

DANIEL MEMMERT & BENJAMIN NOËL

# THE PENALTY KICK

THE PSYCHOLOGY OF SUCCESS



MEYER & MEYER SPORT

## The Penalty Kick

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## *FOREWORD*

Penalties and penalty shootouts are very special situations: There is a lot of adrenaline, stress, rush, stage fright, thrill, tension—and fun.

In my role as a national goalkeeper coach, I am lucky enough to work with some of the greatest, world-class goalkeepers. My aspiration is to develop “my boys” through making use of imminent and innovative playing methods.

The FIFA World Cup 2006 in Germany demonstrated the importance of meticulous preparation and the right training for goalkeepers. This information on the now well-known note helped Jens Lehmann in the penalty shootout against Argentina, and was the sole reason for the match later being labeled as the “summer fairy tale.” Back then, we still used tallies and just processed all of the information that was handed to us. However, today we use a database which presents all penalty takers alongside their preferred shot directions and shot strategies. This allows me to make quantitative and qualitative observations and then pass them on in a structured manner. Moreover, this enables my protégés to make up their own mind about their opponents and scorers.

There are many myths surrounding the penalty kick. In fact, I am often confronted with diverse theories, and continually asked about the way that the goalkeeper should behave. Should he draw the scorer’s attention to him? Should he perform deceptive movements? Should he jump toward the left side if the scorer

kicks the ball with his right foot? Should the goalkeeper try to appear “tall?” And if so, how? Should he remain standing for a long time? Should he offer one corner? After being bombarded with questions, I often wonder if anyone has the answers.

This is where this book can help. The authors were able to bring light into the darkness and present saved results on penalty shootouts. The sports science results on this research area are remarkable, making it apparent that it is not just soccer practice that stimulates soccer science, but rather that it works both ways. The next step would be to consolidate practice recommendations from these results in order to elaborate games and trainings and bring innovation to the training ground.

Dear soccer friends, I hope you enjoy reading this book, and I wish you good luck for the world’s most wonderful side activity.

**–Andreas Köpke**

*National goalkeeper coach of “Die Mannschaft”*

## *INTRODUCTION*

Penalty shootouts determine the outcome of games and are therefore both fascinating and meaningful in soccer, from grass roots up to the UEFA Champions League. This is the reason why penalty kicks interest a large amount of viewers, fans, media, athletes, and teams. It is highly probable that for upcoming events, we will experience individual penalty kicks in preliminary round matches, or penalty shootouts in knockout matches will decide whether a team drops out or advances to the next round. This will cause whole nations to either drown in grief or express their exuberant excitement in a parade, turning it into something that will go on to be remembered for a long time.

During the 2016 Rio Olympics men's final, a true penalty kick thriller occurred in the Maracanã stadium. The German soccer team lost against Brazil 5-6 in a penalty shootout. During regular play, Neymar gave his team the lead, but Max Meyer then went on to score in the second half. In the final penalty shootout, Nils Petersen was the only scorer who missed, allowing Neymar to solidify Brazil's victory. Since 1976, almost every fifth knockout match of the FIFA World Cup or the UEFA European Championship has been decided by a penalty shootout. There's a 60% chance that the future FIFA World or FIFA European leader will have to engage in a penalty shootout on its way to claim the title.

In the last 30 years, more than 120 scientific studies have tried to identify factors which influence the success of a penalty kick. In this popular science book, we present the knowledge of penalty shootouts which can easily be understood by players,

trainers, and even the average soccer fan. We do not, however, neglect consolidated research results in sports psychology and the movement science. Sports scientific presentations, which are commonly not readily available to the public, are connected and processed “easily and loosely” with historical soccer dramas. It is more about common statements about the shot and point, than about outstanding scorers’ or goalkeepers’ performances. For example, we do not try to clarify why Jean-Marie Pfaff has the best rate in the German Bundesliga, with 66% of saved penalty shots (10 were saved out of 15 on the post apart from the goal). Likewise, we do not explain why Hans Joachim Abel has been able to convert all of his 16 penalty shots and, thereby become the best penalty taker in the history of the Bundesliga (besides Manfred Kaltz, who has the most converted penalty shootouts, however with “only” a rate of 88%). From the goalkeeper’s viewpoint, we do not question why certain penalty shootout killers, like Robert Enke who saved 9 out of 18 penalty kicks, exist. The success probability is an unbelievable 50%, with only every fourth penalty kick being held. We also do not question why successful goalkeepers exist, goalkeepers like Hans Jörg Butt who not only saved 14, but also scored 26 (3 of them in the UEFA Champions-League).

In the penalty shootout, two people are always the focus: the kicker and the goalkeeper. We have therefore divided our chapters according to these two roles and have explored individual time phases before the kick for both of them. Furthermore, we have chosen current and historical stories which should clarify how sports science can possibly explain past dramatic shootouts.

However, when viewing the scientific data, it becomes increasingly apparent that many performance aspects of penalty

shootouts are not sufficiently explored. This can be the reason for why few hedged findings have made their way onto the training ground, and hardly any systematic intervention measurements exist to improve the performance in penalty kicks. Therefore, we continue to hear the phrase “penalty shootouts cannot be trained!” One of the greatest German coaches, Jupp Heynckes (Champions League success with Real Madrid 1998 and FC Bayern München 2013) has even referred to penalty shootouts as “lottery games.” The pressure of the game cannot be reconstructed, as with the physical and psychological exhaustion after 120 minutes. However, more than 120 sports science studies show that the probability of successfully scoring from the point can be optimized, and penalties, corner kicks, or free kicks can therefore be systematically trained.

The phenomenon of the penalty shootout is examined in this book from different and interesting approaches. Whether or not these findings can be implemented at the next FIFA World Cup is doubtful. In any case, we all hope that our national teams successfully take part in the FIFA World Cup, with or without penalty kicks.

## **REFERENCES**

- Dicks, M., Uehara, L., & Lima, C. (2011). Deception, individual differences and penalty kicks: Implications for goalkeeping in Association Football. *International Journal of Sports Science & Coaching*, 6, 515-521. DOI: 10.1260/1747-9541.6.4.515
- Froese, G. (2012). *Sportpsychologische Einflussfaktoren der Leistung von Elfmeterschützen*. Hamburg: Verlag Dr. Kovač.