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## COMPARING THE EFFECTIVENESS OF AN ISOKINETIC EVALUATION TO A FUNCTIONAL CAPACITY EVALUATION IN REDUCING INDUSTRIAL INJURIES

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**PURPOSE:** To compare the effectiveness of a functional capacity evaluation (FCE) to an isokinetic physical capability evaluation (PCE) in reducing soft tissue injuries in industry. **METHODS:** New hire applicants for a national food distribution services company were evaluated from 2/00 – 3/03. From 2/00 – 8/01, each applicant received a FCE (FCE Group) and from 9/01 – 3/03, each applicant received a PCE (PCE Group). The applicants were delivery drivers and order selectors. The FCE group tested and recommended for hire 1,650 individuals and the PCE group tested and recommended for hire 1,900 individuals. The FCE consisted of a traditional work simulation test and a cardiovascular step test. The PCE group received an isokinetic flexion/extension evaluation of the knees and shoulders at 60 degrees/sec. Frequency of injury and cost of injury were monitored and tracked for each group during their respective 19-month period. Only those injuries occurring within the first 19-months of employment were considered. **RESULTS:** A Chi-Square analysis showed the observed frequency of injury vs. the expected frequency was significantly different. The observed frequency for the PCE group was 24 vs. the expected of 27 compared to the observed frequency for the FCE group of 45 vs. the expected of 21 (Chi-Square = 1552.04, df=1, p<.0000). The mean total injury cost for the PCE group was significantly less than the FCE group (\$5,659 vs. \$16,504, Kolmogorov-Smirnov Test, p<.05). **CONCLUSION:** These results show an isokinetic knee-shoulder new hire physical capability evaluation to be significantly more effective in reducing work related injuries than a traditional FCE.