ABSTRACT

TITLE:	Testing Goalkeeper Techniques for Saving Penalty Kicks
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ABSTRACT: A penalty kick in the game of soccer is a unique and impactful event. The goalkeeper attempts to defend the goal in the best way possible using one of two techniques. Goalkeepers dive to their left or right in an effort to save the ball, about 95% of the time (Bar-Eli, Azar, Ritov, Keider-Levin, & Schein, 2007), because that is the norm associated with defending a penalty kick. This is classified as the guessing technique. The other penalty kick save technique is reacting, where the goalkeeper reacts to the direction of the shot. The purpose of this study was to test the effectiveness of these two penalty kick saving techniques. The hypothesis indicated that the reacting technique would be the more successful of the two techniques. A total of 23 collegiate level soccer players, five of which were goalkeepers, were used to test the techniques and collect the data. Each goalkeeper defended twenty penalty kicks; ten were defended employing the guessing technique, and ten were defended utilizing the reacting technique. A total of twenty-five penalty kicks were saved by the goalkeepers. The guessing technique resulted in eleven saves and the reacting technique resulted in fourteen saves. This data was analyzed using a dependent t-test which showed that the results were not significant ($p>0.05$). The results are leaning slightly in the favor of reacting possibly suggesting that there are benefits to using the reacting technique.