



HOW COACHES INFLUENCE REFEREE DECISIONS

- A PRINCIPAL-AGENT PERSPECTIVE ON NON-PROFESSIONAL SOCCER -

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Doctor of Philosophy (Dr. Phil.) in Sports Sciences

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List of Abbreviations

Approx.	Approximately
BFI-S	Big-Five-Inventory-Shortversion
BIDR	Balanced Inventory of Desirable Responses
DFB	German Soccer Association (Original German notion: 'Deutscher Fußball Bund')
FIFA	Fédération Internationale de Football Association (International Soccer Association)
FLVW	Westfalian Soccer and Athletics Association (Original German notion: 'Fußball- und Leichtathletikverband Westfalen')
NEO-PI	NEO Personality Inventory
NEO-PI-R	NEO Personality Inventory Revised
PC	Personal Computer
SPSS	Statistical Package for the Social Sciences
UEFA	Union of European Football Associations
VSA	Regional referee board (Original German notion: 'Verbands-Schiedsrichterausschuss')

I Introduction

1 Problem Definition

‘Think twice before you speak, because your words and influence will plant the seed of either success or failure in the mind of another.’

(Napoleon Hill, 1883 - 1970)

7,185,670,942 ...

This is the number of people currently living in this world (United States Census Bureau, effective date 15/08/2014). Whenever at least two of these people interact with each other, communication takes place (Hartley, 1999, p. 78-79). The significance of human communication becomes even more obvious when following Paul Watzlawick’s view that ‘one cannot *not* communicate’ (Watzlawick, Beavin, & Jackson, 1967, p. 51).

In this context, Napoleon Hill’s quote (see above) outlines the importance of *what* people say whenever they communicate. This insight might not appear revolutionary from a theoretical point of view, but represents quite a challenge in reality. A boss trying to make his subordinates perform at their best possible effort can be considered as such a communicative challenge. At the same time, this attempt represents an influence on the subordinate’s decisions (e.g., with respect to the allocation of his personal resources).

The constellation between a boss and a subordinate is one of the most relevant applications of the *principal-agent theory*. The theory serves as a theoretical contemplation of settings in which an agent (e.g., the subordinate) performs a specific task or service on behalf of a principal (e.g., the boss). The basic assumption of the theory is that the principal and agent face the problem of *asymmetric information* (Quiggin & Chambers, 2003).

Contracts give the principal the formal authority to influence the agent's performance with the intention to maximize his own profits (Jäger, 2008). In doing so, the agent's intentions may lead to a result that does not represent a perfect fulfillment of the principal's interests (Foss, 1995). Due to its broad range of adaptability, this theory has also been transferred to other practical settings such as a client assigning an attorney (Maltzman, 1998, p. 11) or an insurance company providing service for a client (Laffont & Martimort, 2001, p. 100-101).

The relevance of agency problems and individuals trying to maximize own profits has also found expression in works on sports-related applications such as soccer. The majority of stakeholders (e.g., the club management, coaches, players, and fans) in such a setting aim at exerting a legal influence on the match outcome by performing well. However, these parties have been repeatedly subject to '*game fixing*' attempts by the gambling mafia and adherent parties. Various examples have shown that with their (financial) intervention, involved parties can be bribed (Hunter, 2014). As a consequence, match results may be predetermined and the idea of a fair competition is subverted illegally.

Despite the undoubted relevance of illegal influence on match results in soccer, this work will focus on a specific constellation in which the extent of 'legally' exerted influence shall be analyzed. More concretely, the influence of coaches on referee decisions shall be elaborated. In doing so, this work shall represent another contribution to research on agency problems in sports.

Garicano, Palacio, and Prendergast (2001), for example, tried to elaborate on the consequences of the pressure exerted on the referee by the crowd in Spanish soccer ('Primera Division'). They consider the referee as an agent and identify a home bias regarding the awarded extra time. Sutter and Kocher (2004) also ascribe the agent role to the referee and elaborate a systematic home bias in professional soccer with respect to the awarded penalties.

Referees basically act on behalf of their referee boards (principal) which are responsible for the referee recruitment and training, their assignment to matches, their promotion, and relegation. In order to realize the aim of the referee boards - the correct and unbiased enforcement of the laws of the game - they have to assign neutral referees to the matches. In this case, the (incomplete) contract between principal and agent is manifested in the laws of the game in combination with the assignment of a referee to a certain match.

In aforementioned studies, the referee biases represent a deviation from the principal's aim. In order to avoid this kind of problem, the principal-agent theory proposes various solution mechanisms of which monitoring the agent (e.g., in order to detect low effort by the agent) will be the most relevant in this study.

In professional soccer, monitoring mechanisms are installed in form of official observers who evaluate the referee's performance in every match. Basing on their reports, the referee boards decide about promotion and relegation of referees at the end of a season. Assuming that every referee is willing to reach the maximum, they will have to apply a high effort level to be successful.

This study aims at closing a research gap by applying the principal-agent theory to a similar, yet different setting in non-professional soccer. In contrast to referees in professional divisions, comprehensive monitoring mechanisms are not in place in amateur soccer. This means that official observers are rarely present during the matches. As a consequence, the principal (the referee boards) cannot monitor the agent's (the referee's) performance on the pitch. This problem might find expression in a referee who is not close to the action, because he chooses not to apply his optimal physical ability to run. Furthermore, the referee might also make use of his discretionary power by consciously making a call for a certain team (e.g., with the intention to calm the players or coach down).

Even though this behavior does not contradict the laws of the game fundamentally, it is not in line with a referee's perfectly objective enforcement of the laws of the game. The absence of an official observer (as a principal's monitoring mechanism) in non-professional soccer therefore leads to a constellation that is specific for three reasons.

Firstly, the studies by Garicano, Palacio, and Prendergast (2001), but also Sutter and Kocher (2004) on referee bias in professional soccer (where official observers are in place) allow for the assumption that the extent of referee bias is larger in non-professional soccer due to missing monitoring mechanisms.

Secondly (and most importantly), this kind of principal-agent relationship also facilitates the intervention of a third party (e.g., a coach). Despite their actual tasks such as choosing a proper lineup and tactics, coaches might also try to be successful by influencing the referee. This is, because favorable decisions make a successful result (e.g., a victory) more probable. This behavior is contradictory to the principal's aims of a correct and objective enforcement of the laws of the game. It can be considered as 'principal-like' behavior (acting as a principal without having the formal right to do so).

Thirdly, in contrast to arbitrators in professional leagues, referees in non-professional soccer cannot be thoroughly trained to resist potential influencing attempts (e.g., by coaches) due to financial restrictions. As a consequence, referees in non-professional soccer may be more susceptible to influences subverting their principal's aims.

These three specificities frame a setting which has not been object of research so far. Besides closing this research gap, the study shall also help to figure out if specific elements of the principal-agent theory can be adjusted. More specifically, the original theory disregards the influence of a third party in a given constellation, because it is assumed that the latter cannot impact the setting when a complete contract is in place. In reality, however, this is not necessarily the case due to asymmetric information.

Furthermore, the theory has also been criticized due to its narrow (economic) view. Wiseman, Cuevas-Rodriguez, and Gomez-Mejia (2012), for example, urge that the social context in which the underlying contract is effective needs to be incorporated. This approach goes along with the idea of man underlying behavioral economics which assumes that a person's behavior is also influenced by social and psychological factors (Camerer & Loewenstein, 2004, p. 3-51). Therefore, it will be especially interesting to figure out if the parties' behavior in a sports-related principal-agent constellation is not only determined by pure economic motives, but also affected by values such as fairness and sportsmanship.

The present study shall elaborate on elements of the principal-agent theory which can potentially be enriched. Basing on these contemplations, the following question shall be answered:

Given a principal-agent setting in which the principal cannot monitor the agent's performance: (How) Can a third party undermine the principal's interests by influencing the agent with communicative means? Can a sports-related setting help to enrich elements of the theory?

2 Course of the Work

The work is divided into four major chapters (roman numerals I to IV). Following this introduction (Chapter I), Chapter II (Fundamentals & Theoretical Framework) aims at introducing the organization and structures referees in non-professional divisions have to cope with. Furthermore, the theoretical basis with the principal-agent theory as its major element will be presented. Subsequently, the relevance of theory for this sports-related setting and possible solution mechanisms will be discussed. Based on this framework, the working model shall help to understand the interactions and relations in the given principal-agent setting. This shall be reached by illustrating how the coaches interact with the referees and which role the third party takes over in this constellation.

Chapter III (Analyses) focuses on the empirical elements of the work. Firstly, the underlying questions will be developed based on the principal-agent theory as the theoretical foundation. These questions will serve as a framework for the study. Secondly, the methodology will be explained in order to understand the course of the empirical analysis part. In this section, the basic setup of the two questionnaires and the adaptation of the final data file (SPSS) will be explained. In the results section, the empirical findings from both, the surveys and the official match data, will be presented. In a first step, basic descriptive statistics are outlined with the intention to give a basic understanding of the data. In a second step, the underlying questions will be answered based on the data.

In Chapter IV (Discussion of the Results), the results will be discussed with regard to the appropriateness of the principal-agent theory for the presented case. Additionally, recommendations for an enrichment of theoretical elements will be given. The results will then be transferred to a 'classic' area of application of the theory – the practical implications for a manager dealing with project management issues. This happens with the aim of elaborating on the implications for other principal-agent settings.

3 State of Research

Soccer referees have been increasingly in the focus of scientific research, especially in sports literature. In particular, the question 'is there a home-advantage' has been investigated in numerous papers. Pollard (1986, p. 237-248) found out that there is such an advantage in all major professional team sports in England and North America. This advantage was found to be the greatest in soccer. Johnston (2008, p. 563-568) elaborated on referee bias regarding the attendance and the home advantage in English Soccer (2006-2007). He found out that by focusing only on those matches played at grounds where there was considerable variation in attendances over the season, changes in the attendance had no significant relationship to the outcome of those matches. Furthermore, Johnston did not notice a consequent appearance of referee bias in that specific season.

In contrast to Johnston, Nevill, Balmer, and Williams (2002) identified a clear home advantage that resulted from the crowd noise in the stadium. When referees were confronted with various tackles either with noise or without, it became obvious that the presence of crowd noise had a significant effect on the taken decisions. The referees viewing the challenges with crowd noise in the background were more insecure in their decision making and awarded fewer fouls (15.5%) against the home team, compared with the ones watching the game without noise.

In another study, Balmer, Nevill, Lane, Ward, Williams, and Fairclough (2007) tested the hypothesis that biased decisions in favor of the home team are directly linked to increased anxiety and arousal due to the presence of crowd noise. With the help of video scenes, they found out that this hypothesis could indeed be approved. Lucey and Power (2009) also worked on the question whether there is a home advantage in soccer resulting from referee biases. They did so especially with regard to the awarded stoppage time. Lucey and Power found out that there is a slight support for the respective hypotheses.

However, the reasons for this finding are neither related to the stage of the season, nor the strength of the teams or the audience. Lane, Nevill, Ahmad, and Balmer (2006) tried to figure out the factors having an impact on the referee's decisions during a match. By conducting qualitative semi-structured interviews, the authors concluded that the audience may not affect decisions at matches with a large crowd, but can be powerful at matches with small crowds. In addition to that, the authors underlined that referees are aware of the fact that not all their decisions are correct. However, the question if a wrong decision has an effect on later calls is not answered in their work. Furthermore, it was found out that the referee's experience strongly interacts with other related issues. It may help to cope with a large crowd and also the decision if a tackle has to be considered as a foul or not. Another relevant aspect is the player's reaction. According to the authors, the player's behavior also has an influence on the decision (e.g., to award a penalty or not). Similarly to the factors mentioned above, the work has also analyzed the impact of opinion, control, personal life, environmental factors, professionalism, and crowd interaction.

In contrast to the aforementioned works, Dohmen (2008) laid his focus on the German 'Bundesliga'. His focus was also set on referee bias. Dohmen underlined that referees tend to award more stoppage time in games in which the home team was behind. The same bias was identified regarding the awarded goals and penalties. In accordance with the results from the 'Premier League', Dohmen has also experienced an influence of the crowd with regard to the referee bias. A similar study was conducted by Scoppa (2008) in the Italian 'Serie A'. He showed that referees were biased in favor of the home team, as the stoppage time was significantly longer if the home team was losing. Scoppa also underlined that the refereeing bias increased to a great extent when there was no running track in the stadium. This circumstance was leading to the situation that the audience was close to the pitch. Consequently, the hypothesis that social pressure influences the referee's decisions found support.

When analyzing the referee's performance in German soccer, Unkelbach and Memmert (2008) focused on the awarded yellow cards. They found out that referees awarded fewer yellow cards at the beginning of a game as should be statistically expected. According to the authors, the concept of 'game management' was one possible explanation. Furthermore, the consistency model (Haubensak, 1992) may also be considered as a reason for this phenomenon. According to this view, referees have to calibrate a judgment scale and need to avoid extreme category judgments in the beginning (e.g., yellow cards) in order to preserve degrees of freedom on that scale.

Buraimo, Forrest, and Simmons (2008) investigated the English 'Premier League' and the 'Bundesliga' with regard to disciplinary sanctions. However, in contrast to other papers, the authors also included 'within-game' information. They identified that players in a losing position tended to be more aggressive and thus were sanctioned more likely than the leading team. There was also evidence of home team favoritism in Germany because home teams without running tracks in their stadium attracted fewer yellow and red cards than teams playing in a stadium with a separation of fans from pitch. This could be considered as an indication of referee response to social pressure leading to a bias.

In contrast to the bias regarding awarded stoppage time and yellow cards, Plessner and Betsch (2001) analyzed the referee's bias with regard to penalties. In their study, more than 100 participants made decisions as a referee by watching videotaped scenes from an actual match. The authors came to the conclusion that an arbitrator's initial decisions have an impact on later calls. They found a negative correlation between the participants' successive penalty decisions with regard to the same team and a positive correlation between successive penalty decisions concerning the first team and then the opposing one (Plessner & Betsch, 2001).

In a recent paper, Di Corrado, Pellarin, and Agostini (2011) summarized the literature on social pressure and the referee's decision making with respect to yellow and red cards, awarded penalties, and stoppage time. They found out that the audience plays a significant role in the referee's decision making, leading to favoritism towards the home team. More precisely, the studies in question supported the view that the home team is shown fewer bookings and red cards than the away team (Buraimo, Forrest, & Simmons, 2008; Dawson & Dobson, 2010; Dohmen, 2005 & 2008; Downward & Jones, 2007).

Kocher and Sutter (2002) studied biased decisions of soccer referees in the German 'Bundesliga' with regard to the agency theory. This approach has neglected such a form of malfeasance by economic agents so far, but has rather concentrated on agents exerting suboptimal effort levels. Potential favoritism or biased behavior of referees can be tested by examining their decisions on awarding penalties or stoppage time. In their work, Kocher and Sutter (2008) figured out that referees awarded more penalties to home teams and more stoppage time in case the home team was behind.

In addition to the research on referee bias resulting from external factors extensive work has also been done with regard to psychological factors influencing a referee's decision making process (Brand, Plessner, & Unkelbach, 2008). The authors found out that bad calls regarding offside and awarding yellow cards can also be explained by models of perception and psychophysics. Other studies (Brand & Neß, 2004; Brand, Schneeloch, & Schmidt, 2006; Mascarenhas, Collins, & Mortimer, 2002; Unkelbach & Memmert, 2008) focused on the enforcement of the laws of the game or game management as the underlying reasons for the referee's decisions. Most of the aforementioned studies come to the conclusion that there are measurable referee biases. Some of them underline that the biases may lead to advantages for the home team. However, the question of 'do the respective referees actually take notice of the fact that they are influenced (e.g., by the crowd noise)' is not clearly answered.

It can be assumed that the referees in professional divisions do so, but do not feel an impact on their decision making process. This might be significantly different in non-professional divisions as the referees are less trained concerning the management of stress situations. As a consequence, they may be more 'open' to influences by coaches in order to please them and avoid even more criticism. As can be derived from the aforementioned arguments, the issue of decision making in sports has been subject to various studies. However, there are still aspects that have not been dealt with. Those aspects will be introduced in the following.

4 Scientific Gap

Extensive research has been done with regard to the factors that might have an impact on a referee's decisions during a soccer match. Especially professional divisions such as the 'Premier League' in England and the German 'Bundesliga' have been in the focus of numerous studies. One of the questions underlying the studies was if there is a significant advantage for the home team with regard to referee decisions. The existing studies tried to answer this question by analyzing disciplinary sanctions (yellow and red cards), awarded penalties, and the stoppage time. In some cases, the crowd noise was also taken into consideration as an influencing factor.

Surprisingly, the amateur divisions have been neglected so far. As a matter of fact, more than 75,000 referees are assigned to matches in these divisions every weekend out of which 4,997 are active in the FLVW area (Deutscher Fußball Bund, DFB referees statistics, effective date 01/01/2013). This work aims at closing a scientific gap in elaborating on the question how a third person stepping into an existing relation between a principal and an agent can influence the latter with the intention to maximize own profits.

The given constellation is especially interesting when the principal - in contrast to the third person - cannot monitor the agent's performance. Based on the findings, similar relations in business life shall be considered in order to elaborate on practical implications for a manager dealing with project management issues.

In the following, it shall be explained why the referee's decision making processes in professional and amateur divisions might differ and why studying the amateur divisions shall help to close a scientific gap.

4.1 Relationship between Referees and Coaches

Scientific research has focused on external factors such as the crowd noise, constructional circumstances in the stadium, in-game-information, the social background of players, etc. (Brand & Neß, 2004, p. 127-136). However, the relationship between referees and coaches in amateur divisions has not been subject to systematic scientific research. A gap can especially be detected for the question if and how coaches (third person) try to influence the referees (agent) and how those react accordingly, given that the referee boards (principal) cannot monitor the performance (on the pitch).

4.2 Differences between Professional and Amateur Divisions

Amateur divisions have been largely neglected in scientific literature. When comparing the professional leagues with amateur soccer, significant differences become apparent.

