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Performance Evaluation for Weightlifting Lifter by Barbell Trajectory

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Abstract : The purpose of this study is to investigate the kinematic characteristics and differences of the snatch barbell trajectory of 53 kg class female weight lifters. We take the 2014 Taiwan College Cup players as examples, and tend to make kinematic applications through the proven weightlifting barbell track system. The competition videos are taken by consumer camcorder with a tripod which set up at the side of the lifter. The results will be discussed in three parts, the first part is various lifting phase, the second part is the compare lifting between success and unsuccessful, and the third part is the outstanding player compare with the general. Conclusion through the barbell can be used to observe the trajectories of our players cite the usual process cannot be observed in the presence of malfunction or habits, so that the coach can find the problem more accurately guide the players. Our system can be applied in practice and competition to increase the resilience of the lifter on the field.

Keywords : computer aided sport training, kinematic, trajectory, weightlifting
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