Development of an Assistive Instrument to Batting Practices and to Improve Hand Eye Coordination in Baseball

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The primary purpose of this study was to develop an assistive instrument to batting practices and to improve hand eye coordination in baseball in order to investigate the subsequent training effect. The balls were pitched one by one from the assistive instrument at a constant speed to enable the practicing of batting skills. A quantitative research approach was followed to analyze the impact of practicing through the assistive instrument and to identify the strategies which baseball players can adopt to improvise the impact of batting skills. The assistive instrument consisted of a 12v wheel motor to feed the ball automatically and two 12V Dc speed motors to pitch the ball to a particular distance. To test the accuracy of the instrument, a training group (n=5), and a control group (n=5) were used by purposive sampling method. The two groups were denoted as Team-A and Team-B. Team-A was allowed to practice 15 hits through the assistive instrument. Each batter of Team-A was allowed to hit 5 balls before and after batting practice to investigate the training effect while the batters in team B were not given any other practices. Paired t-test was used to analyze the data. The results indicate a significantly enhanced batting performance after the practice ($p<0.05$). thus, the study revealed that there is an impact on practicing through the assistive instrument on the performance of baseball players.

Keywords: Baseball, Assistive Instrument, Batting Practices, Hand-Eye Coordination