Soccer: Statistically predicting the ever-changing game and the main factors that can decide the outcome of a match with are the possession, the passing percentages, and the shots on/off target.

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Abstract

Internationally recognized**,** soccer ranks as one of the longest standing sports, and is arguably one of the most popular. It has many variations in game play and can change very drastically in a matter of moments. To break down soccer to its basics and to try to discover what statistic is most important and how much each one counts, the sport must be analyzed. Usually in soccer, other than the player rankings, what shows up the most at the end are: the possession, the passing percentages, and the shots on/off target. These are just some of the main factors that can decide the outcome of a match, the human factor just being impossible to quanta size. Breaking down each of these 3 key factors into linear regression can show how much, if at all each statistic can actually help improve the winning percentage. To insure that the sample not be skewed a large amount of data must be randomly selected to ensure a lesser margin of error. Then to compare statistics to each other, graphs have been formed to more easily see how teams compare to each other. After the result it is apparent that the win percentage is increased by each statistic as each increase, but it is marginal and each only increases a little. So the question now is what else could be studied to get the biggest factor, and which is more effective for a team.

Keywords: the possession, the passing percentages, and the shots on/off target.