4.2.1 Education and Training

In contrast to their colleagues in professional leagues, non-professionals cannot profit from a thorough assistance and education during their career organized by the national referee board. In professional soccer, the referee's performance is evaluated by an official coach after every match by consulting videotaped scenes. The referee receives a detailed coaching and can improve his future performance.

In addition to this measure, there are regular trainings which are intended to prepare the referee for stress situations, rhetoric, psychology (e.g., coping with a heated-up atmosphere in the stadium, and/or massive protests by coaches), but also to improve his decision quality by addressing wrong calls from past match days on videotape.

Compared to this structured training philosophy, the situation in non-professional soccer is different. Firstly, the referees are steered and managed by regional and local boards, leading to different interpretations with respect to related topics such as training. Secondly, due to financial constraints, there are generally only few and scattered trainings which are even not accessible for all referees. As a consequence, the referees can be prepared less adequately for stressful situations during the match (e.g., influences by players, the crowd, or coaches).

4.2.2 Information

Another striking difference between the referees in professional and amateur soccer can be seen in terms of the information the referees have. Due to the media, the limited number of teams in professional divisions (56 teams in the three professional divisions in Germany), and a comprehensive match preparation, the referees are well-informed about the coaches' and players' characters before the match. This implies that the referees are well aware of potentially 'disturbing' characters. As a consequence, they can develop strategies beforehand in order to solve difficult situations that might come up during a match in advance. This might also affect their performance positively. Again, this preparation is hardly possible for referees who find themselves in non-professional leagues. Firstly, there are far more teams and players in those leagues which makes it hard to remember information on 'difficult characters'. Secondly, the media presence is significantly lower leading to a limited access on the respective information regarding players and/or coaches. And lastly, less money (if at all) is involved which means that referees in non-professional soccer might be less motivated to perform as adequately as their colleagues in professional divisions (at times).

In their case, the activity is rather a hobby on non-professional level and tends to be less performance-related. A possible relegation due to poor performances is less likely and does not have significant financial consequences in their case.

4.2.3 Structural Differences

The circumstances accompanying a match in a professional division and on amateur level are conspicuous - for example in terms of attendance. Due to the fact that there are thousands of spectators making noise in most matches in professional divisions, the coaches' behavior is normally not directly recognized by the referee. Furthermore, an assistant referee or the fourth official (if applicable) can act as a mediator in this case. In contrast, there are merely a few spectators in non-professional leagues. In this case, the referee directly takes notice and has to deal with the coaches' behavior and the efforts of influencing his decisions himself since assistant referees usually do not form part of amateur soccer (up to 'Landesliga').

Furthermore, studies on referees in professional divisions jointly assume that the referee does not consciously notice influencing attempts in regard to his decision making. This is not necessarily true for the amateur divisions. In contrast to their colleagues in professional leagues, amateur referees have to fear less negative consequences from wrong calls (objectively seen) as there are no cameras, slow motions, etc. More concretely, they are not object to nationwide criticism (sports magazines, TV shows, etc.) in case of 'wrong' calls. As a consequence of their 'poor' performance during the 2010 World Cup in South Africa, Howard Webb ('wrong' awarding of personal sanctions in the rough final), Jorge Larrionda (not awarding a regular goal for England vs. Germany), Roberto Rosetti (awarding a goal for Argentina despite an offside position) have not only been confronted with international criticism, insults, derision, but also death threats.

Additionally, there are normally no official observers judging the referee's performance in amateur divisions, whereas in the 'Bundesliga', the referees are monitored during every match.

In professional leagues, referees have to fear the relegation to a lower division (strongly connected with financial disadvantages) if their performance was poor. As this is not the case in amateur divisions, the referees might rather deliberately influence the course of a match by awarding free kicks, penalties, or personal sanctions in favor of the criticizing coach's team.

This might happen with the intention to calm him down and avoid trouble. In other words, the referees in non-professional leagues may make use of their 'discretionary power' more deliberately.

II Fundamentals and Theoretical Framework

5 Structures in Non-Professional Soccer

The structures in professional German leagues ('1. Bundesliga', '2. Bundesliga', and '3. Liga') differ significantly from the ones in amateur divisions. The regional and local referee boards in non-professional divisions suffer from a lack of referees, whereas the DFB ('Deutscher Fußball Bund') faces a strong competition among the top level referees. Due to financial advantages, the national referee board can also provide comprehensive trainings, facilitating improved performances on the pitch. The diverging circumstances lead to specific challenges for the referee boards in non-professional leagues. In the following, the structures in these divisions shall be introduced in order to illustrate the given circumstances.

5.1 Organization and League Structure

The German soccer association (DFB) consists of five regional associations which in turn incorporate 21 federal associations. More than 6,800,000 members are organized in the 25,000 clubs of the DFB acting as the umbrella association.

The soccer and athletics association in North Rhine-Westphalia (FLVW) is one of the 21 federal associations of the DFB. With its 2,377 soccer clubs, 17,500 teams, and more than 885,000 members, the FLVW is the second largest association in Germany ('DFB-Mitgliederstatistik 2013', effective date 02/05/2013).

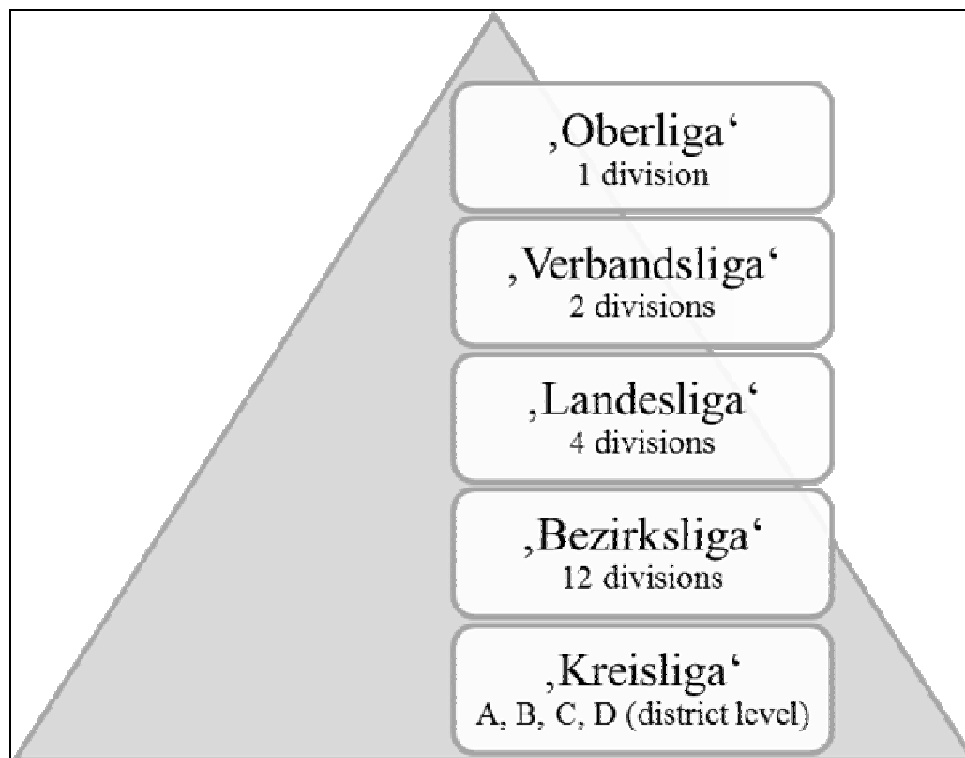


Figure 1: League Structure Male Seniors

The league structure in the FLVW is illustrated in Figure 1. The ‘Oberliga’ represents the highest division for male seniors in the FLVW. The next lower league is the ‘Verbandsliga’ which is split up into two divisions. The ‘Landesliga’ consists of four divisions and is followed by twelve ‘Bezirksliga’ divisions.

The aforementioned leagues are organized on FLVW level. However, the majority of players are organized in leagues on district level (‘Kreisliga’), which is operated by the districts. In most districts, the ‘Kreisliga’ is split up into three leagues (A, B, C) with further divisions each.

Due to an extraordinarily high number of players, some districts even operate a ‘Kreisliga D’ as the lowest division.

Male junior divisions are organized on a similar basis compared to the aforementioned leagues, but are additionally split up into the following age groups:

- A-Juniors: Under 19 years;
- B-Juniors: Under 17 years;
- C-Juniors: Under 15 years;
- D-Juniors: Under 13 years;
- E-Juniors: Under 11 years;
- F-Juniors: Under 9 years;
- G-Juniors: Under 7 years.

As opposed to more than 306,000 male players, only 34,500 women play soccer in the FLVW (in 2013). Despite the fact that there is no ‘Oberliga’ in female soccer, the leagues are structured in a similar way. However, they differ in the number of divisions per level. There is only one ‘Verbandsliga’ division, followed by three ‘Landesliga’ divisions, seven ‘Bezirksliga’ divisions and the ‘Kreisliga’ divisions on district level. This structure also exists for junior female players, but it has to be remarked that the number of divisions per level is even lower compared to senior female leagues.

5.2 Referees in the FLVW

4,997 referees are active in the FLVW, trying to enforce the laws of the game on the pitch. However, due to the lack of referees, not all matches (e.g., in D-Juniors divisions and in younger age groups) are staffed with official umpires.

The 33 referee boards on district level which again are subsumed in the comprehensive federal association’s referee board (VSA, ‘Verbands-Schiedsrichterausschuss’) are the referees’ governing bodies.

The boards on district level act as a managing body being responsible for recruitment, training, and assignment of the referees on local level. They also decide about a promotion and relegation of referees in their district and nominate the candidates for the pools of referees competing for a promotion on federal level up to the ‘Oberliga’ (division five).

5.2.1 Rules and Regulations

The laws of the game shall be pursued by players, coaches, officials, and referees in order to maintain organized match operations. Besides the existing laws of the game which are given by the world soccer association FIFA (‘Fédération Internationale de Football Association’) and adapted by the European soccer association UEFA (‘Union of European Football Associations’), the German soccer association DFB specifies the rules and regulations for its national soccer operations. The FLVW has established further rules and regulations specifying the match operations in the association. These also comprise the referees’ role. The main elements of this document are shown in Figure 2.

Paragraph	Contents
§ 1	General clauses
§ 2	Rights and duties during the match
§ 3	Rights and duties after the match
§ 4	Kick-Off in case of unpunctual final whistle in preceded match
§ 5	Absence of the referee
§ 6	Assignment, rejection, and dismissal of referee
§ 7	Jurisdiction against referees
§ 8	Punishment authorities against referees
Appendix	Training and examination clauses, performance classes
Youth referees	General clauses, qualification, assignment, training

Figure 2: Referees’ Rules and Regulations

These rules and regulations shall be enforced by the local referee boards. Due to the fact that it does not incorporate detailed instructions, it can only be considered as a basic framework regulating the interaction between the referees and their managing boards. Thus, the rules and regulations represent a form of incomplete contract between the two parties.

5.2.2 Recruitment

In order to facilitate a correct enforcement of the laws of the game by assigning neutral referees to the matches, the clubs in the district are obliged to provide a certain number of referees. This number depends on the number of teams in their club and their respective division. Generally, the club has to provide a referee for every senior team and for all A-, B-, and C-Junior teams. Three referees have to be provided if the team plays in a division that foresees assistant referees. If the clubs do not manage to provide sufficient referees, they are punished according to an official schedule (see Figure 3).

Step	Consequences
1	<p>Seasonal fine that is dependent on the division of the first team:</p> <ul style="list-style-type: none"> - Becomes effective in the first year - Teams in professional leagues, the “Regionalliga”, the “Oberliga”, the “Westfalenliga”: EUR 250.00 - Teams of the “Landesliga” and the “Bezirksliga”: EUR 200.00 - Teams of the “Kreisliga A, B, C and D”: EUR 150.00
2	<p>Ban: No organization of tournaments</p> <ul style="list-style-type: none"> - Becomes effective as soon as the club does not accomplish the required number of referees by 60% in the second season - Club anniversaries are an exception
3	<p>Disqualification/Relegation of a team</p> <ul style="list-style-type: none"> - Becomes effective in the third season if the number of required referees is not reached by 40% - Relegation of the club's male team in the lowest league - Deprivation of the championship title if a club has only one team that won the title - Deprivation of the team in the lowest division if a club disregards the clauses in three subsequent seasons

Figure 3: Sanction Mechanisms for a Lack of Referees

Generally, the clubs announce referee candidates participating in the training to become an official umpire. The local referee boards cannot influence the clubs' choice, as they are obliged to accept every candidate. The training consists of eight appointments (two hours each), in which the laws of the game are taught.

At the end of the training, the candidates have to pass a test consisting of a theoretical and a running part. The theoretical part consists of ten multiple-choice questions and twenty questions which have to be answered in written form.

The running test consists of the following three disciplines and conditions:

1. 50 meters (max. 9.5 seconds for males; max. 11.0 seconds for females)
2. 100 meters (max. 16.6 seconds for males; max. 19.0 seconds for females)
3. 1,000 meters (max. 5:30 minutes; for males; max. 6:00 minutes for females)

If these conditions are also fulfilled, the candidate becomes an official referee.

5.2.3 Assignment to Matches

As soon as the candidates have passed the test, they can be assigned to matches. New referees generally start their activity in the juniors division on district level. Generally, a top-down approach is applied regarding the assignment process. In a first step, the federal referee board of the FLVW (VSA) assigns referees and assistant referees to the men's matches in the 'Oberliga' (division five) and the referees for the matches in the men's 'Verbandsliga' (division six), 'Landesliga' (division seven), and the women's 'Verbandsliga'.

The referees for the youth matches of the A- and B-Junior's 'Westfalenliga' and the C-Junior's 'Regionalliga' (each representing the second highest junior's division in Germany) are scheduled next. A certain contingent of matches in the men's 'Bezirksliga' (division eight) and the A- and B-Junior's 'Landesliga' is also scheduled by the FLVW. The same approach is applied for the women matches.

Once those matches are scheduled, the referee boards on local level have to assign assistant referees to the matches in division six and seven, but also for youth matches of the A- and B-Junior's 'Westfalenliga' and the C-Junior's 'Regionalliga'.

However, the local boards only have to schedule those matches with assistant referees, which are refereed by an umpire from their respective district. Beside the assignment of referees and assistant referees to matches on FLVW level, the local boards also have to schedule the matches on district level. This comprises all matches in the senior's and junior's divisions, representing the vast majority in terms of referees needed.

Regardless of the division, the form and process of the referee assignment do not differ. All referees are assigned via an e-mail that provides the relevant information. The referees have to confirm the assignment by clicking on a link at the end of this e-mail (see Figure 4).

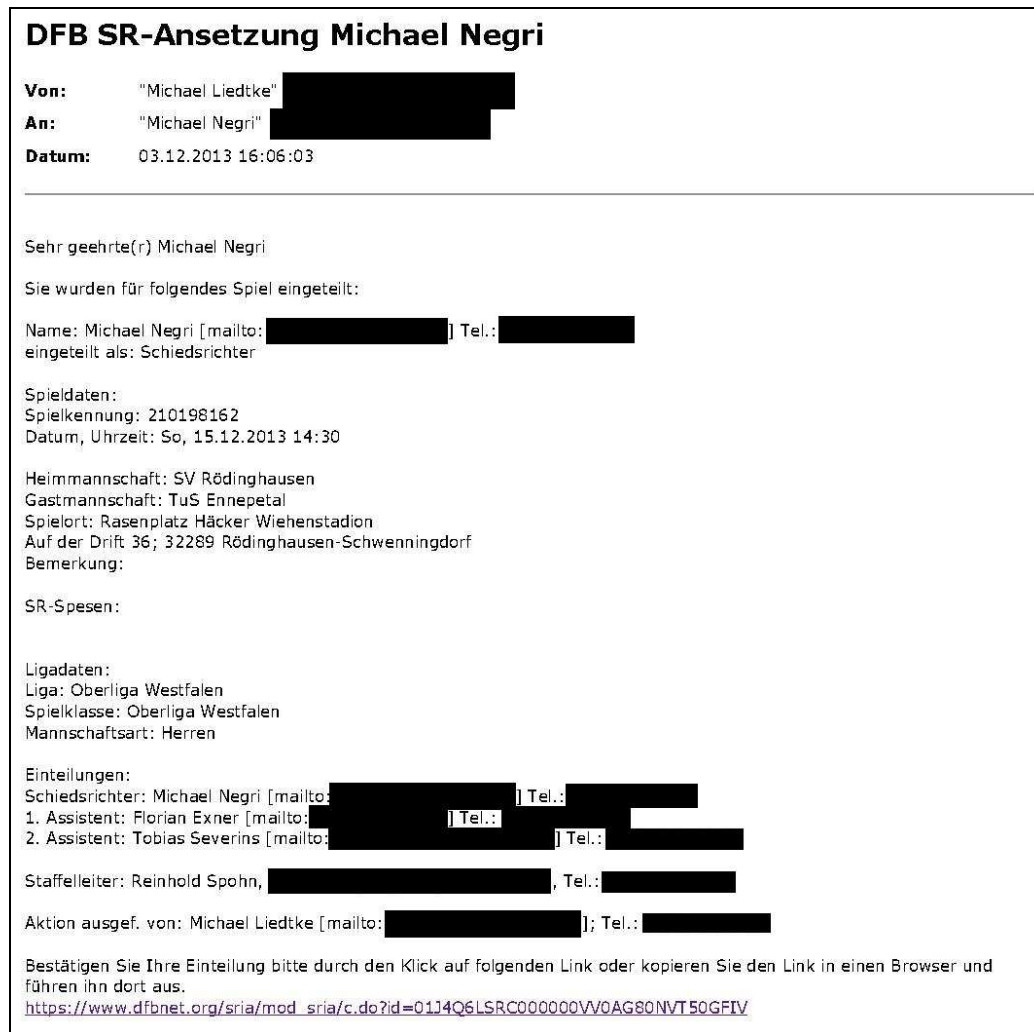


Figure 4: Referee Assignment E-Mail

5.2.4 Training

In contrast to the referees in professional divisions, the colleagues in amateur soccer cannot be trained systematically or individually due to personal and financial restrictions. More precisely, the referee boards on district level cannot thoroughly observe the referees on the pitch with the intention to give feedback and improve their performance. Consequently, other measures have to be taken. In order to refresh the knowledge regarding the laws of the game, all referees meet in their district on a regular basis. In most cases, these trainings take place monthly with the aim to inform the referees about news in the district or the FLVW, but also to talk about specific elements of the laws of the game. The topic usually changes every meeting.

