, Athletic Asia 16 (March 1987) : 3.
principle’. In studying Judo he felt it was necessary to train the body, essential in all forms of martial arts. But just as importantly, he saw the need to develop the mind. ‘Maximum efficiency with minimum effort’, was the Kano’s belief.

Originally, one of the characteristics of Judo was the emphasis placed upon intuition and personal experience and the individuality of the techniques resulting from hard practice and experiment. However, modern Judo is based upon the method inherited from the early days. These methods were offered by advanced science which is more scientific in nature. In the recent years the application of science to Judo has increased greatly and research in the technique has made considerable progress. Since Judo is an Olympic event, various means and methods of training and conditioning have also been greatly developed.

These days Judo is practiced at national and international level. It has also been introduced in the Olympic games and the other World Championships. The world-wide popularity of Judo is evidenced by more than one hundred nations that belong to the International Judo Federation. It is a sport which develops a high level of modern values and attitude both to life and to sport⁶.

Judo may be described as a science for the study of potential powers of the body and mind and the way of applying them most efficiently in combative activities. Hence it is involved by the study of the laws of gravity, dynamics and mechanics as related to the function of the human body.

As compared to the Indian Judokas, the Western and Northern Judokas are more fit and have developed modern techniques and tactics. They have a sound system of scientific coaching and long durations of training sessions. From 1970 to 1980, there was a truly dramatic improvement in the level of physical fitness of Judokas on the International contest mat and relative increase in the fitness of competitors at National level. The traditional view was that the best way to get fit for Judo, was to do specific exercise for Judo fitness as well as Judo practice.7

It proved impossible to do the amount of Judo needed to achieve the required physical standard without getting the knocks and muscle strain that would set the training programme back a few weeks supply of supplementary training, particularly running and weight training with schedule curled from other sports and games, drastically raised, the fitness

of Judokas. Now Judo players are among the fittest sports persons in the world. Whole body fitness also raised the standard of Judo itself.

In Judo, we require the fittest persons. A fit man full of energy can concentrate on his opponent. A tired man going on the defence, can think only of himself. A fit person who is physically and mentally more alert is less likely to suffer injuries, and he is capable of producing the explosive power and is able to do the movement with better coordination. A fit person in Judo will be able to do good Judo for the best of six sets of five minutes. This, of course, could be extended to eight sets of five minutes of Randori. The few areas of physical fitness for the Judokas are muscular fitness, strength endurance, speed of moment, endurance, flexibility and power.

It is provided by its nature that it is a strength-dominated sport but with respect to that, all other conditional abilities and motor components are also required. We can say that without having proper fitness level, the Judokas cannot participate in any Judo competition and also cannot participate in regular Judo practice. Judo is a body contact game where structural measures of a Judoka, plays an important role in his performance. It involves throwing, holding, locking and choking techniques which require a big amount of strength and physical fitness.

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It is very simple to evaluate the physical fitness of a Judoka and to device a training programme for him. The difficulty is in evaluating the specific physical fitness level of a player and its development. Therefore, it is most important to analyse and evaluate the requirements of the game before we suggest the different factors of specific fitness.

It is a well known fact that all sports activities need higher standards of general fitness and each sport requires dominance of particular fitness components, such as arm strength in Judo. Similarly abdominal strength, leg-strength, endurance and coordination are all contributory factors essential for attaining proficiency in Judo. Judo is predominately an aerobic activity as continuous bouts are played with fast speed. Thus it needs development of a high level aerobic endurance among the Judokas. A Judoka requires a high degree of strength and total body agility exercises so that he is able to gain good mat position and competes with his opponent in offensive as well as defensive manoeuvres.

It is after considering the above-mentioned facts that the research scholar has chosen to conduct the study entitled, “Construction of Specific Fitness Test Battery and Development of Norms for Judokas”.

**Statement of the Problem**

The purpose of this study was the construction of specific fitness test battery and development of norms for Judokas.
Delimitations

1. The study was delimited to the Men Judokas who have participated at the All India Intervarsity competitions.

2. Further it was delimited to only 150 Judokas who have participated in the All India Intervarsity Championships for the year 2002-03 and 2003-04.

Limitations

1. Variations in performance due to climatic conditions, ground condition, player's physical and psychological (motivational) factors that might affect the study, were considered as limitations of this study.

2. Errors in measurement and timing, which were recorded, due to human performance and perception which might affect the study were also be considered as limitations of this study.

Definition and Explanation of the Terms

Specific Physical Fitness

The specific physical fitness refers to the adaptation of physiological and muscular systems of the body to the stress caused by the specific activity on the organism, which may differ from game to game. It is a specific strength which may endure for longer duration in quick succession of contraction and relaxation of arms muscles during the actual Judo competition.
Physical Fitness

Physical fitness is the ability to carry-out the daily tasks with vigour and alertness without undue fatigue and with ample energy to engage in leisure time pursuits and to meet the above average physical stress encountered in emergency situation.9

Test

A test is a specific tool, procedure or technique used to elicit response from the students in order to gain information to be used as the basis for appraisal of quantity of elements such as fitness, skills, knowledge and values.10

Norms

An experimentally derived index which enables teachers to compare the achievement or status of their students with those of a similar group. Norms are often assumed to be the representative of some larger population.11

Explosive Power

Explosive Power is defined as the ability of a muscle or a group of muscles to release maximum force in the shortest possible time in an explosive manner, projecting the body or an object.12

10 Ibid; pp. 91.
11 Ibid; pp. 91.
Judoka

Judoka is a Japanese terminology which denotes the sportsman who practices Judo.

Uchikomi

Uchicomi is the repetition workout of a particular technique used in Judo.

Seoi Nage

Seoi Nage is a shoulder throw, an effective technique used in Judo.

O-goshi

O-goshi is the major hip technique which is commonly used in Judo contests.

Tsukuri & Kake

The verbal meaning Tsukuri is the preparation and Kake is the fitting action. In other words it is the preparation and attack during a contest.

Factor Analysis

Jackson and Messick\(^{13}\) defined that “Factor analysis is a mathematical procedure which resolves a set of descriptive variables in to a smaller number of categories, components or factors”.

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Significance of the Study

1. The study will be helpful to evaluate the physical fitness of Intervarsity level judokas and for the selection procedure.

2. This study will also be helpful to the physical education teachers and coaches to design and formulate conditioning and training programmes for judokas.

3. The study may serve as a guideline to sports psychologist and coaches to motivate students.

4. The result of the study may inculcate the interest of the Judokas as they themselves can realise their level of fitness by testing themselves.

5. The test battery will also contribute in determining the specific fitness goals to attain improvement in performance of Judokas.

6. The present study will also help to conduct further scientific research in training methods for the Judokas.