

Yeadon, M.R. 1997. Twisting double somersault high bar dismounts. Journal of Applied Biomechanics 13, 76-87.

At the 1988 Seoul Olympic Games, four double somersault dismounts with one twist and four double somersault dismounts with two twists were filmed using two 16mm cameras during the men's horizontal bar competitions. Contributions to tilt angle reached at the midtwist position, determined using computer simulations based on modifications of the data obtained from film, were used as measures of the twisting potential of various techniques. The amount of tilt produced was greater when total twist was greater and when the body was tucked rather than straight. The twisting techniques used varied with timing of the twist within the two somersaults. Contact contributions were larger when there was more twist in the first somersault. When there was little or no twist in the first somersault, the major contribution came from aerial techniques that comprised mainly arm movements and symmetrical hip movements in the flight phase.