The monthly appointments also serve as a forum and means to boost the referees' performance. The referees are supposed to attend these meeting on a regular basis. However, the local referee boards do not have effective means to facilitate the enforcement of referee attendance. Fines for absence only come into play whenever the absent referees do not inform their board that they cannot attend a meeting. As a consequence, many boards on district level have to cope with an unsatisfactory attendance and the lack of measures to improve the referees' performance on the pitch.

In addition to the meetings, the referees are supposed to be tested after each season. In analogy with the test for referee candidates, this test consists of a theoretical part with questions regarding the laws of the game and a running test. The requirements for the referees on district level differ slightly in dependence on the referee's respective division. Similarly to the monthly meeting, attendance in the test is low even though the referee boards consult these two criteria for a promotion and relegation on district level. Again, the local boards lack efficient measures to increase attendance and thus, performance in the long run.

5.2.5 Remuneration

The referees' remuneration varies with the respective division and shall be considered as a compensation of expenses. Matches on FLVW level are better paid than matches on district level, but are also usually connected with longer trips to the stadium. After a recent raise of remuneration, the salaries in 2014 vary between 50.00 € for the referee and 30.00 € for the assistant referees in matches of the 'Oberliga', 18.00 € for 'Kreisliga B' matches in Gütersloh, and 6.00 € for a D-Juniors' match on district level. A similar remuneration is valid for juniors' and females' divisions.

5.2.6 Promotion and Relegation

Referees can be promoted or relegated just as soccer teams. The boards on district level are responsible for the promotion or relegation in leagues up to the 'Kreisliga A'. The criteria for a promotion or relegation on district level are the participation in the monthly trainings and the annual test, but also the reliability in terms of the assignment to matches. However, the actual performance on the pitch can only hardly be evaluated as the referee board lacks the financial means to constantly assign observers to the matches. This procedure changes as soon as the referees fight for a promotion to a league on association's level (starting with the 'Bezirksliga'). In this case, the local referee boards can nominate candidates which then have to pass a test, consisting of a theoretical part (rules and regulations) and a running part. The detailed requirements are determined by the VSA, not by the local boards.

Referees fighting for a promotion to the 'Landesliga' face an even stricter procedure. The referee boards on district level (KSA) have a certain contingent that can be nominated for a pool with referees from the entire FLVW area. These candidates are then announced to the FLVW. In order to obtain the right to fight for a promotion during the respective season, the candidates have to pass a running test and a written theoretical test with thirty questions before the actual season starts. If they do so, the referees are observed during their matches by official observers. Normally, eight observations are made per referee during one season. The criteria for the assessment of the referee's performance during a match are shown in Figure 5.



Competition:		Match: Home Team – Away Team		
Division: XXX	Date: DD.MM.YYYY	Kick Off: Time		
Result: X : X	Half Time: (X:X)	Difficulty Level: 1=Normal / 2=Difficult / 3=Very difficult		
Referee:	Name	Points:	X.X	1/2/3
Assistant Referee 1:	Name	Points:	X.X	1/2/3
Assistant Referee 2:	Name	Points:	X.X	1/2/3
Referee Observer:	Name			

Point scale	9.0 – 10 - Extraordinary 8.5 – 8.9 - Very good 8.0 – 8.4 - Good	7.5 – 7.9 - Satisfactory 7.0 – 7.4 - Weak 6.0 – 6.9 - Very weak	5.0 – 5.9 - Unsatisfactory < 5.0 - Inacceptable
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1 Description of the match:

Text

2 Application and interpretation of the rules:

Text

3 Game Management, personality, tactical behavior, interaction with players and officials:

Text

4 Disciplinary control/ number of personal sanctions:

Text

Home team:	X initial	X second	X red			Away team:	X initial	X second	X red
	yellow cards	yellow cards	cards				yellow cards	yellow cards	cards

5 Physical constitution and positioning during the match:

+ Normal -		+ Normal -	
<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Always close to the action	<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Flexible diagonal
<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	View on the action	<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Close to the penalty area if necessary
<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Position during set piece		

Text

6 Conclusion and suggestions for improvement, reason for bonus point(s):

Text

7 Cooperation with assistant referees /Performance of assistant referees:

Referee Assistant 1 – Evaluation:

+ Normal -		+ Normal -	
<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Offside decisions	<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Positioning
<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Cooperation with referee	<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Indication of fouls
<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Control of game continuation	<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Behavior on the bench

Referee Assistant 2 – Evaluation:

+ Normal -		+ Normal -	
<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Offside decisions	<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Positioning
<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Cooperation with referee	<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Indication of fouls
<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Control of game continuation	<input type="checkbox"/> + <input checked="" type="checkbox"/> Normal <input type="checkbox"/> -	Behavior on the bench

Text

Figure 5: Observation Report for Referees in the ‘Oberliga’ (own translation)

After half of the season, the referees whose grades are below the average of the respective pool drop out. The best referees are promoted to the next higher division after the season. The higher the division is the more demanding the requirements of the theoretical and running test are.

5.3 Match Reports

Match reports have to be filled out online (<https://www.dfbnet.org>) for every match (see Figure 6). Before kick-off, both teams indicate their lineups including the substitutes. The referees have to fill out the report after every match indicating the following information:

- Kick-Off time and time of final whistle;
- stoppage time first half;
- stoppage time second half;
- result at half-time;
- final result;
- yellow cards;
- second-yellow cards;
- red cards;
- substitutions;
- scorers.

Spielberichte	Aktuelle Auswahl		
Spielplanauswahl	Spieltag - Datum:	30. -15.01.2014 (Mittwoch)	Begegnung: FC Gütersloh - DSC Arminia Bielefeld
Schiriansetzung	Freigabestatus:	Schiedsrichterfreigabe	Stadion - Ort: Heidewaldstadion - GÜTERSLOH
Pass Online	Fehlerhinweis:		
Abmelden			
Service	Spielverlauf		
Hilfsangebote	Spieleitung		
Passwort ändern	Schiedsrichter:	Schiedsrichterassistent 1:	Schiedsrichterassistent 2:
Benutzerdaten ändern	Michael Negri		
Downloads	Schiedsrichter und Assistenten nicht veröffentlichen: <input type="checkbox"/>		
Impressum			
Session / Sitzung	Spielzeiten:		
Begonnen um 14:54	Beginn:	18:30	Ergebnisse:
Ablauf um 15:16	Nachspielzeit:		Spielergebnis: Normales Ergebnis
	1. Halbzeit:	0	Heim:Gast
	Minuten		
	2. Halbzeit:	0	Zur Halbzeit: 1 : 1
	Minuten		Endergebnis: 1 : 2
	Ende:	20:15	
	Durchgeführte Kontrollen:		
	Schuhe: i.O. @ n.i.O. @		
	Bericht		
	Spielfeld: i.O. @ n.i.O. @		
	Bericht		
Meldung über besonders faires Verhalten: <input type="checkbox"/> siehe Bericht			
Sonstige Vorkommnisse			
Auf beiden Seiten kamen alle Einwechsel- sowie auf Seiten von Arminia Bielefeld auch die Probespieler zum Einsatz.			
Eingesetzte Auswechselspieler Heim <input type="button" value="Bearbeiten"/>			
Eingesetzte Auswechselspieler Gast <input type="button" value="Bearbeiten"/>			
Zeit	Nr	für Nr.	Zeit
Verwarnungen Heim <input type="button" value="Bearbeiten"/>			
Verwarnungen Gast <input type="button" value="Bearbeiten"/>			
Zeit	Nr	Grund	Zeit
83.	12	Foulspiel	
Feldverweise nach Gelb-Roter Karte Heim <input type="button" value="Bearbeiten"/>			
Feldverweise nach Gelb-Roter Karte Gast <input type="button" value="Bearbeiten"/>			
Zeit	Nr	Grund	Zeit
Feldverweise nach Roter Karte Heim <input type="button" value="Bearbeiten"/>			
Feldverweise nach Roter Karte Gast <input type="button" value="Bearbeiten"/>			
Zeit	Nr	Grund	Zeit
<input type="button" value="Zurück"/> <input type="button" value="Drucken"/> <input type="button" value="Presse (csv)"/> <input type="button" value="Presse (pdf)"/> <input type="button" value="Freigeben"/> <input type="button" value="Speichern"/>			

Figure 6: Match Report

6 Theoretical Framework

In this section, the relevant theories for this research project will be introduced. In a first step, the rationale behind the choice of the principal-agent theory will be explained. Subsequently, the theory will be presented as a suitable means to elaborate on this triad. Concluding, further theoretical elements (the ‘big five inventory’ and the concept of ‘social desirability’) will be introduced.

6.1 Rationale behind the Choice of the underlying Theory

The triad of referee, local referee boards, and coaches is particularly interesting as every party’s profit depends on the other parties’ behavior. More concretely, the (local) referee boards have to rely on the referees as they are their agents enforcing the laws of the game on their behalf. The referees, in turn, depend on their boards as those manage the match operations and represent the referees’ interests towards the regional and national institutions. Additionally, the coaches’ profit depends on the referee’s performance as this might have a direct effect on the match outcome for their team. In contrast, the referees profit may increase with a coach who appears as a fair sportsman, not trying to influence him. From an economic perspective, all parties can be considered as profit maximizing individuals aiming at their own best possible outcome. Pratt and Zeckhauser (1985) describe such a constellation as follows:

‘Whenever one individual depends on the action of another, an agency relationship arises. The individual taking the action is called the agent. The affected party is the principal.’

Following this view, the principal-agent theory seems to be a suitable approach to analyze the presented triad. Besides its applicability to the presented setting, it will be interesting to figure out if the principal-agent theory’s idea of man as a perfectly rational homo oeconomicus can be maintained.

More concretely, due to the fact that the setting is located in non-professional sports it may be assumed that the parties' behavior is not solely determined by economic motives, but rather by values such as fairness and sportsmanship (Camerer & Loewenstein, 2004, p. 3-51). This contemplation goes along with the idea of man in behavioral economics. Concretely, it is assumed that human beings do not only make decisions based on rational reasons, but also on social, psychological, and cognitive aspects.

Taking the principal-agent theory as the major theoretical basis, it will be interesting to figure out if a sports-related setting supports the claim (e.g., manifested in behavioral economics) to adapt the underlying view of individuals making purely economic decisions.

6.2 Principal-Agent Theory

The principal-agent theory has its origin in the works 'The Nature of the Firm' (1937) and 'The Problem of Social Cost' (1960) by Ronald H. Coase (*1910 in Willesden, Great Britain). Coase has made a huge contribution to the economic question why firms exist at all. In the former work, Coase points out that a firm represents a network of formal agreements (incomplete contracts) which shall regulate the interaction between specific parties (Coase, 1937).

In his work 'The economic institutions of capitalism: Firms, markets, relational contracting', Oliver E. Williamson (*1932 in Superior, U.S.A.) coined the so called 'new institutional economics' (Schuhmann, 1987, p. 212; Erlei, Leschke, & Sauerland, 2007, p. 13) which comprise the 'property rights theory' (Furubotn & Pejovich, 1972, p. 1137-1162), the 'transaction cost theory', the 'contract theory' (Leipold, 1975, p. 357-385), and the 'principal-agent theory' (Picot, Dietl, & Franck, 1999, p. 85-94).

The principal-agent theory addresses problems resulting from asymmetric information and incomplete contracts. With its focus on constellations in which a person acts on behalf of another individual (Quiggin & Chambers, 2003), the theory has made an important contribution to economic literature.

Williamson (1985) stated that an increasing specificity of an investment also leads to an increasing incompleteness of the underlying contract. Generally, the theory examines the interaction and behavior of a principal (represented by the referee board in this work) with an agent (the referee). According to Pratt and Zeckhauser (1985), a principal-agent relationship occurs when a person's benefit (principal) depends on the performance of another individual (agent). As the interaction between the referees and the respective referee boards also represents a principal-agent relationship, the basic considerations of this theory seem suitable for the case presented and are illustrated in Figure 7.

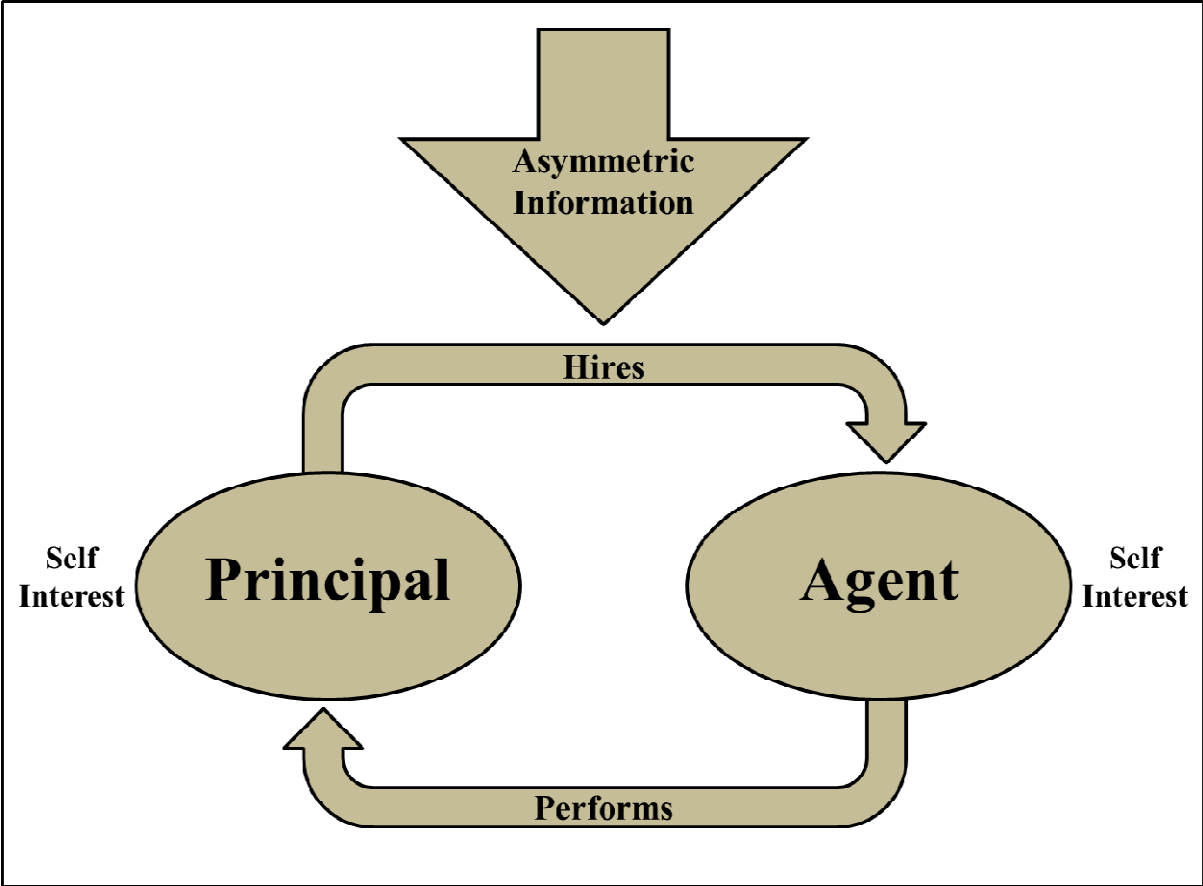


Figure 7: Principal-Agent Relationship

The agent is engaged by the principal to perform a certain task on his behalf. Their interaction generally is specified in a contract. Scott and Triantis (2005, p. 3-5) state that contracts are incomplete because of cost reasons (it is too expensive to write down all possible details) or unforeseeable contingencies.

According to Gintis (2000, p. 332), the principal's payoff in this constellation depends on the agent's action. The asymmetric information between principal and agent represents the major problem and leads to so called 'agency costs'. According to Jensen and Meckling (1976), those do not only comprise the monitoring expenditures, incentives, and bonding expenditures by the agent, but also the (monetary) difference between the best choice for the principal and the one actually chosen by the agent. Jensen and Meckling (1976, p. 308) refer to agency costs as follows:

'If both parties to the relationship are utility maximizers there is good reason to believe that the agent will not always act in the best interests of the principal. The principal can limit divergences from his interest by establishing appropriate incentives for the agent and by incurring monitoring costs designed to limit the aberrant activities of the agent.'

The theory also assumes that both players' self-interests do not correlate perfectly in this game (Laffont & Martimort, 2001, p. 146; Demski, 1980). According to Foss (1995), the agent possibly has intentions which do not allow for the perfect fulfillment of the principal's interests. Incomplete information may result in four problems of which hidden characteristics will be considered first.

6.2.1 *Hidden Characteristics*

When hiring or assigning a task to an agent, the principal potentially cannot assess the agent's characteristics (e.g., competencies and skills). Still, he is forced to mandate an agent to perform the relevant task on his behalf. Due to the fact that the agent's characteristics cannot be perfectly evaluated ex-ante (before signing the contract), the principal faces the danger of hiring an agent who is not willing to (or simply cannot) perform the task in the principal's best sense. The consequences of the principal's choice (e.g., the outcome of the agent's performance) therefore can only be evaluated after the decision has been made (ex-ante).

Campbell (1995) illustrates this constellation by choosing an example that refers to a taxi trip. When choosing a taxi the customer (principal) generally does not know if the taxi driver (agent) has made the necessary arrangement to ensure the principal's safety (e.g., by conducting necessary repairs). Following the theory, a taxi driver who tries to maximize his financial wealth, would not conduct repair works in order to save money. As a consequence, the passenger cannot be sure to sit in a safe taxi. The driver's (cars) characteristics remain hidden.

