

Relationship of fitness and physiological variables of non-sportswomen

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ABSTRACT

The purpose was to find out the relationship of the selected motor components and physiological variables in predicting fitness status of women. The twenty five female non sports women subjects were selected from Universities and Colleges of Rajasthan. Total twelve variables *i.e.* six physiological variables and six motor components were selected. Physiological variables included body density, vital capacity, blood pressure, breath holding capacity, hemoglobin. pulse rate. Motor components included Cardio vascular endurance, agility, flexibility, speed, strength and balance. Body density (percentage of body fat) was calculated from the skin fold measurements, peak flow rate with the help of peak flow meter, blood pressure by Doctor's Sphygmomano-meter in pulse pressure, hemoglobin percentage with the help of Hemoglobin meter, pulse rate by stopwatch, in number of beats per minute, breath holding capacity with the help of nasal clip and stop watch in seconds, Speed was measured by the performance of 50 m dash in seconds, Agility by 10 x 4 m shuttle run in seconds, Flexibility of lower back and hamstring muscles by the performance of sit and reach test in centimeters. Strength was measured by the performance of standing broad jump with the help of flexible steel tape in meters, Endurance by the performance of 600 m run on standard track with the help of stop watch in seconds/minutes, Balance by the performance of static balance test (stoke stand) in sec/minute. All the female students (sports women) were provided complete information about the study and instruments which were used. To find out the relationship of selected motor components and physiological variables Pearson Product Moment Correlation was used.

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Physical fitness is a priceless possession of any man, because it serves as a base for any future development. A weak or an unsuitable base can hardly withstand the load of a super structure. Therefore, physical fitness, at different stages of life, serves as a sound base for any further development. In fact it is the basic factor for achievement in any field of life (Uppal, 1996 and Sharma, 2000).

In this modern era of competition, the physical, physiological fitness and psychological preparation of a player or team is as much important as teaching the different skill. These players are prepared not only to play, but also to win, or game. And for winning the game, it is not only the proficiency in the skill, which brings victory, but more important is the physical, physiological and psychological fitness of the players (Aluzo, 1962). Identification and selection of potential athletes in specific fields on scientific knowledge is a matter of routine in many developed countries. In India, this aspect has been given serious consideration and the players are selected mainly on the basis of their performance records in various

sports meets. It is often forgotten that such 'talents' have already their peak performance with little scope for further spectacular improvement in spite of intense grooming scheduled, so they need to be identified at a very young age.

Another reason attributes to the lowering of the general physical fitness is that physical work is often considered being below the dignity of many as evident from the increasing level of labour charges in all spheres of life. People feel it embarrassing in walking a few hundred yards on the streets (Hockey Robert, 1973).

Thus, we see that the importance of physical fitness through organized physical education and sports programmes are of greater significance in today's sedentary life or else the risks of physical diseases and organic malfunction will be ever mounting.

In the present competitive world, women are visible, but then active involvement in physical activity is not yet pervasive. They are entering new roles in the society, which expects them to move equally with their male counter parts. The main focus should be on the lives of