

Shooting “Lights Out”: Exploring a New Method for Improving Accuracy in the Basketball Jump Shot

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Category: Undergraduate

ABSTRACT

Proprioception is the awareness of limbs in space and it is essential in order to be successful in the basketball jump shot. The purpose of this study was to determine if practicing the basketball jump shot in a dark gym would improve an athlete's shooting percentage by strengthening the proprioceptors in the muscles, tendons, joints and vestibular apparatus. The participants for this study consisted of 10 female basketball players from Texas Lutheran University. The participants were instructed to shoot twenty-five jump shots from the free throw area in a well lit gymnasium and an initial shooting percentage was recorded for each subject. Then the subjects were randomly divided into two groups: a dark group and a light group. Each individual would then complete four sessions on different days, either in the light or the dark, depending on their placement. Each session consisted of twenty-five jump shots. After all sessions were completed, a post-test of twenty-five jump shots was conducted in the light for all participants. The post tests of the light and dark groups were compared using a t-test. The results of the study did not show any significant improvements in shooting accuracy by shooting in the dark ($t=-.655$; $p=.27$). However, three of subjects from the “dark” group did show minimal improvements from the pre-test to the post-test. This method of shooting in the dark may have shown better results if the number of subjects and the number of sessions were increased and it should be further investigated.