

CHAPTER 44  
PHYSICAL EDUCATION  
&  
SPORTS SCIENCES

Doctoral Theses

489. DABAS (Pawan Kumar)  
**Demographic Study on Autonomic Function of Retired Sportsperson of Selected Games and Sports Predominated by Power and Aerobic Capacity.**  
Supervisor : Dr. Dhananjoy Shaw  
Th 18097

*Abstract*

The study is undertaken with the purpose to make autonomic function norms for retired sportsmen and compare them with the clinical norms available. Further to determine the selected sympathetic and parasympathetic function of power and aerobic events. The sympathetic nervous system controls many important functions of the autonomic nervous system i.e. increasing heart rate, force of contraction, excitability, conductivity of muscles. Broadly speaking, its functions are catabolic in nature.

*Contents*

1. Introduction. 2. Review of related literature. 3. Materials and methods. 4. analysis of data and results of the study. 5. summary conclusions and recommendations. Bibliography. Appendices.

490. SONIA SHALINI  
**Study on the Effect of Step Aerobic Training on Selected Ground Reaction Force Variables of Female.**  
Supervisor : Dr. Dhananjoy Shaw  
Th 18239

*Abstract*

This study has find out the biomechanical (impact force) adaptation

of the selected four step aerobic training protocols in the performance of the “Basic Step” on step platforms of different heights and music tempo [beats per minute (BPM)]. It also determine the intensity (impact force) to which the lower extremities are subjected in the performance of the chosen step aerobic training protocol by analyzing the components of the three dimensional ground reaction forces exerted by the subjects as they step on and off the step platform.

*Contents*

1. Introduction. 2. Review of literature. 3. Procedure. 4. Analysis of the data and the results of the study. 5. Summary, conclusions and recommendations. Bibliography.