Assuming that an agent does (or can) not perform in the principal's best interest two general forms of agency costs for the principal come up. Given that the principal wants to find a new agent, he faces costs for the necessary 'recruiting' process and for sacking the current agent. With reference to the taxi example, the costs for finding another agent may be represented by the time it takes to find another taxi. The basic fee for calling a taxi (regardless if one chooses it for his trip) represents costs for sacking the current agent.

In case he wants to keep on working with the current agent, he has to find ways to improve the performance. This could be in form of training or coaching, representing costs for the principal. However, this approach is not applicable in the example, as driver and passenger normally have a one-time relationship.

The risk of hiring an inappropriate agent ('adverse selection') in advance can be reduced by applying various instruments such as 'signaling'. This, for example, is often done in the recruitment process of companies. More concretely, adverse selection may be avoided by communicating the company's values and philosophy openly in order to increase the chance of receiving applications from candidates who share these values. Thus, a successful cooperation may be more realistic.

'Screening' represents another way to find an appropriate agent. Conducting an assessment center and personal interviews, for example, can also help to find the desired employee (agent). Another approach is to set up 'self-selection' schemes.

In doing so, the principal offers different contracts to the agent. The agent's choice forebodes his intention. Transferring this approach to the recruitment process of a company, the persons in charge may offer the agent (the applicant) a contract with a fixed salary only and one with a fixed plus a performance related salary component. It is important to notice that the latter will result in a higher total monetary equivalent if the agent shows a good performance. Following the theory, applicants choosing the performance-related contract show more intrinsic motivation and thus are more appropriate than their competitors choosing the other version. Akerlof (1970) developed a model describing adverse selection. In his work 'Market for Lemons', he explains this problem by consulting the example of used cars.

6.2.2 Hidden Action and Hidden Information

'Hidden action' is another issue potentially coming up in a principal-agent relationship (Foss, 1995, p. 188). It is present when the principal cannot completely (or only at extraordinary costs) monitor the agent's action after having signed the contract. Despite being able to evaluate the results, he generally lacks the means to evaluate the process connected to the outcome (Rosen, 1987, p. 17). Thus, he cannot figure out if the agent acted in his own perfect self-interest (profit maximization). More concretely, the principal aims at reducing costs and increasing profits (Tirole, 1988).

Considering the passenger of a taxi again, hidden action can be considered as follows. The principal wants a safe trip to his destination. This shall happen as fast and cheap as possible. The taxi driver can maximize profits by not taking the optimal (shortest) way for the principal. Instead, he may rather choose a longer route to increase the charge (Campbell, 1995, p. 7). Even if the principal is able to control the quality of the output (arriving at the destination), it remains questionable if the agent has dedicated the maximal performance level under the given constraints. As a solution, the principal can set up monitoring mechanisms to closer analyze the agent's effort.

If the agent does not choose a high effort level, this is denoted as ‘moral hazard’. This problem can be avoided by installing incentive schemes fostering the agent’s motivation. More concretely, his pay can be directly linked to the quality and/or quantity of the outcome. Again, agency costs incur for these mechanisms.

In this context, another problem caused by asymmetric information shall be introduced. Besides problems resulting from ‘hidden action’, ‘hidden information’ might bear risks for the principal as well. More specifically, the principal can oversee the agent’s performance, but cannot assess the quality of the result due to a lack of knowledge. Contemplating the production of a PC (personal computer), the principal can monitor the production process, but is not capable to assess its quality, because he does not have the necessary knowledge. Reducing this form of information asymmetry again leads to agency costs. In this case, the principal may potentially want to train himself in order to have a better understanding of personal computers.

6.2.3 *Hidden Intention*

A fourth problem in a principal-agent constellation possibly comes up even if the principal can supervise the agent and no hidden information is in place. Still, the agent’s ‘hidden intention’ might not be in congruence with the principal’s aims. This can lead to drawbacks. More specifically, the agent might make use of a principal’s specific investment (e.g., purchasing a machine which exclusively produces microchips for personal computers). Presuming that only the agent can operate the machine, he might demand a higher salary. In this case, the principal is depending on the agent’s knowledge and might be obliged to comply - the principal finds himself in a ‘hold up’ situation. Given that the principal does not comply with the agent’s request, the machine represents a form of sunk costs. This is, because the machine cannot be used at all in this case.

The following situation represents a form of the driver's hidden intention in the taxi example: It shall be assumed that the customer has booked a flight at night and needs a taxi to catch this plane. The booking represents the specific investment. The driver is also informed about the booking and knows that is the only driver nearby. In this situation, he could charge a higher fee, as he is the only possibility for the customer to catch the plane (hold up). Following from this constellation, the customer can either accept the higher fee, or he will miss his flight. Assuming that he does not want to pay the higher fee, the costs for the booked flight represent sunk costs (Campbell, 1995, p. 7-8).

In addition to aforementioned strategies, the literature on principal-agent relations proposes further solutions for problems coming up in this constellation. Information systems, bureaucratic control, and incentives can be seen as the most accepted ones. An effective organizational culture, trust and a good reputation might also be a good basis for a positive principal-agent relation (Eisenhardt, 1989, p. 57-74).

Elaborating on the case against the background of the principal-agent theory seems very promising. More concretely, the referees can be considered as service providers in charge of managing the game in accordance with the existing rules and regulations. In this constellation, the referees take over the role of the agent. The referee boards represent the principals whose aim it is to maximize 'profits' by reaching a correct enforcement of the laws. The contract between both parties is represented by the assignment to a specific match. Their duties and rights are specified by the DFB within the framework of the soccer rules. With the confirmation of an assignment to a specific match (e-mail), the referee agrees to comply with the rules and his role a neutral arbitrator acting on behalf of their boards. The principal-agent theory therefore shall help to understand, how the referees perceive their role and their way of acting.

It will be interesting to elaborate on the influence of a third person (coaches) who step into this relationship attempting to reach favorable referee decisions (profit maximization). In doing so, coaches might subvert the principal's aims.

Transferring economic theories to sports related topics is not a new phenomenon. According to Sutter and Kocher (2004), referees act as agents. However, the role of referees has not been explored thoroughly and thus leaves room for further research (Sutter & Kocher, 2004). Basing on the assumption that referees act as agents in soccer, various parties could appear as a potential principal. In this work, the role of coaches as a 'disturbing factor' will be in the center of interest.

6.3 Further Theoretical Elements with Relevance for the Analysis

Even though the principal-agent theory represents the relevant theory for this study, further elements shall also be consulted in order to gain a broader view on the topic, backing up the findings derived from the main theory.

6.3.1 *Big-Five-Inventory-Shortversion (BFI-S)*

The question of how and why referees can be influenced may also be answered by having a closer look at their personality traits. Within the past decades, psychologists have agreed on a general structure describing the human personality that is referred to as the Big Five personality dimensions (Goldberg, 1981; John & Srivastava, 1999). This approach has its origin in two traditions out of which the psycho-lexical tradition, developed by Gordon Allport (1937) and Raymond Cattell (1946) is the first one. According to this approach, all differences in personality can be expressed by personality describing adjectives (Gerlitz & Schupp, 2005, p. 2). Various analyses of those adjectives in Anglo-American dictionaries lead to a reduction to 35 variables, which again were reduced to five variables in the course of another analysis conducted by Tupes and Christal (1961).

The second approach is referred to as differential and clinical tradition of personality research conducted by William Stern (1911) and Hans Eysenck (1947).

It is assumed that consistent and stable differences in individuals' personalities can be ascribed to genetic differences (Gerlitz & Schupp, 2005, p. 2). Eysenck (1947) initially elaborated the dimensions 'extraversion' and 'neuroticism', but added 'psychoticism' as a third pillar later on. Paul Costa and Robert McCrae began their research on the development of personality assessments based on factor models in the 1970s and developed a three-factor model consisting of 'neuroticism', 'extraversion', and 'openness to experience'. Those three dimensions established the acronym NEO (Costa & McCrae, 1976). Costa and McCrae then began to develop scales to assess 'agreeableness' and 'conscientiousness' in the early 1980s as a consequence of similarities between their three-factor NEO Personality Inventory and Goldberg's Big Five (John & Srivastava, 1999, p. 102-138). In 1985, both developed the NEO Personality Inventory (NEO-PI), which measures the dimensions neuroticism, extraversion, and openness to experience with six facets each. The dimensions agreeableness and conscientiousness are captured with 18 items each (Costa & McCrae, 1985).

In 1992, Costa and McCrae unified the dimensions and adapted the latter two by also dividing them into six subscales. Following Costa and McCrae (1992), this approach today is referred to as NEO Personality Inventory Revised (NEO-PI-R). Gerlitz and Schupp (2005) base their tested and validated Big-Five-Inventory-Shortversion (BFI-S) on this revised inventory by applying only three items per dimension. The latter version shall also find application in this research project by integrating it into the survey (see 11.1). In order to have a better understanding of the five aforementioned dimensions, they shall be shortly explained in the following.

‘Neuroticism’ as one of the five dimensions of personality describes a person’s tendency to have negative emotions. Feelings that are ascribed to neurotic individuals are anxiety, guilt, shyness, and anger (Matthews & Deary, 1998). People who score high on the neuroticism scale also face the risk of phobia and depression (Hettema, Neale, Myers, Prescott, & Kendler, 2006, p. 857-864).

‘Extraversion’ as the second dimension describes persons who like to interact with others, are talkative, and assertive (Furnham, 2008, p. 1-30). Those people are also outgoing, normally have many friends, and like changes (Eysenck & Eysenck, 1975, p. 5).

‘Openness to experience’ is another pillar constituting the five personality dimensions (McCrae & John, 1992, p. 175-215). Individuals who score high on this scale are generally looking for variety and can be considered as curious and imaginative (Costa & McCrae, 1992).

The fourth dimension is called ‘agreeableness’ and describes people who are basically looking for harmony and can be described as helpful and cooperative (Graziano & Eisenberg, 1997). Following Goldberg (1981), other traits of agreeable individuals are trustfulness and friendliness.

‘Conscientiousness’ represents the fifth dimension of the big five. A high score on this scale indicates that the respective person is self-disciplined, organized, reliable, and willing to fulfill a certain task (Weiten, 2012, p. 478). Furthermore, those people tend to be ordered, but also work ethically and efficiently (DeYoung, Quilty, & Peterson, 2007, p. 880-896). Costa and McCrae (1992) state that individuals with a low score for ‘conscientiousness’ have difficulties in motivating themselves. As a consequence, they rather procrastinate tasks (Dewitt & Schouwenburg, 2002, p. 469-489).

In the further course of this work, the BFI-S will be applied as it represents a validated construct with fewer items than the original version. Due to the fact that the applied surveys (see 11.1) do not focus on the referee's and coaches' character, but rather considers them as one of various factors in the given setting, the short version shall be sufficient.

6.3.2 *Social Desirability*

Much information on what we think is important to explain human behavior is a result of self-reports (Peterson & Kerin, 1981). As a consequence, the human tendency to let oneself appear in the best possible light may lead to biased answers towards what is considered to be 'good' or ethical (Maccoby & Maccoby, 1954). 'Social Desirability' seems to occur in all self-report means and was found to be relevant in virtually all social sciences studies (Peltier & Walsh, 1990; Zerbe & Paulhus, 1987; Simon & Simon, 1975). Not acknowledging social desirability tendencies in the interpretation of research results may therefore lead to inappropriate interpretations of human behavior and intentions (Mensch & Kandel, 1988).

According to Paulhus' studies (1991 & 1998), operationalizing this construct with only one factor may not be sufficient. Consequently, Paulhus developed the 'Balanced Inventory of Desirable Responding' (BIDR) with separate scales for 'Impression Management' and 'Self-Deceptive Enhancement'. The latter expression shall be understood as the contemplation of positive attributes that are thought to apply for oneself (Davies, French, & Keogh, 1998, p. 402). Impression management aims at creating a positive image in other persons' eyes. The intention behind this behavior is the individual's interest in how others perceive and rate them (Leary & Kowalski, 1990). This understanding will also be applied in the further course of the study.

7 The Relevance of the basic Principal-Agent Model for the Setting

In section 6.2, the principal-agent theory was introduced as the major theoretical basis for this work. Its application to sports related settings has already found relevance in various studies (Sutter & Kocher, 2004; Altman, 2011). Basing on the structures in non-professional soccer (see 5), it shall be figured out which of the problems and solution mechanisms described by the principal-agent theory are also relevant in the presented setting.

7.1 Hidden Characteristics

Similarly to the development of other honorary posts, soccer associations also face a lack of referees. 17,685 soccer teams are organized in the FLVW area.

However, only 4,997 referees are active at the same time, leading to a ratio of 0.28 referees per team (DFB Schiedsrichterstatistik 2013, effective date 01/01/2013). As a result, the aim of assigning an official referee to every match in the association cannot be reached. This situation will not improve in the short term when consulting the number of new referees. Only 383 new referee candidates were trained in 2012. This represents a drop of 198 referees compared to 2011 (581).

The principal-agent theory considers hidden characteristics as one major problem resulting from asymmetric information before the contract between both parties is signed (Spremann, 1987, p. 7-8). This is due to the fact that the principal does not completely know the agent's character and appropriateness for the foreseen tasks. In the given setting, the referee boards do not know the candidates who want to become a referee. In order to avoid these consequences, the clubs show a tendency to register as many candidates as possible. Despite this rather low number, the clubs do not prioritize the quality and appropriateness of the candidates as they do not have to deal with them after the training.

As a consequence, the clubs might also send candidates which they can convince of becoming a referee instead of finding people which are personally motivated to do so. The former candidates obviously can be influenced by external parties (such as their clubs) and thus do not represent the desired type of an unswayable referee. However, the referee boards are obliged to accept every candidate. This leads to an increased risk of accepting candidates which will not be able and/or willing to fulfill the referee boards' aims of a correct, objective enforcement of the laws of the game. This especially applies to the setting in which a coach might make use of the referee boards' absence during the game. More precisely, candidates that have been persuaded by their clubs to become a referee might also be prone to influencing attempts of coaches later on.

The principal-agent theory proposes screening, signaling, and self-selection strategies to overcome the problem of an agent's hidden characteristics (Miller, 2005, p. 349-367). The principal can install selection mechanisms that help him to find an appropriate agent. Whenever at least two agents apply for a job, the principal can screen the respective agents to find out the most suitable one. Taking the example of people applying for a job, the principal (boss) might set up an assessment center in which the agents (applicants) have to prove their qualification for the job. However, due to the fact that the referee boards are obliged to accept any referee candidate, they cannot install effective screening mechanisms.

In order to avoid problems resulting from adverse selection (choosing an inappropriate agent) in advance, the principal can also make use of signaling strategies. Referring to the aforementioned example, this can be done by an open communication of the company's values and requirements. In doing so, the principal aims at attracting agents identifying themselves with his own aim. According to Sutter and Kocher (2004), this aim is the impartial decision making on the pitch based on the written rules and regulations. Those are manifested in the official laws of the game and are socially desired (Scoppa, 2008, p. 124).

As a consequence, signaling strategies of the referee boards do not represent an effective mean to reduce the risk of adverse selection as they do not contribute to a significant reduction of information asymmetries *ex-ante*. However, these strategies can also be applied by the agent (Wickham, 2006, p. 145). For example, an applicant (agent) may hand in certificates, reports, or letters of recommendations in order to demonstrate his appropriateness for a job. In doing so, the applicant supports the principal in reducing the information asymmetry regarding his qualification. Due to the referee boards' obligation to accept every referee candidate, the agents in the given setting do not face a competition and thus do not have to signal their aptitude for this activity. This leads to the conclusion that the referee candidates do not have to apply signaling strategies.

Additionally, the principal-agent theory proposes screening strategies helping the principal to learn more about the agent, e.g., with regard to his qualification or intention. Conducting an assessment center or a job interview are common examples for a screening by the principal. Again, those means cannot be applied to the referee boards' case since they do not have the formal right to choose from various agents. The boards are obliged to accept any candidate, allowing them to attend the training and the final test as long as they show up regularly.

As a last solution mechanism, self-selection is considered to be effective for the principal. According to Spremann (1987), this strategy should be designed in a way so that the agent is encouraged to demonstrate his characteristics. In doing so, the principal designs various contracts which are offered to the agent. Then, the latter can choose among them. With his choice, the agent reveals information regarding his intentions. This information helps the principal to learn more about the agent's intentions.

Referring back to the example of a candidate applying for a job in a company, the boss (principal) could offer two contracts to the applicant (agent) with one contract yielding a fixed salary regardless of the agent's performance and one version with a relatively low fixed salary plus performance-related components (Miller, 2005, p. 349-367). For the latter contract, it shall be assumed that the pay will exceed the pay of the contract with the fixed salary given that the agent chooses a high effort level. Should the agent choose the first contract (with a fixed salary), the principal knows that the agent does not necessarily choose a high effort level as high pay is not depending on his performance. In the other case, the principal can assume that the agent is willing to perform well in order to reach a good result and thus, increase his performance-related salary.

In the given triad, the referee boards do not have the opportunity to offer more than one contract. This is because the laws of the game - representing this kind of formal agreement - cannot be changed by the boards. Furthermore, the referees' pay depends on the division of the respective match (see 5.2.5), but not on the referee's effort level. As a consequence, this mean cannot be applied by the principal either.

7.2 Hidden Action and Hidden Information

The agent's hidden action represents another problem which might come up in a principal-agent relationship. It describes the principal's missing opportunity to completely monitor the agent's action at reasonable costs. Under the presented circumstances, the referee boards cannot monitor their agent's performance on the pitch due to financial and personal restrictions. Less than 5% of the referees are monitored during the matches by official observers (see 12.1.1). This leads to a constellation in which the coaches can step into the existing principal-agent relationship between the referee boards and their adherent referees. Coaches pursuing a profit maximizing strategy might make use of this circumstance by trying to take over the principal's role even though they do not have the formal right to do so.

