

ACKAPHON PENSUPHA : BIOMECHANICAL ANALYSIS OF THE FOSBURY FLOP HIGH JUMPING FOR THE THAI HIGH JUMPERS. THESIS ADVISOR : ASSOC.PROF. ANAN ATTACHOO, Ed.D., PROF. Dr.CHUSAK VEJBAESYA. 181 pp. ISBN 974-581-912-3

The purpose of this research was to analyze the factors of biomechanics and other factors of the Fosbury Flop high jumping for the Thai high jumpers.

It was found that ;

1. The national high jumpers had significantly more the horizontal velocity of the last three steps than other groups.
2. The national high jumpers had significantly more the vertical velocity at the take-off point than other groups.
3. The national high jumpers had significantly less time to jumping at the take-off point than other groups.
4. Angle of the take-off leg, the national high jumpers were larger. Angle of the free-leg foot, the regional high jumpers were larger. Angle of knee of the take-off leg were almost the same of them. Angle of knee of the free-leg, the general high jumpers were larger. Angle of body at the take-off point, the national high jumpers were larger. Angle of the inside elbow, the general high jumpers were larger. Angle of the outside elbow, the general high jumpers were larger.
5. The lower of the center of gravity at the take-off point, the higher of jumping. The pathways of the center of gravities were parabola.
6. Additionally, an analysis of physical fitness was found that the national high jumpers had significantly more flexibility than the others, while the strength of leg and the height of vertical jump of all were almost the same.
7. There were two training methods of high jumping.
  - 7.1 The non-formal training method.
  - 7.2 The formal training method.