

# Analysing Moisture and Comfort Properties of Sports Wear for the Players in Tirupur City

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**Abstract-** In the sports field the fabric plays a vital role. The sportswear should have certain properties in order to adapt to the activities of sports person. For a sports person the costume should fulfill the properties like management in moisture, comfort of the fabric and the safety requirements. Every human being sweats during different kinds of activities. The Main feature of the fabric is to transports this water out of the body to make the wearer feel comfortable. This paper reports the concept of moisture management, comfort of the fabric and safety requirements of the sportswear. In this analysis the researcher takes survey from sports person and suggests solutions to improve the wear by fulfilling all the three requirements and manage all characteristics on fabrics for active sportswear.

**Index Terms-** Sportswear, Comfort, Moisture, Safety, Fabrics.

## INTRODUCTION

The Sportswear is the very important special clothing for the players. Based upon the movement, action, motions, skilful application and efforts the sportswear should have the basic requirements. The most important property of any apparel is comfort, moisture absorbent and safety. It is a qualitative aspect in terms of the sportswear clothing. The clothing should be comfort based on the groups, like physiological, tactile and thermal comfort.



Fig: 1

Physiological comfort is mainly related to the latest fashion trend and the acceptability in society and bears little relation to the properties of the fabrics, which concerns the heat and moisture transport properties of clothing and the way it helps the clothing to maintain the heat balance of the body during various levels of activity.



Fig:2

The sportswear should have the Moisture management property is an important aspect of any fabric meant for active sportswear, which decides the comfort level of that fabric. Every human being sweats during different kinds of activities for playing in the ground. The important feature of any fabric of fabric should evaporates the water out of the body, which make it for the wearer of the players feel comfortable. The aspects like comfort of the fabric, moisture management and safety are the important concept for the controlled movement of water vapor and atmosphere through the fabric.

## REVIEW OF LITERATURE

- Zimniewska observed that the Investigation of the influence of different types of Sportswear made from cellulosic manmade fibers and polyester fibers on the energy cost of the effort of volunteers in sports conditions.
- Malgorzata states that the human body sweats during exercise to maintain its internal temperature, where its physiological activities can run efficiently. This process is called heat acclimatization, which improves thermal comfort.
- Chao explains that the increases heat tolerance and reduces heat strain the presence of moisture within clothing can increase the wearer's heat loss dramatically.

**Objectives:**

1. To study about The demographic features of sportsman in Tirupur city
2. To analyze the moisture management of sports wear
3. To find the comfort properties of sports clothing
4. To study about the safety requirements of sports wear
5. To offer suitable suggestions for improving the garment in sports industries.

**LIMITATIONS OF THE STUDY**

- The Sportswear is concentrated only on the three properties.
- In spite of the above limitations, all efforts have been made to ensure correctness in the data collection.

**RESEARCH METHODOLOGY**

Research is common parlance refer to “a search for knowledge”. One can also define research as a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation

**Data collection:**

The primary methods of data collection that is questionnaire technique was used to collect the data required. No of Respondents include both male and female. Convenience sampling method has been

adopted under the non-probability sampling technique and about 100 samples have been collected for the study.

“A research design is the arrangement of conditions for collection and analysis of data in a Manner that aims to combine relevance to the research purpose with economy in procedure”

**Sampling Technique:**

Convenient sample technique is used to find sample from the whole population

**Sampling size:**

The study was conducted towards Sports person in Tripura city. The size of the population is 100 and the survey was conducted in tirupur city.

**STATISTICAL TOOLS - PERCENTAGE ANALYSIS**

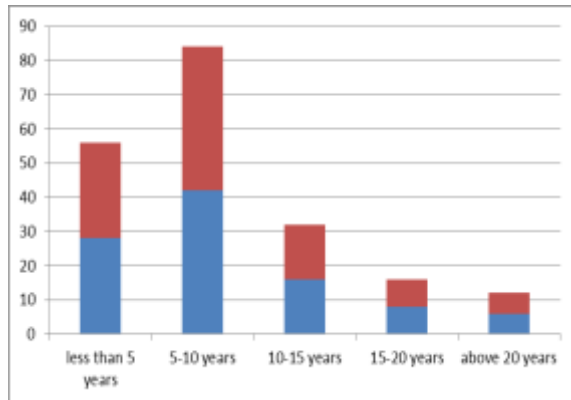
The Percentage analysis is an effective tool to study the attributes of the respondents. Each response by the respondent to a particular statement is plotted into frequency table and quantified. The entire response to the statement is considered as 100 percent and each of the choice within the statement is measured as what percentage does it holds to the total response to that particular statement.

**Percentage Analysis- Experience in Sports field:**

S. No	Experience In Business	No. Of Respondent	Percentage
1	Less Than 5 Years	28	28
2	5-10 Years	42	42
3	10-15 Years	16	16
4	15-20 Years	8	8
5	Above 20 Years	6	6
	Total	100	100

**INTERPRETATION**

From the above table shows that, it is observed that, 28% are less than 5 years, 42% are 5-10 years, 16% are 10-15 years, 8% are 15-20 years, and 6% are above 20 years respondents.



### SUGGESTIONS

- The wear comfort of sportswear is an important quality criterion. It affects not only the well-being of the wearer, but also their performance and efficiency. It is appropriate to describe wear comfort as the “physiological function” of sportswear.
- Wear comfort is also a major sales aspect. Many people believe that comfort is something individual to each person, which cannot be quantified or measured.
- An important way to measure wear comfort is to perform wearer trials with human subjects. These could be performed either “in the field” under practical conditions or under controlled climatic and activity scenarios in a climatic chamber.
- Clothing physiological laboratory measurements have been developed to ensure more efficient product development and high reproducibility for certification purposes.

### CONCLUSIONS

In this analysis the problems faced by sports person is identified and the remedial measures are given to improve the perfect conditions of sportswear. The results showed that the sample with 100% polyester fibers demonstrated better physiological responses and performance by Players compared to the other fabric types. The manufacturers have to concentrate in producing the garments by fulfilling the certain conditions of sports person by mixing some organic fibers to the polyester fabric where it is the essential for the sports person.

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