This might lead to a subversion of the referee boards' aims of a correct and fair enforcement of the laws of the game and represents the basic scenario of this study.

Besides an agent's hidden action, the principal might also suffer from hidden information. The theory refers to this issue as the agent's superior knowledge with regard to the provided service. Transferring this to the given setting, this would mean that the referees do have specific knowledge with respect to the laws of the game which the referee boards do not have. However, this is not the case as the referee boards take over the referee training and thus do not lack the knowledge with respect to the laws of the game. As a consequence, there is no hidden information that the referees might make use of the terms of the laws of the game.

7.3 Hidden Intention

Even if the principal can observe the agent's action (since there is no hidden action and no hidden information), problems may still arise due to the constellations in which the principal does not know the agent's intentions. The agent's payoff is generally defined as the difference between his wealth and his chosen effort (Bøhren, 1998, p. 746).

In the given setting, the referee boards have to assume that their aim (correct enforcement of the laws of the game) is in congruence with the referee's intention. This is because there are - in accordance with the theory - no practical means in place which can help the referee boards to reduce the problems resulting from hidden intention. More precisely, the referee boards do not know about a single referee's intention when assigning him to a specific match. As a consequence, the boards have to rely on the referee's performance, assuming that he performs in their own best interest.

However, the agent might show opportunistic behavior once the contract has been closed.

Williamson (1985, p. 47) defines ‘opportunism’ as follows:

‘By opportunism I mean self-interest seeking with guile. This includes but is scarcely limited to more blatant forms, such as lying, stealing, and cheating. Opportunism more often involves subtle forms of deceit. More generally, opportunism refers to the incomplete or distorted disclosure of information, especially to calculated efforts to mislead, distort, obfuscate, or otherwise confuse.’

Following the principal-agent theory, unaligned interests of both parties may lead to a hold-up issue. Klein (1996, p. 1) uses the example of a person building a house on a piece of land that he does not own, but rather has to lease for a certain period of time. Once this period expires, the landowner could potentially make use of this specific investment (the house) by increasing the rent for the land. The principal now finds himself in a hold-up situation in which he can either chose to pay the higher rent (and remain in the house) or to rebuild his house elsewhere. In the latter case, the house represents a form of sunk costs (expenditures that cannot be reimbursed). In the given setting the referee boards do not make specific monetary investments. Considering the referee boards’ expenditures (e.g., for training purposes) in professional leagues, significantly less money is involved in amateur soccer. Furthermore, these investments are usually not made for one referee, but the group as a whole. Following this contemplation, the referee boards do not face a hold-up problem.

7.4 Conclusions on the Relevance of the Principal-Agent Theory for the Setting

Due to the lack of personal and financial resources, only 3% of the referees are monitored by an official observer during the matches (see 12.1.1). As a consequence, the majority of all matches take place without a reliable feedback mechanism. This renders it possible for a third party (the coach) to step into the existing relationship, trying to bias the referee with the intention to reach a favorable treatment of his team.

The problem of hidden characteristics is relevant in the given setting in non-professional soccer. The referee boards face a significant lack of referees ensuring the correct enforcement of the laws of the game, but do not have the formal right to influence the recruitment of new referees. As a consequence, the boards have to accept any candidate even though they know that inappropriate referees will be amongst them. The solution mechanisms proposed by the principal-agent theory cannot be applied in this context. At this stage, the setting requires alternative solutions that are not provided by the original theory.

Hidden action represents the core problem in non-professional soccer. The referee boards can neither monitor nor assess the referees' performance on the pitch due to a lack of financial and personal resources. A third party can make use of this situation by stepping into the constellation and taking over a 'principal-like' role. The basic question in this context is therefore supported by the structural circumstances in amateur soccer. The hold-up problem resulting from hidden intention does not play an important role in this constellation because the principal does not make excessive investments which could be made use of by the agent. These findings allow for the assumption that the theoretical view of the basic principal-agent theory can be found in this sports related setting. The absence of objective feedback and monitoring mechanisms allows a third party to step into this relationship and take over a 'principal-like' role. The role and influence of this third party on the agent shall be elaborated in the following section.

8 Solution Mechanisms for the Relationship between Referee and Coach

The principal-agent theory proposes various solutions for the principal's problems resulting from asymmetric information. In the following, it shall be evaluated how these solutions might find application in the presented setting. This will happen against the background of the given circumstances and restrictions. According to Miller (2005, p. 349), there is no single, holistic solution to the problems in principal-agent relations. However, not all of them are relevant for the circumstances in question. The introduction of incentive schemes, for example, does not seem to be applicable as the referee's performance (and reluctance to influencing attempts) cannot be measured with objective means. Based on this view, only selected mechanisms will be analyzed with respect to their specificity for the triad consisting of referee boards, referees, and coaches.

8.1 Trust

The relevance of trust in social systems has been identified by Arrow (1974, p. 23). Subsequently, Casadesus-Masanell and Spulber (2004), Knack and Keefer (1997), and Williamson (1993) have concentrated their attention on trust in economic systems. Arrow (1968, p. 538) underlines the importance of trust for economic welfare by referring to principal-agent relationships:

‘One of the characteristics of a successful economic system is that the relations of trust and confidence between principal and agent are sufficiently strong so that the agent will not cheat even though it may be ‘rational economic behavior’ to do so. The lack of such confidence has certainly been adduced by many writers as one cause of economic backwardness.’

Following Casadesus-Masanell (2004, p. 375), agency contracts strongly rely on trust between principal and agent.

Transferring this view to the presented setting allows for the interpretation that the referees shall show reluctance to any influencing attempt by the coaches even though this does not represent 'rational economic behavior'. Trust may lead to this behavior.

The means to establish trust, however, are limited in the shown example. Trust may be reached by the way of leadership (Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Kirkpatrick & Locke, 1996). In this context, serving as a role model might be one approach for the referee boards (Rich, 1997). This means that the members of the referee boards themselves are required to prevent influencing attempts by coaches during their matches in order to demonstrate determination. This is especially important as they might be watched by other referees from time to time.

Furthermore, the duration of the relationship between referees and their managing board can affect the development of trust (Dirks & Ferrin, 2002, p. 615). This means that especially inexperienced referees might be in need of leaders serving as a role model.

8.2 Monitoring

One of the basic assumptions of the principal-agent theory is the agent's information advantage over the principal. This form of asymmetric information bears the risk that the agent does not perform in the principal's best interest. This is the case whenever the agent does not apply the first-best effort (Baiman, May, & Mukherji, 1990, p. 761). As a consequence, a moral hazard problem may arise even though the outcome is observable (De Paola & Scoppa, 2010, p. 227).

The absence of a comprehensive monitoring system has been identified as a basic problem in the referee-related setting. It offers the third party the chance to enter the relationship with the intention to bias the referee. Sappington (1991, p. 49) argues that if frictions are caused by risk aversion, information asymmetries, or problems in measuring the agent's activity, the principal can profit from monitoring schemes.

Aforementioned prerequisites seem to be fulfilled in the referee setting. Due to the fact that there is no performance-related pay, referees do not have to take any risk - their pay solely depends on the division they are active in. Information asymmetries can also be identified as the referee boards do not know anything about the referee's characteristics and intentions ex-ante. Finally, the referee's performance cannot be measured by objective means. Even though official reports capture the relevant outcomes of matches (see Figure 6) they do not serve as a means to evaluate the referee's performance. Thus, following Sappington (1991, p. 49), monitoring mechanisms can be beneficial for the referee boards in this setting. However, it has been found out that currently only 3% of all matches are monitored by an official observer. Holmström (1979, pp. 74-91) states that a costless monitoring system might reduce the agency costs and thus raise the principal's utility. Such a costless solution does not seem applicable in the given setting. Currently, the observers are paid a relatively low allowance for their activity and the travel expenses are reimbursed. Despite this financial expenditure, the number of observers is still not sufficient. Economically speaking, installing monitoring mechanisms is only helpful as long as the costs do not exceed the gains from doing so (Jensen, 2003, p. 138). Taking this into consideration, it might be questionable if increased expenditures for monitoring can justify a reduction of biased decisions. This is, because the elaborated extent of referee bias in the given setting does not seem to be dramatic.

8.3 Training

Even though the quality of referee decisions seems to be good when considering the difficulty of their 'job' (Mascarenhas, O'Hare, & Plessner, 2006; Helsen & Bultynck, 2004), there is still room for improvement when acknowledging the findings in the literature identifying referee biases (Nevill, Balmer, & Williams, 2002; Unkelbach & Memmert, 2008; Jones, Paul, & Erskine, 2002). However, the decision-making quality itself shall not be in the focus of action in the context of this study.

Rather, the referees' behavior towards influencing attempts of coaches ('talk') needs to be trained. According to Plessner and Czenna (2008), decisions may not only be intuitive (e.g., in foul situations), but possibly also require deliberative processing (e.g., when reacting to complaints by coaches or players). This is exactly, where training is needed.

One approach to reduce referee biases can be to increase the referees' self-confidence. Bénabou and Tirole (2002, p. 877) assume that believing oneself to be of high quality facilitates the idea of convincing others that this is indeed the case. In accordance with this view, self-confident referees may prevent coaches from trying to influence them. The monthly meetings are so far limited to the theoretical contemplation of the existing laws of the game. Practical trainings are neglected even though they seem to be a promising tool to foster self-confidence. When conducted by an experienced colleague or moderator, role-plays might be helpful to learn more about one's behavior in situations that might come up during matches (e.g., dealing with a protesting coach). Kanfer and Marston (1963, p. 63) assume that a person must first evaluate his actions to some extent and judge them before being able to control his behavior effectively. In the context of role-plays, this evaluation might also be given by the moderator. Behavior can then be adapted on the pitch accordingly. Rhetoric training might be another approach to stop coaches from influencing referees. Just as the analyzed influencing attempts by coaches, the referees might also be trained with respect to the repartee.

8.4 Intrinsic & Extrinsic Motivation

According to Scott and Mitchell (1972, p. 76), 'motivation' can be understood as the encouragement of people to perform in a way that leads to a desired outcome. Wong (2000, p. 3) states that motivation also refers to the reasons for good performance in specific situations. According to this view, the referee's motivation shall be understood as the determination to comply with the existing laws of the game by making objective decisions.

When elaborating on motivational issues, a differentiation between ‘intrinsic’ and ‘extrinsic’ motivation can be made (Deci & Ryan, 2000, pp. 227-268). Extrinsic motivation can be achieved by external factors such as fines, salary, or grades at university (Coon & Mitterer, 2008, p. 339). Those can either serve as a punishment for misdemeanor or as a reward for positive behavior (Weinberg & Gould, 2007, p. 139). Intrinsically motivated individuals are considered to be driven by the wish for empowerment and self-determination (Miner, 2005, p. 109). Furthermore, they do not tend to expect any form of external reward when performing a certain task. They rather act for their own sake and consider the task itself as a reward (O’Neil & Drillings, 1994).

Before making an assumption of how a high level of motivation can be reached, a work of Frey and Jegen (2001, pp. 589-611) referring to the impact of external rewards on motivation of human beings shall be considered. In their paper, it is shown that offering a monetary reward for performing a specific task may affect intrinsic motivation negatively.

The effects of external interventions on intrinsic motivation can be ascribed to two psychological processes. ‘Impaired self-determination’ describes the substitution of a person’s intrinsic motivation by extrinsic control mechanisms if the individual considers an external intervention as a limiting influence with regard to the self-determination. More precisely, external pressure to behave in a certain way may lead to a perceived (extreme) justification if the level of intrinsic motivation does not increase. ‘Impaired self-esteem’ as the second process describes the drawbacks from not appreciating a person’s action at all. Intrinsic motivation may decrease as the affected person considers the value of the performed task not to be appreciated or valuable. According to Frey and Jegen (2001, pp. 589-611), external interventions may increase intrinsic motivation if they are considered supportive and might decrease motivation and if they are perceived to be a form of control.

Against the background of this theoretical contemplation, appealing to the referee's extrinsic motivation does not seem to be promising. External interventions (e.g., rewards for 'good' performance) might appear as a form of control, decrease intrinsic motivation and thus have a counterproductive effect (Bénabou & Tirole, 2003, pp. 489-520). Besides this aspect, a successful introduction of extrinsic influences seems inappropriate for two reasons. First of all, the referee boards lack objective tools to determine whether a referee has performed well during a match, or not. As stated above, the match results can only be consulted as an indication for the characteristics of the match (e.g., its intensity expressed by the personal sanctions), but not for the referee's performance. Secondly, the referee boards simply lack the financial means to foster extrinsic motivation collectively.

What is left, is trying to influence the referees' intrinsic motivation. Building up trust and providing training seem to be important pillars in this case, as they may convey appreciation for the referees' task. The referee boards will have to emphasize the importance of the laws of the game and need to provide necessary practical tools (e.g., by training the referees on how to deal with protesting coaches). However, this approach requires the renunciation of monthly meetings in their current form. Theoretical elements (regarding the laws of the game) still need to be considered, but the major challenge will be to better prepare the referees for the situations on the pitch (e.g., by enforcing the correct behavior through role-plays and other forms of practical elements).

9 Biasing the Referee – A Modell

The referee board, the referees, and coaches form the triad of interest in this work (see Figure 8). The board appears as the principal, trying to reach an objective and correct enforcement of the rules by the referee appearing as the agent. In order to do so, the referee boards assign the referees to matches (representing the incomplete contract), given a limited choice of referees. The theory refers to this step as the ex-ante phase of the principal-agent relationship. Once the referees are assigned to matches, the boards lack the means to control their performance and other possible influencing factors ex-post (see red box in Figure 8). The coaches, however, may make use of these circumstances.

In contrast to the referee boards, the coaches are present during the actual fulfillment of the contract (the match) and thus may try to reach a favorable exertion of the referee's discretionary power. They may do so even though they lack the principal's formal means, such as hierarchical instruments. Profit maximizing coaches may also be interested to repeatedly pursue successful strategies in every match. In order to avoid countermeasures by the referee boards, these strategies need to be hardly unverifiable. The coaches may therefore focus on informal interpersonal approaches, such as verbal or mimic influences. These may range from praising the referee to being completely calm or constantly criticizing him during the performance. It is assumed that the referee can respond with a preferential treatment or discrimination of the coach's team to these influences.

In order to determine the coach's success or failure, it has to be elaborated on the question if the strategy applied has an effect on the observable match results (initial yellow cards, second yellow cards, red cards, goals, victory or loss). Contemplating this model from a statistical perspective, it shall be found out if the coaches' success is moderated by the referee's reaction to influencing attempts.

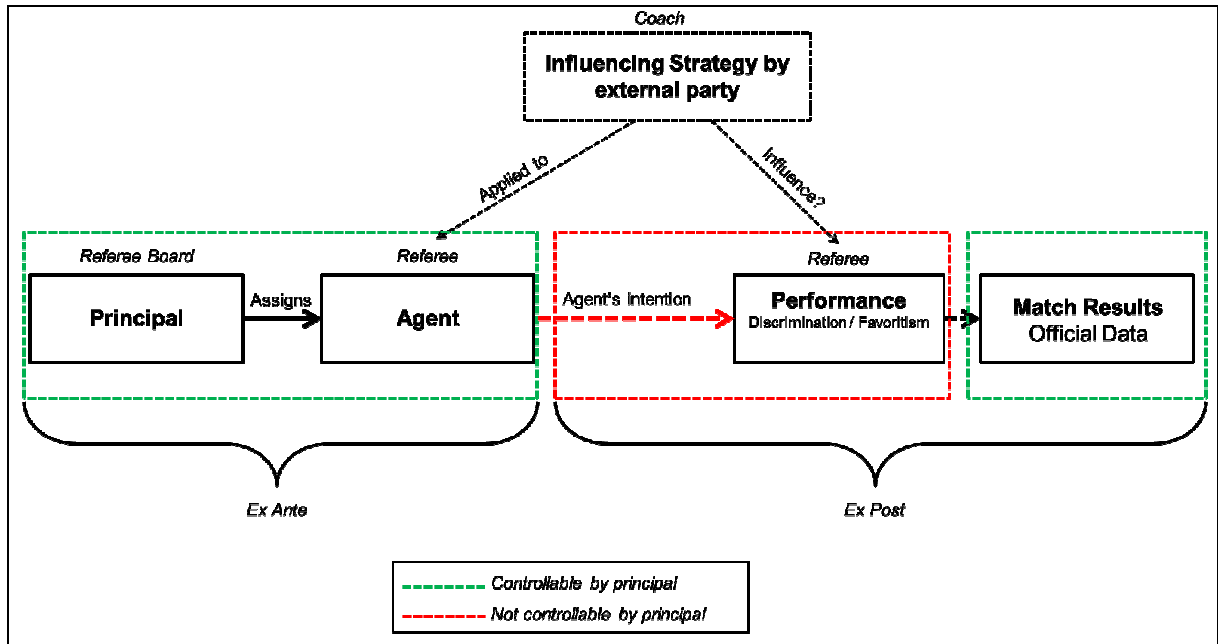


Figure 8: Impacts on Referee Bias and Match Data

III Analyses

10 Underlying Questions

Before introducing the basic problems underlying this study, it has to be stated that the expression ‘hypothesis’ is avoided deliberately. The reason is that a hypothesis can be tested with one single statistical test. This study, however, applies a different approach by conducting various statistical tests for each problem. Consequently, the expression ‘question’ seems to be more suitable in this context.

The principal-agent theory will play the dominant role in the analysis of referee-coach transactions as it can be transferred to the constellation occurring in soccer matches with the referee acting as an agent for the referee boards (Dewitt & Schouwenburg, 2002, p. 469–489).

It will be of special interest if a third party can have an impact on a principal's agent for his own advantage. It shall be assumed that the agent does not consciously violate the laws of the game, but may rather be influenced in terms of his discretionary power.

Based upon this theoretical view, the present work also aims at identifying strengths and weaknesses of the theory with respect to the interaction between coaches and referees. Furthermore, the underlying questions mentioned in the following section shall be investigated.

