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## Comparative analysis of health status among early adulthood and later adulthood

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### Abstract

The study was aimed to see the health status among early adulthood and later adulthood. For the purpose of data the samples were select with the help of probability sampling technique under which simple random method was adopted by the researcher. The average age of the early adulthood samples is  $20.96 \pm 2.48$  and the average age of later adulthood group is  $39.46 \pm 5.74$ . All the samples which are used to fulfil the purpose is belongs from Lakshmbai national institute of physical education, Gwalior. The data was collected on 100 samples, than researcher used simple random method to select 60 samples for both the categories. The data was analysed with the help of statistical package for social sciences 22 version by applying independent t test. After analyse the data it was concluded that the null hypothesis is rejected because there is significant difference is found in the two variables of health status on the basis of them it was concluded that the health status of early adulthood is better than later adulthood on level of significance whereas no significant difference was found in the BMI of both the groups.

**Keywords:** Health status, Basel metabolic rate, resting metabolic rate, fat free mass

### 1. Introduction

Health is like money, we never have a true idea of its value until we lost it" (josh billings). For any sports and for general life health is the first prime and most important aspect of an individual. In daily life we always found some quotations like, "health is wealth", "the greatest wealth is health", "health is a state of complete harmony of the body, mind and spirit. When one is free from physical disabilities and mental distractions, the gates of the soul open" (B.K.S Iyengar). Almost 80%of diseases take birth from psychological illness. According to swami Vivekananda; strength is life, weakness is death. Strength is felicity, life eternal, immortal; weakness is constant strain and misery, weakness is death. Health status is one of the most important aspects for an individual for successfully survival throughout life, for an ordinary person health status may means to carryout daily task with successfully without undue fatigue and enough energy left in the body to carry-out any emergency work. But this concept is not enough for sports person, for a sports person health means a specific/unique level of fitness which is required for sports to complete his different kind of movement throughout match as well as competition without undue of fatigue. The health status of an individual is mainly depends on the body composition variables kumar M (2016) <sup>[1]</sup>. Composition of athlete's body is almost important factor in the success of a team in all athletic endeavors (Wilmore, 1982) <sup>[3]</sup>. Body composition plays an important role in achieving excellence in sports performance (Mathur and Salokun, 1985) <sup>[2]</sup>. Body composition consists of fluid, micro nutrient and fat.

#### 1.1 Objective of the study

The objective is to find out the health status of early adulthood.  
The objective is to find out the health status of later adulthood.

#### 1.2 Hypothesis

The hypothesis of the study was "whether there is any difference in the health status among the both variables".

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**1.3 Significance of the study**

The study will be helpful for coaches, physical educationist to give the idea about the health status of sportsman of different age category.

**2. Methodology**

For the purpose of this comparative study the probability sampling technique is used by the researcher. The data was collected from Lakshmbai National Institute of Physical Education, Gwalior. The data was collected on 100 sportspersons, than after collection of data on hundred subjects; researcher used the simple random method to select the 60 subjects out of 100 and divided them into two

categories, early adulthood and later adulthood. Than subjects were divided into two equal number of groups of 30 samples each. The average age of the early adulthood group is  $20.96 \pm 2.48$  and the average age of later adulthood group is  $39.46 \pm 5.74$ . The data was collected with the help of body composition analyser “maltron bioscan 916”. The data was analysed through the new version SPSS 22.

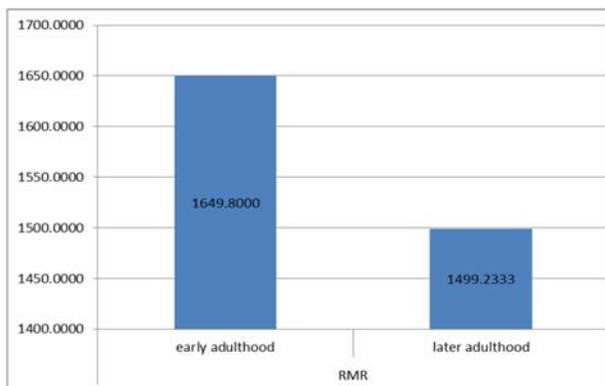
**2.1 Findings and Interpretations**

In the following sections the statistically analysed data has been presented. Results pertaining the analysis of body composition between the sportsperson of different weight categories early adulthood and later adulthood.

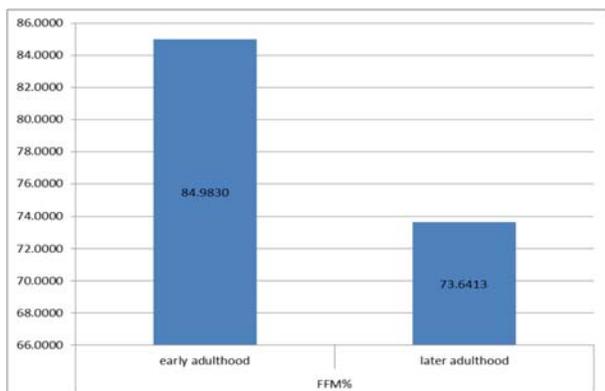
**Table 1:** Analysis of health status among early adulthood and later adulthood.

| variables | N  | Mean      | Std. Deviation | Std. Error Mean | f-value | P -value | t value | P-value |
|-----------|----|-----------|----------------|-----------------|---------|----------|---------|---------|
| BMI       | 30 | 21.8733   | 1.55229        | .28341          | 3.499   | .066     | -1.353  | .181    |
|           | 30 | 31.1833   | 37.65731       | 6.87525         |         |          |         |         |
| RMR       | 30 | 1649.8000 | 208.77663      | 38.11722        | .246    | .622     | 2.660   | .010    |
|           | 30 | 1499.2333 | 229.19705      | 41.84547        |         |          |         |         |
| FFM%      | 30 | 84.9830   | 5.31344        | .97010          | 2.313   | .134     | 3.901   | .000    |
|           | 30 | 73.6413   | 15.01172       | 2.74075         |         |          |         |         |

The above table shows the mean, standard deviation, SEM and p-values of different variables of health status. The above table shows the statistical analysis of the raw data health status on early adulthood and later adulthood. The analysed data shows the significant difference between of health status among early adulthood and later adulthood on the variables RMR and FFM%. Whereas no significance difference is found in the BMI of both the groups. The graphical representation of the data is shown below in the figure 1 and figure 2.



**Fig 1:** graphical representation of fat free mass



**Fig 2:** graphical representation of fat free mass

**3. Conclusion**

This study was designed to analyse the health status among early adulthood and later adulthood. The study was found significant difference in the two variables of health status whereas no difference is found in the BMI of both the groups. Hence on the basis of result it was concluded that the health status of early adulthood sportsperson is better than later adulthood. Whereas the height weight ratio among both the groups is same.

**4. Acknowledgments**

I am very grateful of my parents, family members and my elders who motivate me to work for the development of profession and the society.

**5. References**

1. Kumar M. choice of food and health states of boxers. Scientific Culture in Physical Education & Sports, 2016, 1140-1141. ISBN: 978-93-85446-45-0.
2. Mathur DN, Salokun SO. Body composition of successful Nigerian female Athletes. Journal of Sports Medicine. 1985; 25:27-21.
3. Wilmore JH. Training for sports and activity- The physiological basis of conditioning process. Allyn and Bacon Inc. 1982; 2:119-137.
4. Verma JP. Data Analysis in Management with SPSS Software. Springer New Delhi Heidelberg New York Dordrecht London ISBN 978-81-322-0785-6 DOI 0.1007/978-81-322-0786-3, 2013, 105.