10.1 Third Party's Role in an existing Principal-Agent Setting

Question 1a and *1b* focus on the third party's role, intentions, and strategies in the given setting. The findings shall not only help to figure out if the given working model finds empirical evidence, but also how coaches perceive their role and act during a soccer match. The actual principal-agent setting between the referees and their managing boards does not foresee an interaction with the coaches. The principal's aim is to ensure a correct enforcement of the laws of the game. However, the principal's absence during the agent's performance leads to a problem resulting from hidden action. According to the aforementioned theory, the principal can only judge the outcome of the agent's performance, but not his effort level. Under the described circumstances, the outcomes of the match are recorded in the match reports by the referee (result, yellow cards, second yellow cards, and red cards, stoppage time, etc.). However, the referee boards cannot judge the appropriateness of these results as these boards cannot be present during the matches.

In contrast to the board, the coaches are present during the matches. However, they might pursue other goals than the referee-boards (e.g., winning the game). In order to make a victory more likely, coaches might not only focus on finding the most suitable lineup and tactics for their team, but also aim at a preferential treatment by the referee.

This is, because referees might exert significant (discretionary) power with respect to the outcomes of a match (Dewitt & Schouwenburg, 2002, p. 469-489) leading to a constellation in which the principal's aims might be subverted by a third party. According to the principal-agent theory, any manipulation of the agent by the third party can be referred to as a legitimate profit maximizing strategy (Siebert, 2008, p. 128).

It shall be assumed that the agent is not willing to breach the contract with the principal (e.g., by consciously violating the laws of the game), but might be influenceable with respect to his discretionary power. More precisely, the agent might make favorable decisions for the third party in contentious situations. This view leads to the following first question.

Given a fixed principal-agent relationship in which the agent's performance also impacts a third party's profit, this party will try to exert (a legitimate) influence on the agent's discretionary power with the intention to maximize own utility. (Question 1a)

Under the given circumstances, a third party enters into the principal-agent relationship striving for own profit maximization by influencing the agent. By this, he takes over a 'principal-like' role regardless of the missing formal rights to do so.

According to the theory, the principal can apply various strategies to influence the agent's effort level after the contract has been agreed. Frey and Jegen (2000, p. 4) mention rewards and commands as means to increase the agent's performance. Another approach is to impose bureaucratic control or hierarchy over the agent (De Paola & Scoppa, 2010) However, there is no formal contract between these two parties in place which allows the third party to do so. This means that the coach lacks any form of formal authority. The introduction of information systems (e.g., controlling means) has to be discarded for the same reason (Eisenhardt, 1989, p. 61).

The principal-agent theory also considers the introduction of incentives schemes as a means to steer the agent's effort (Sappington, 1991). Regarding the specifications of the referee-coach setting, this would lead to a coach offering the referee (financial) incentives in order to reach a favorable agent's reaction. Since this steering mechanism (e.g., bribery) represents an illegitimate breach of the existing contract (violation of the laws of the game), it shall be disregarded in this context.

Taking the former view into consideration, formal means to influence the agent do not seem to be applicable in the referee-coach dyad. Consequently, the third party has to develop alternative, informal strategies which allow him to reach a favorable treatment in terms of the agent's discretionary power. In order to prevent the principal from detecting the influencing attempts which allows him to take countermeasures in the future, the third party (coach) has to apply strategies which ideally cannot be noticed by the principal. Rosaz (2012) studied the impact of a principal's biased information on the agent's motivation and efficiency given that the latter are not well-informed. It is assumed that the feedback might increase the effort level in some cases (Lizzeri, Meyer, and Persico, 2002), but can also have the opposite effect (Ertac (2005). Exerting direct verbal influence (with the support of gesture and facial expressions) has therefore proven to be a strategy that fulfills these requirements.

Does the third party exert various forms of direct verbal influence to reach a favorable exertion of the agent's discretionary power? (Question 1b)

10.2 Impact of the Agent's Reaction to Influencing Attempts

The third party represents merely one part of the relationship in the referee-coach setting. It might potentially make use of the principal's absence during the agent's performance by trying to affect him with direct verbal influences (see *Question 1b*).

A prerequisite for the evaluation of the effectiveness of those strategies is that the agent first of all has to notice these attempts. Given that this is the case, another requirement regarding the type of agent has to be met. So far, it was assumed that all agents react with favoritism to influencing attempts. However, agents may not always react alike, but might also show reluctance. One of the reasons is that the chosen effort represents a form of costs and therefore reduces the agent's payoff in the given circumstances (Christen, Iyer, & Sobermann, 2006, p. 137). More precisely, the referee will only react with favoritism if he assumes that this reaction is beneficial for him. As a consequence, the impact of influencing strategies shall also be analyzed against the background of two different agent reactions - favoritism and discrimination. This leads to the following question:

Given that the agent takes notice of a third party's influencing attempts, the success or failure is affected by the basic form of his reaction (favoritism or discrimination). (Question 2)

11 Methodology

The study is based on a two-step methodology. In a first step, two surveys in the FLVW area were conducted - one among the referees, the other among the coaches. Additionally, official match data was pooled in order to apply objective measures for the answers to the set of questions stated in section 10 (Underlying Questions). The underlying methodology will be presented in the following.

11.1 Surveys

In order to learn more about the referees' and the coaches' influence, separate online questionnaires for both parties were set up with the 'Unipark' online survey software (<http://www.unipark.de>) in German language.

The survey was conducted in the FLVW area and focused on referees and clubs in non-professional divisions from December 20, 2011 until March 1, 2012. The data analysis was conducted with the IBM SPSS Statistics Software (Versions 21 and 22).

11.1.1 Capturing Social Desirability Tendencies

Both questionnaires comprise a section aiming at measuring the tendency of social desirability. Pauls and Stemmler (2003, p. 263-275) understand this as responding '[...] in a way that makes the respondents look good.' According to Paulhus (1986 & 1988), social desirability comprises self-deception and impression management. Self-deception can be understood as the unconscious tendency to perceive oneself positively and strengthen one's ego (Fox & Schwartz, 2002, p. 389-410), whereas Dilchert, Ones, Viswesvaran, and Deller (2006, p. 212) state that impression management aims at deceiving others in order to let oneself appear positively. Basing upon this understanding, Paulhus (1991) developed the so-called balanced inventory of desirable responses (BIDR).

However, the BIDR with its 40 items was not adequate for the presented case since measuring the referees' tendency towards socially desirable answers shall be one issue of the survey, but not a major aspect. Musch, Brockhaus, and Bröder (2002) conducted various studies with the aim to develop and test a shorter inventory for the measurement of social desirability tendencies. They developed subscales for self-deception and impression management (ten items each) and proved a clear two-factorial loading structure, satisfactory psychometric qualities, but also good convergent and discriminant validity. The items are depicted below (see Table 1 and Table 2). The respondents were supposed to tick their choice on seven-stepped Likert scales ranging from 'total agreement' to 'total rejection'.

Table 1: Self-Deception Items

Original German item	English translation
„Der erste Eindruck, den ich von anderen Menschen gewinne, bewahrheitet sich meistens.“	<i>'The first impression I receive from other people proves mostly true.'</i>
„Ich bin nicht immer mir selber gegenüber ganz ehrlich gewesen.“ (Negativ kodiert)	<i>'I have not always been completely honest to myself.'</i> (Negatively keyed)
„Ich weiß immer, warum ich etwas mag.“	<i>'I always know why I like a certain thing.'</i>
„Es fällt mir schwer, einen beunruhigenden Gedanken beiseite zu drängen.“ (Negativ kodiert)	<i>'I have trouble putting worrying thoughts aside.'</i> (Negatively keyed)
„Manchmal verpasse ich etwas, weil ich mich einfach nicht schnell genug entscheiden kann.“ (Negativ kodiert)	<i>'I sometimes miss something, because I simply cannot decide fast enough.'</i> (Negatively keyed)
„Ich bin ein vollkommen rational denkender Mensch.“	<i>'I am an entirely rational thinking person.'</i>
„Ich kann Kritik selten vertragen.“ (Negativ kodiert)	<i>'I can rarely cope with criticism.'</i> (Negatively keyed)
„Ich bin mir meiner Urteile sehr sicher.“	<i>'I am very sure about my judgments.'</i>

„An meinen Fähigkeiten als Liebhaber habe ich schon gelegentlich gezweifelt.“ (Negativ kodiert)	<i>‘I have doubted my capabilities as a lover occasionally.’ (Negatively keyed)</i>
„Ich weiß nicht immer die Gründe für meine Handlungen.“	<i>‘I do not always know the reasons for my action.’</i>

Table 2: Impression Management Items

Original German item	English translation
„Manchmal lüge ich, wenn ich muss“.	<i>‘I sometimes lie when I have to.’</i>
„Es ist schon einmal vorgekommen, dass ich jemanden ausgenutzt habe“.	<i>‘I have already exploited someone.’</i>
„Ich fluche niemals“.	<i>‘I never swear.’</i>
„Manchmal zahle ich es lieber anderen heim, als dass ich vergebe und vergesse“. (Negativ kodiert)	<i>‘I sometimes prefer paying someone back instead of forgiving and forgetting.’ (Negatively keyed)</i>
„Ich habe schon einmal zuviel Wechselgeld herausbekommen, ohne es der Verkäuferin zu sagen“. (Negativ kodiert)	<i>‘It happened that I have received too much change and did not tell the seller.’ (Negatively keyed)</i>
„Ich gebe grundsätzlich alles an, was ich zu verzollen habe“.	<i>‘I basically declare all goods I have to declare.’</i>
„Manchmal fahre ich schneller, als es erlaubt ist“. (Negativ kodiert)	<i>‘I speed sometimes.’ (Negatively keyed)</i>
„Ich habe Dinge getan, von denen ich anderen nichts erzähle“. (Negativ kodiert)	<i>‘I have done things that I do not tell others about.’ (Negatively keyed)</i>
„Ich nehme niemals Dinge an mich, die mir nicht gehören“.	<i>‘I never take things that I do not own.’</i>
„Ich bin schon einmal wegen einer angeblichen Krankheit nicht zur Arbeit oder Schule gegangen“. (Negativ kodiert)	<i>‘It happened that I did not go to work or school due to a pretended illness.’ (Negatively keyed)</i>

11.1.2 Measuring the BIG Five Personality Dimensions

The questionnaires also comprise a section focusing on the referees' and coaches' general self-concept. Similarly to the measurement of social desirability tendencies, the restrictions in terms of time lead to the need of a short, but reliable scale. The NEO-PI is one of the most common means, assuming that the human personality can be ascribed to the five dimensions openness, conscientiousness, extraversion, agreeableness, and neuroticism (Costa & McCrae, 1985).

Some years after the development of the NEO-PI, Costa and McCrae revised their inventory and developed the NEO-PI-R that comprises 240 items in total. Answering those items takes the respondent about 45 minutes and is not applicable in all surveys (Costa & McCrae, 1992).

For this reason, Gerlitz and Schupp (2005) elaborated a significantly shorter inventory which still meets the requirements in terms of reliability and internal consistency. Their so-called Big-Five-Inventory-Shortversion is limited to 15 items and has proven to be a reliable solution (Gerlitz & Schupp, 2005). It is especially suitable because of the existing time restriction and comprises three (positively and negatively poled) items for each of the five personality dimensions. In coherence with the scales regarding social desirability tendencies, seven-stepped Likert scales ranging from 'total agreement' to 'total rejection' were also applied. The items are listed in Table 3.

Table 3: Big-Five-Inventory-Shortversion

Dimension	German Item	Translation
	„Ich bin jemand, der...	<i>‘I see myself as someone who...</i>
Conscientiousness	...gründlich arbeitet.”	<i>...does a thorough job.’</i>
	...Aufgaben wirksam und effizient erledigt.”	<i>...does things efficiently.’</i>
	...eher faul ist.” (Negativ kodiert)	<i>...tends to be lazy.’ (Negatively keyed)</i>
Openness to Experience	...eine lebhafte Phantasie, Vorstellung hat.”	<i>...has an active imagination.’</i>
	...originell ist, neue Ideen einbringt.”	<i>...is inventive, comes up with new ideas.’</i>
	...künstlerische, ästhetische Erfahrungen schätzt.”	<i>...values artistic, aesthetic experiences.’</i>
Extraversion	...kommunikativ, gesprächig ist.”	<i>...is talkative.’</i>
	...aus sich herausgehend, gesellig ist.”	<i>...is outgoing and sociable.’</i>
	...zurückhaltend ist.” (Negativ kodiert)	<i>...is reserved.’ (Negatively keyed)</i>
Agreeableness	...rücksichtsvoll und freundlich mit anderen umgeht.”	<i>...is considerate and kind to everyone.’</i>
	...verzeihen kann.”	<i>...has a forgiving nature.’</i>
	...manchmal etwas grob zu anderen ist.” (Negativ kodiert)	<i>...is sometimes rude to others.’ (Negatively keyed)</i>
Neuroticism	...entspannt ist, mit Stress gut umgehen kann.” (Negativ kodiert)	<i>...is relaxed, handles stress well.’ (Negatively keyed)</i>
	...leicht nervös wird.”	<i>...gets nervous easily.’</i>
	...sich oft Sorgen macht.”	<i>...worries a lot.’</i>

In addition to these 15 items, the referees and coaches were confronted with questions with regard to their self-concept in private life and their role as a referee in the further course of the survey. For both, eight identical semantic differentials with a five-stepped scale were developed with the intention to elaborate on the question if referees differentiate between their private role and their activity on the pitch. The eight semantic differentials were:

- ‘calm’ – ‘choleric’;
- ‘insecure’ – ‘self-confident’;
- ‘rational’ – ‘emotional’;
- ‘peace-loving’ – ‘combative’;
- ‘open minded’ – ‘conservative’;
- ‘introverted’ – ‘extroverted’;
- ‘eloquent’ – ‘not eloquent’;
- ‘quick at the repartee’ – ‘not quick at the repartee’.

Due to the specificity of the chosen topic, no suitable scientifically proven questionnaires or related references were available for this research project.

As a consequence, the items in the questionnaire were specifically chosen for the research project with special regard to personality traits that are of importance for the role as a referee and a coach. The inventory does therefore not claim to be complete, but shall rather serve as a general indication of the different self-conceptions in certain situations.

Both questionnaires aim at learning more about the parties in the referee-coach setting. The goal is not only to elaborate on the persons’ character traits, but also on the applied strategies in the setting. Due to the questionnaires’ imperfect objectivity, they will only be applied to elaborate on *Question 1a*.

11.1.3 Referee Survey

The referee survey aims at referees in the FLVW area and was set up as an online version. The survey shall be introduced by explaining the basic approach and its structure. In order to receive a significant amount of responses, a pilot test of the questionnaire was conducted by contacting the referees in Gütersloh. This happened via an official information e-mail that was sent to approximately 150 referees in the district. Basing upon the returns, the questionnaire was critically discussed in the 'Department of Sport and Exercise Psychology at the University of Potsdam' and adapted accordingly.

Before starting the actual survey, the referees were informed about the research project in the association's referee magazine 'Schiedsrichter-Aktuell'. The magazine is edited on a monthly basis as a PDF document and can be accessed on the association's website (<http://www.flvw.de/fussball/schiedsrichter/sr-aktuell.html>). The article was published in June 2011. Additionally, the chairmen of all 33 referee committees on district level were informed about the project in order to find further support. The referees' e-mail addresses were provided by the FLVW. In total, more than $N = 5,000$ referees were approached with the questionnaire. Approx. $N = 2,300$ referees filled out the questionnaire, of which $N = 1,400$ were complete and object to the empirical analysis. All other replies were disregarded due to unsound data or incompleteness.

The survey starts with a section in which the respondent is briefly informed about the project, the questionnaire, and how to work with it. Subsequently, general information on sex, name, age, years of experience, the respondent's current division, the district he or she is active in, and the educational background is gathered. In the following section, self-deception and impression management (ten items each) tendencies (Musch, Brockhaus, & Bröder, 2002) are polled. These items are followed by 15 items of the Big-Five-Inventory-Shortversion and eight items each with reference to the referee's self-concept on the pitch and in private life.

In the next section, the referee is faced with statements regarding his game management strategy, followed by items with reference to influencing attempts by coaches and the respective reaction to fair comment and impertinent lamentation. The questionnaire closes with the referee's view on the number of accepted influencing attempts by the coach and his view on the relationship with coaches.

11.1.4 Coach Survey

Similarly to the referees, the coaches were also faced with an online questionnaire in order to learn more about their role in the referee's decision-making process. The presidents, managers, or heads of the soccer division were contacted via e-mail. In order to do so, the respective addresses were derived from the clubs websites or further online research. However, not all clubs could be contacted due to missing contact details. In total, approximately $N = 1,680$ clubs were contacted with the link to the questionnaire, a short explanation of the research interest, and the request to forward the mail to all coaches of male and female junior and senior teams.

This number approximately represents the total number of soccer clubs in the FLVW area (<http://www.flvw.de/verband/zahlendatenfakten.html>, 'FLVW Gesamtstatistik 2013', accessed 09/12/2013). In total, 393 surveys were returned. For the pilot phase, all teams representing their club in the 'Oberliga', but also all teams from both 'Verbandsliga' divisions were approached. This resulted in a number of $N = 24$. After having received the results from the tests, the replies were analyzed, and the questionnaires were adapted accordingly.

Both questionnaires coincide to a certain extend. Besides the polling of person related information (e.g., age, sex, current division, etc.), the surveys aim at determining the level of self-deception and impression management, but also to the personality traits following the Big-Five-Inventory-Shortversion (Gerlitz & Schupp, 2005).

Furthermore, both versions do not only contain items with respect to the person's character on the pitch and in private life, but also the view of the counterpart in the referee-coach setting. The coach questionnaire closes with issues concerning the behavior towards referees. More precisely, the coaches are faced with questions that shall measure the number of influencing attempts, but also the applied strategy.

11.2 Official Match Data

When contemplating the surveys, it has to be noted that the results are always subjective - and thus biased to a certain degree. As a consequence, their meaningfulness is doubted in many cases (Bertrand & Mullainathan, 2001). In order to overcome this problem, the surveys comprise a section in which the extent of social desirable answering tendencies shall be measured. However, the aim of this study is to elicit objective and unbiased information. Consequently, not only the survey results, but also official match data from the DFB-Net (<http://portal.dfbnet.org/>) are contemplated. It shall be find out if the subjective information gained from the surveys finds factual expression in the matches and the adherent results.

However, this data is not open to the public as it is password protected. The website is the official platform for amateur soccer and offers the opportunity to figure out the result, the personal sanctions, and the awarded stoppage time for every match. The reason for that is that every referee has to report this information after the respective match (see Figure 6). This online solution replaced the paper based match reports before the season 2010/11 and also allows the identification of the referee name for every match. In total, approx. 43,700 matches in the junior divisions and 68,460 matches in the senior division were object to the basic analysis. This number of approx. 112,000 matches, however, was reduced. In order to improve the data quality and to reduce arbitrariness, only constellations in which a referee and a coach 'met' at least twice in a game, were contemplated. As a consequence, 317 matches were object to the final analysis.

This step might be arguable, but the benefit from identifying reliable matches outweighs the drawbacks from reducing the number of matches that were contemplated at this stage. The analysis of the official match will focus on the result at half-time (goals scored and conceded) and the final result, but also on personal sanctions (yellow cards, second yellow cards, and red cards). The points of the team in the specific match (zero for a loss, one for a draw, and three for a victory) are considered as an additional variable.

11.3 Data Preparation – Survey and Match Data

Besides both separate questionnaires (Files ‘Schiedsrichterumfrage’ and ‘Trainerumfrage’), the results from the surveys were merged with the match data into one additional SPSS file (File ‘Gesamtdatei mit Match Data’) in order to analyze the matches with a given referee-coach constellation. More precisely, all data from the coach survey were integrated as variables next to the results from the referee survey. The data of the respective match was added as further variables. As a consequence, each match with a specific referee-coach constellation represents one case. Before starting the analysis, the data file was edited in order to create further variables and simplify the interpretation of the output.

11.3.1 Recoding of Variables

In a first step, the negatively keyed items in the short version of the Balanced Inventory of Desirable Responses (Musch, Brockhaus, & Bröder, 2002) were recoded (see Table 1 and Table 2). The same procedure was applied with respect to the negatively keyed items of the BFI-S by Gerlitz and Schupp (2005, see Table 3). This applies for both questionnaires. In addition to that, the items regarding the coaches’ influencing strategies and the referees’ strategies as response to influencing attempts of coaches were recoded in order to harmonize the perspective.

11.3.2 Computation of new Variables

New variables were computed in order to broaden up the range of analysis. In a first step, age groups were built for both questionnaires (see Table 4).

Table 4: Age Groups

Group	Age (years)
1	< 18
2	18-25
3	26-35
4	36-45
5	46-55
6	56-65
7	> 65

Basing upon the BFI-S (see Table 3), the average of the three items for every dimension were computed, representing the score for openness, conscientiousness, extraversion, agreeableness, and neuroticism. In order to receive the total scores for self-deception and impression management, the respective scores of the items per dimension were added.

Furthermore, a factor analysis was conducted for the possible referee reactions to influencing attempts by coaches. It resulted in two major factors that will be named 'favoritism' and 'discrimination'. The items forming these factors are stated in Table 5.

Table 5: Factor Analysis: Referee Reactions to Influencing Attempts

Rotierte Komponentenmatrix^a

	Komponente	
	1	2
Wenn mich ein Trainer wiederholt sachlich und konstruktiv kritisiert, dann bevorzuge ich (bewusst) das Team des Trainers bei der Vergabe von Freistößen.		,705
Wenn mich ein Trainer wiederholt sachlich und konstruktiv kritisiert, dann bevorzuge ich (bewusst) das Team des Trainers beim Aussprechen von persönlichen Strafen.		,874
Wenn ein Trainer wiederholt unsachlich lamentiert, dann bevorzuge ich (bewusst) das Team des Trainers bei der Vergabe von Freistößen.		,911
Wenn ein Trainer wiederholt unsachlich lamentiert, dann bevorzuge ich (bewusst) das Team des Trainers beim Aussprechen von persönlichen Strafen.		,909
Wenn mich ein Trainer wiederholt sachlich und konstruktiv kritisiert, dann benachteilige ich (bewusst) das Team des Trainers bei der Vergabe von Freistößen.	,927	
Wenn mich ein Trainer wiederholt sachlich und konstruktiv kritisiert, dann benachteilige ich (bewusst) das Team des Trainers beim Aussprechen von persönlichen Strafen.	,925	
Wenn ein Trainer wiederholt unsachlich lamentiert, dann benachteilige ich (bewusst) das Team des Trainers bei der Vergabe von Freistößen.	,864	
Wenn ein Trainer wiederholt unsachlich lamentiert, dann benachteilige ich (bewusst) das Team des Trainers beim Aussprechen von persönlichen Strafen.	,884	

Extraktionsmethode: Analyse der Hauptkomponente.

Rotationsmethode: Varimax mit Kaiser-Normalisierung.

a. Rotation konvergierte in 3 Iterationen.

The test for internal consistency proves a satisfactory Cronbach's α of .894 (four items) and a good intercorrelation between the items (Kaiser-Meyer-Olkin .694) for a preferential treatment of the team (favoritism). The factor discrimination also gives a good Cronbach's α of 0.933 (four items) with a Kaiser-Meyer-Olkin of .745. Subsequently, the average scores for the items forming the factors discrimination and favoritism were computed and centralized (the average score was detracted from the score of the test person). These values were saved as additional variables, representing the two referee reactions to influencing attempts by coaches. Based upon the result of a match, the points for the teams have been integrated manually (three for a win, one for a draw, and zero for a loss) as a separate variable.

Additionally, a variable indicating if the coach team had a home or away game in the respective match was set up. The average goals scored and conceded, but also the personal sanctions (cards) were computed with the basis of the total number (of goals and cards) divided by the number of matches in the specific season.

The moderator analysis (impact of the referee's reaction) requires a product term consisting of the strategy applied by the coach and the referee reaction to this influencing attempt. Therefore, the scores for both items were multiplied and the product was centralized.

12 Results

In this chapter, the underlying questions (see 10) are tested based on the empirical results. Before doing so, it shall be elaborated on the appropriateness of the principal-agent theory. More precisely, it shall be tested if the hypothesized problems resulting from asymmetric information in an agency relationship can also be found in the given setting.

In a first step, descriptive statistics regarding the referee and coach survey will be presented to order the data and provide a systematic overview. Subsequently, the questions will be answered.

12.1 Descriptive Statistics

Descriptive statistics data shall help to learn more about the referees and coaches. The aim is to give a more detailed impression of both datasets and to find out relevant aspects with respect to the principal-agent theory (Files 'Schiedsrichterumfrage' and 'Trainerumfrage'). The results shall be presented separately and refer to the original surveys.

The reduced number of questionnaires resulting from the identification of specific referee-coach pairs (who have met at least in two games) is not applied at this stage. Thus, all returned questionnaires will be taken into consideration for the sample descriptions.

12.1.1 Sample Description: Referees

The majority of referees (N = 1,390) is male (95.7%; N = 1,334) and their average age is M = 32.52 (SD = 16.767; N = 1,359) years. Considering the age structure, Figure 9 shows a relatively balanced structure between young and old referees with nearly half of the referees (47.7%) younger than 25 years and 52.3% older than 25 years. Referees aged 18-25 years represent the biggest group.

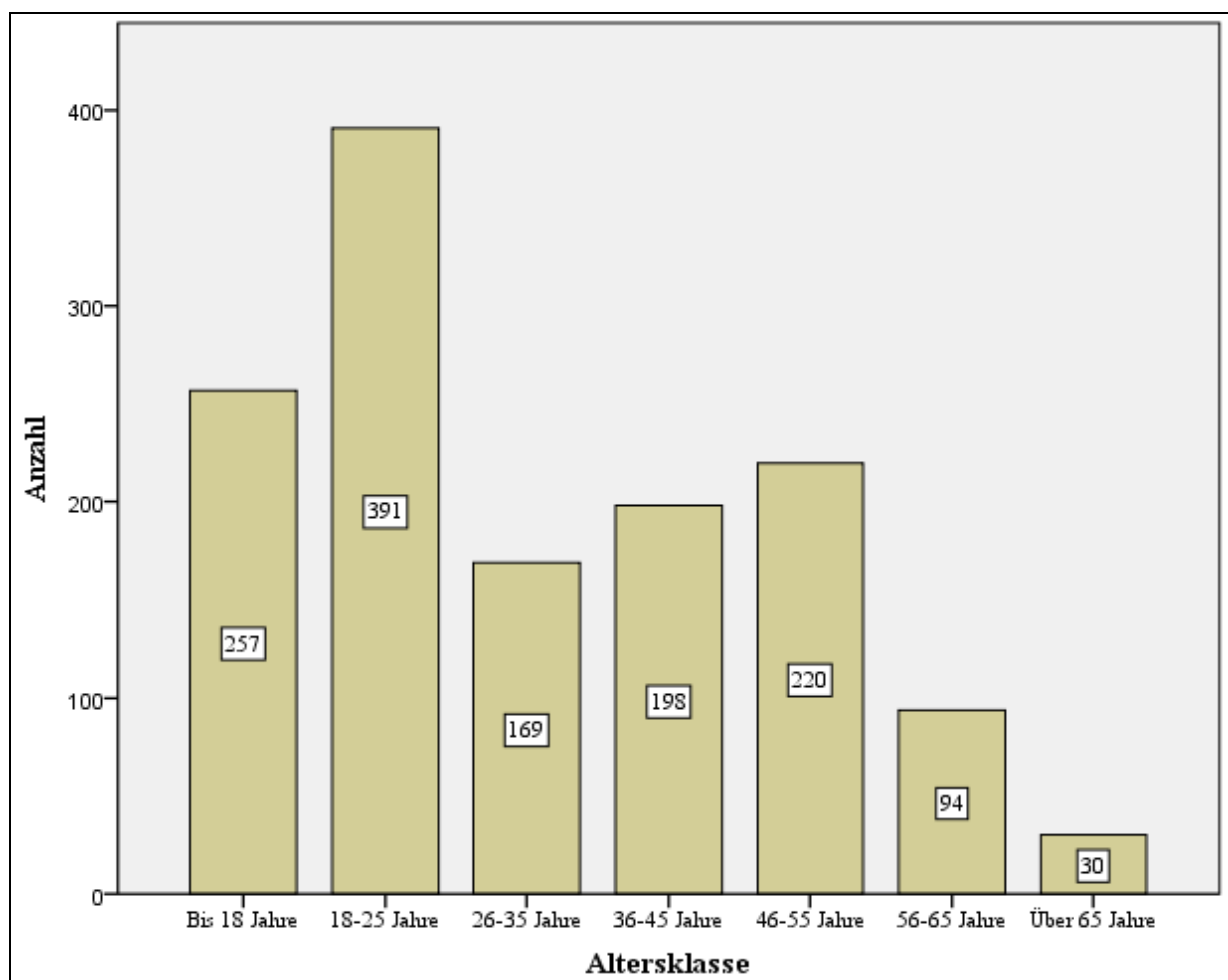


Figure 9: Age Classes - Referees

Figure 10 illustrates the divisions, the referees are active in. 77.0 % are assigned to matches on district level (\leq 'Kreisliga A'), whereas only 5.1% act in divisions with referee teams (\geq 'Landesliga').

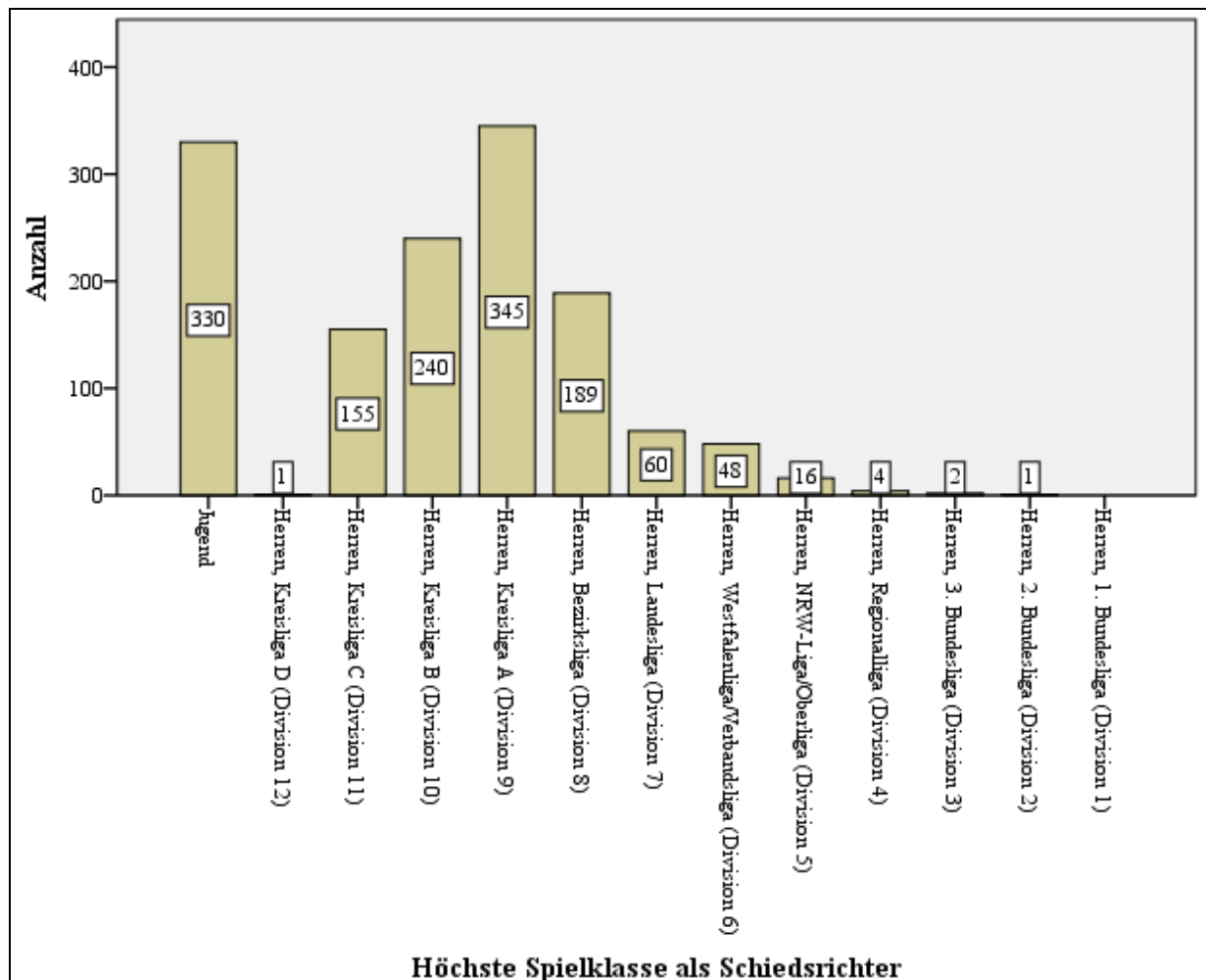


Figure 10: Division of Referees

Matches on district level represent 90% of the total number of matches in the FLVW. At the same time, the referees who are assigned to these matches are the least qualified and are disregarded in terms of official observers. The regional referee board only assigns official observers to matches in the 'Bezirksliga' (division 8) or higher. In return, this means that less than 10% of all matches are generally considered for the assignment of an observer. 159 referees fought for a promotion in the season 2013/14. Considering the total number of 4,997 referees (as of January 2013), only 3% of the referees were observed in the season.

Various districts try to compensate the lack of official observers by asking experienced or higher-class referees to ‘observe’ their colleagues on local level with the intention to give them feedback regarding their performance.

In contrast to official observers, their function is rather informal. The written performance reports differ from the official ones and shall serve as a basic evaluation for the referee’s adequacy for the respective division. In contrast to the official observers, the colleagues on district level also lack the necessary training. Due to financial and personal restrictions, the assignment of observers on district level is limited to a very low number.

Aforementioned circumstances confirm the basic problem in the given principal-agent setting. The vast majority of matches take place without official observers evaluating the referee’s performance. This implies that the principal cannot observe the agent’s performance, but only the result. At the same time, the third party may step into this relationship, trying to make use of the principal’s absence. Based upon this finding, the basic requirement for the proposed model finds strong empirical evidence.

12.1.2 Sample Description: Coaches

In analogy to the referees, most of the coaches (N = 381) are also male (94.%) supporting the general impression of soccer as a ‘male’ sport. 46.5% of the coaches have been coaching for five years or less and thus do not have excessive experience. Another 27.5% of the coaches have five to ten years of experience. In total, 74.0% of the coaches do not have more than 10 years of coaching experience. Only 5.2% of the coaches have been doing the ‘job’ for more than 20 years. Taking these finding into consideration, it can be said that the majority of coaches does not have too much experience with respect to the duration of their activity.

When having a closer look at the coaches and the divisions of their team, one has to differentiate between the junior’s and senior’s divisions. More than two-thirds (68.9%) of the respondents coach a junior’s team.

Due to the fact that this work focuses on divisions in amateur soccer, the number of coaches in the respective division is depicted in Figure 11. The figure illustrates that the vast majority of coaches (95.3%) is active on district level only. These divisions represent the lowest level in amateur soccer.

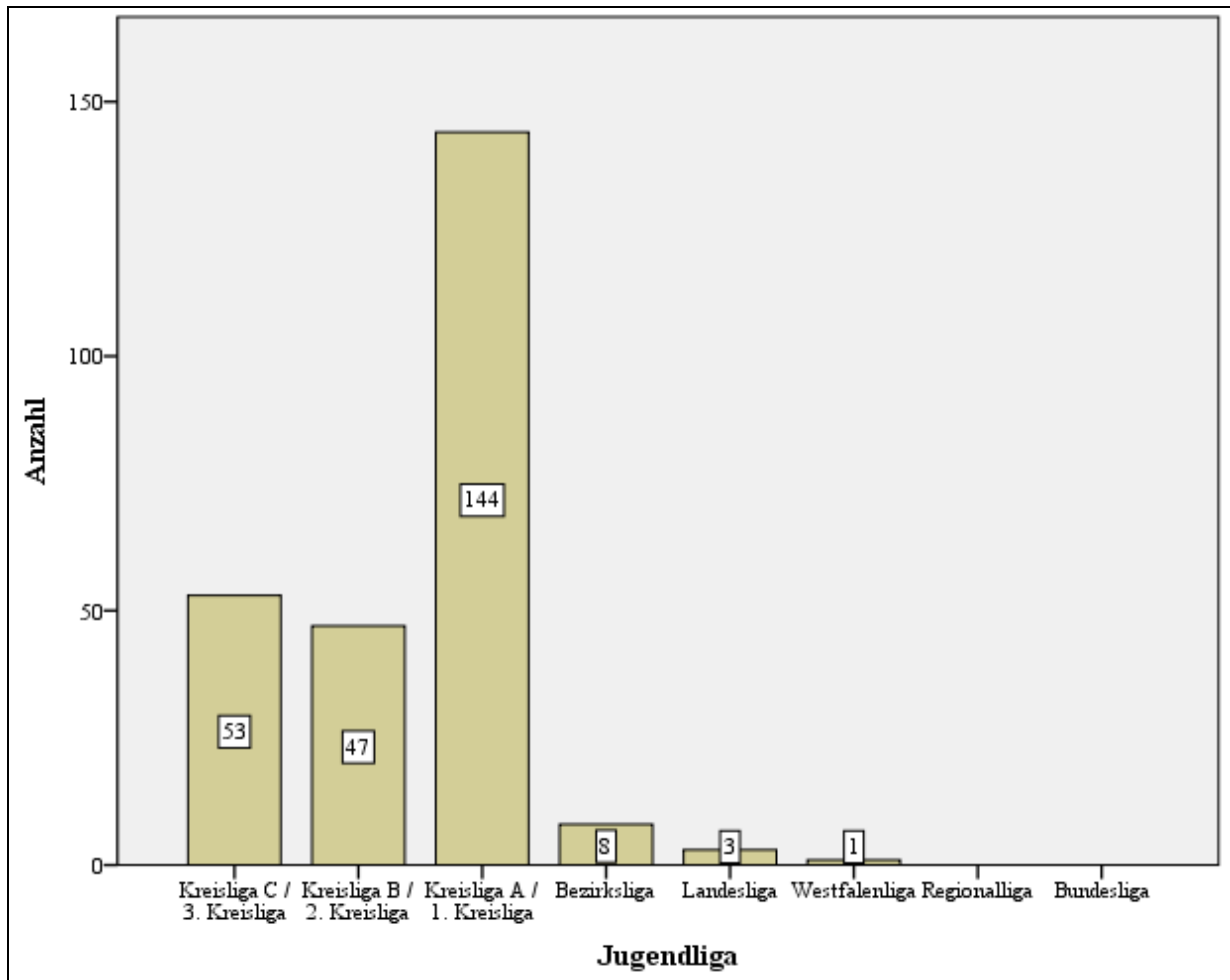


Figure 11: Coaches in Junior's Divisions

A similar result can be found for coaches training a senior's team (31.1%). 77.3% are responsible for a team on district level (see Figure 12). Moreover, it becomes obvious that there are no coaches representing a team higher than the 'Landesliga' which also supports the impression that most of the coaches (and referees) are focused on pure amateur soccer with only a few acting performance-oriented.

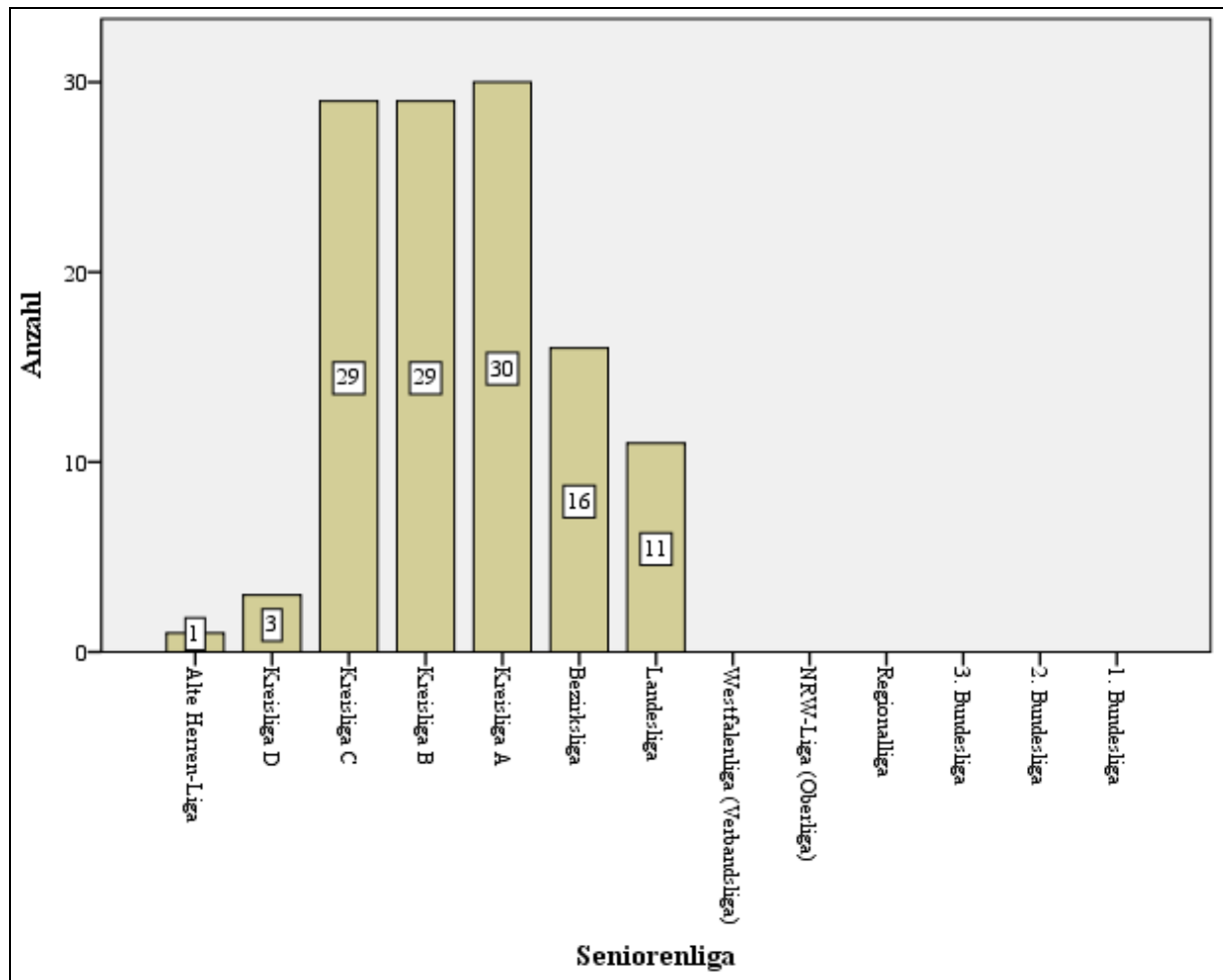


Figure 12: Coaches in Senior's Divisions

12.2 The Third Party's Role in an existing Principal-Agent Setting

In order to elaborate on the role of a third party in an existing principal-agent relationship, match data are not important yet. As a consequence, both separate questionnaires will still be taken into consideration (Files 'Schiedsrichterumfrage' and 'Trainerumfrage') for the following part of the analysis. This is to make use of the solid empirical basis.

The basic premise for a principal-agent relationship is that someone performs a task or service on behalf of another person (Quiggin & Chambers, 2003). Following this assumption for the presented triad means that the referees shall enforce the laws of the game on behalf of the referee boards.

Coaches might try to disturb this relationship by entering the game as a third party. Hence, coaches possibly try to exploit the principal's absence by taking over his role and they might try to influence the agent. The resulting question is the following:

Given a fixed principal-agent relationship in which the agent's performance also impacts a third party's profit, this party will try to exert (a legitimate) influence on the agent's discretionary power with the intention to maximize own utility. (Question 1a)

Following the principal-agent theory, the principal is a profit maximizing individual trying to reach the best possible outcome (Laffont & Martimort, 2001). Referring back to the assumption that coaches (as a third party) take over a 'principal-like' role, they will try to influence the referee. In order to elaborate on the third party's role in this constellation, it is important to learn more about how the third party itself reacts in that specific situation.

In a first step, it is interesting to know if the third party claims the right to influence the agent at all. The empirical analysis shows that the third party does not deny the attempt have impact. The reason for that is that the third party does neither dissent having the right to criticize the agent ('Ich habe das Recht, den Schiedsrichter zu kritisieren') with $M = 3.07$ ($SD = 1.135$; $N = 366$) nor to exert this right ('Ich nutze das Recht, den Schiedsrichter zu kritisieren') with $M = 3.20$ ($SD = 1.080$; $N = 365$). Both means represent the expression 'partly' ('Teils teils') on the Likert scale.

The precondition of normally distributed data is met for all items when following Bortz (1989, p. 163; 2005, p. 93). He considers data with a sample size of $N \geq 30$ as normally distributed given that the visual inspection of all distributions identifies that two thirds of the data are covered by the normal curve. This is valid for all items in the given data file. The optical test for normally distributed data proves the fulfillment of this prerequisite.

Additionally, the values for 'Skewness' and 'Kurtosis' for the first statement (-.072 / -.788) and the second statement (-.036 / -.679) do not exceed +/- 1 and also prove the assumption of normally distributed data. The frequency of the third party's influencing attempts ('Wie häufig versuchen Sie, den Schiedsrichter bei Spielen Ihrer Mannschaft in irgendeiner Art und Weise zu beeinflussen?') (M = 2.47; SD = .950; N = 372; Skewness .296; Kurtosis -.235) allows for the interpretation that there are no constant, but rather infrequent influences. The mean is located between the linguistic expressions 'seldom' ('selten') and 'at times' ('hin und wieder').

The reasons for the respective behavior can be manifold. One basic explication for a person's behavior can be found in his personality (McCrae & Costa Jr., 1999, p. 160; Ajzen, 2005, p. 1). Costa and McCrae (1985) developed the Big Five personality traits which were applied by Barrick and Mount (1991) to explain their relation to job performance criteria. Following this application, the influence of the third party's personality on his behavior towards the agent might also be relevant.

A correlation of the dimensions stated in the Big Five Inventory Shortversion (BFI-S) developed by Gerlitz and Schupp (2005) and the frequency of influencing attempts gives a weak significant (negative) correlation for conscientiousness with $r = -.193$ (N = 356; $p = 0.00$; two-tailed) and $r = -.215$ (N = 364; $p .00 < .01$; two-tailed) for agreeableness. The other dimensions do not show significant correlations. Hence, if the third (the coach) scores high on these personality dimensions, he shows a decreasing tendency regarding the number of influencing attempts.

According to Thompson (2008, p. 542-548), conscientious persons are dutiful and self-controlled. This may also explain the decreased number of influencing attempts. It may be assumed that conscientious people (slightly) tend to focus on the task itself, being able to blank out third parties (e.g., a superior or the referee in the given setting).

A lower frequency for influencing attempts can also be detected for persons scoring high for agreeableness. This result may be explained by the third's will to maintain positive relations with others (Jensen-Campbell & Graziano, 2001, p. 325). However, aforementioned personality dimensions can only be considered as one factor impacting the extent of influencing attempts. In order to evaluate the impact of further aspects, the third party's educational background (expressed by the school level) and age may also be contemplated. Indeed, both factors correlate significantly with the number of influencing attempts. The frequency decreases ($r = -.138$; $N = 372$; $p .008 < .01$; two-tailed) with an increasing person's age ('Alter'), but correlates positively with the school level ('Höchster Schulabschluss'; $r = .181$; $N = 370$; $p .00 < .05$; two-tailed). Table 6 indicates the correlation of the aforementioned items with the frequency of influencing attempts.

Table 6: Potential Factors Impacting the Frequency of a Coach's Influencing Attempts

Korrelationen						
		Wie häufig versuchen Sie, den Schiedsrichter bei Spielen Ihrer Mannschaft in irgendeiner Art und Weise zu beeinflussen?	Gewissenhaftigkeit	Verträglichkeit	Höchster Schulabschluss	Alter
Wie häufig versuchen Sie, den Schiedsrichter bei Spielen Ihrer Mannschaft in irgendeiner Art und Weise zu beeinflussen?	Pearson-Korrelation	1	-,193**	-,215**	,181**	-,138**
	Sig. (2-seitig)		,000	,000	,000	,008
	N	372	356	364	370	372

** . Korrelation ist bei Niveau 0,01 signifikant (zweiseitig).

A partial correlation of age with the frequency of influencing attempts (with conscientiousness as a control variable) gives us a no significant correlation, whereas the respective opposite partial correlation ('age' as control variable) remains weakly significant with $r = -.178$ ($N = 353$; $p .001 < .01$; two-tailed). Within the scope of this study, a person's conscientiousness appears as one relevant factor for the frequency of influencing attempts.

Questions referring to issues which might be seen as unethical or socially undesirable bear the risk of resulting in answers that are influenced by a respondent's impression management tendencies. This strategy describes the attempt to answer in a way that lets oneself appear in a good light (Leary & Kowalski, 1990, p. 34). When asking the coaches how often they try to influence the agent, one might expect that they admit fewer attempts than the actual number. The reason for that is that society might consider this behavior as 'unfair' and thus, socially undesirable. In order to test for this distortion, a bivariate correlation with the frequency of influencing attempts and the score for impression management should result in a negative coefficient r . However, the opposite is the case ($r = .256$; $N = 354$; $p .00 < .01$; two-tailed). It seems that influencing the agent from time to time is considered socially accepted by a profit maximizing third party scoring high on impression management. At the same time, conscientious thirds seem to concentrate on their original tasks, blanking out others (such as the agent). This view is supported when contemplating the results of the correlation of impression management and conscientiousness which results in $r = -.231$ ($N = 348$; $p .00 < .01$). More precisely, people who are interested in creating a positive image of themselves tend to score lower on this personality dimension. A person's conscientiousness therefore appears to be a determining factor for the frequency of influencing attempts (with respect to the agent). The number increases with a decreasing score for conscientiousness since these people show less self-control and concentrate on their actual task (Ameriks, Caplin, Leahy, & Tyler, 2007, p. 969).

Concluding, the applied setting allows for the interpretation that the third party indeed tries to influence the agent. They do so infrequently. This behavior shows dependencies on the person's conscientiousness. More concretely, the more conscientious the person is, the fewer influencing attempts are made. ***Question 1a therefore cannot be negated!***

However, it has to be noted that the results are based on the respondent's answers to the questionnaire so far. Therefore, objective means shall be consulted in order to find out if these attempts can be generally successful and which strategies are the most promising ones. Official match results shall help to elaborate on *Question 1b*.

12.3 The Effectiveness of Verbal Influence on the Agent's Discretionary Power

In contrast to the original files comprising all returns, only the replies from referees and coaches who have met at least in two matches were considered for the following analysis (File 'Gesamtdatei mit Match Data'). As a consequence, the sample size is smaller, but seems to be more relevant for the setting as the answers can always be substantiated with official match data.

Following Deci (1971, p. 105), 'one is said to be intrinsically motivated to perform an activity when one receives no apparent reward except the activity itself.' A profit maximizing third party, however, will not rely on the agent's intrinsic motivation only, but needs to find means to increase the extrinsic motivation as well. According to Frey and Jegen (2000, p. 4), the impact of extrinsic influences can be best displayed in principal-agent relationships. This is exactly, where the coaches' influencing strategies are targeted on. Following the 'social exchange theory', various forms of talk have an important influence on an agent's motivation (Bottom, Holloway, Miller, Mislin, and Whitford, 2006, p. 33). The related question is the following:

Does the third party exert various forms of direct verbal influence to reach a favorable exertion of the agent's discretionary power? (Question 1b)

Various verbal strategies ranging from praising the agent to staying calm to constant criticism have been investigated by applying linear regression models with respect to their influence on official match outcomes.

The chosen strategy represents the independent variable, whereas the specific match data is referred to as the dependent variable. The results are displayed separately for every strategy and are derived from the reduced sample. This comprises the referee-coach dyads and the relevant official match data.

12.3.1 Small Talk before the Service Provision

Establishing a positive relationship with the agent before the actual service provision is one approach that might be applied by the third party taking over a ‘principal-like’ role. In order not to distract the latter from the task, the principal needs to establish this relationship in advance. More precisely, having an informal chat with the agent might help to learn more about each other and thus reduce information asymmetries. Indeed, this strategy has a significant impact on the outcome in the given setting. A linear regression model identifies an advantageous treatment of the coaches’ team (see Table 7). The more coaches admit to have chats with the referee before kick-off, the fewer yellow cards are awarded to their team. It has to be acknowledged that this result might not be exclusively explained by the coach’s strategy. For example, not only the coach may appear to be friendly towards the referee, but also the players. With them showing fair behavior on the pitch, the number of yellow cards may also be relatively low. However, the latter interpretation cannot be proven against the background of the underlying question and therefore shall only serve as an impulse for further thinking.

Table 7: Linear Regression with ‘Small Talk’ as Predictor and the awarded yellow Cards for the Coach’s Team as dependent Variable (N = 307).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben	-.154	.064	-.137	-2.411	.017

R² (adj.) = .015

Applied method in SPSS: Enter

Based upon this outcome, the hypothesized impact of the coach's strategy on the match results finds first empirical evidence. This influence is rather weak and explains a low part of total variance with an adjusted $R^2 = .015$.

The advantage in terms of yellow cards may not appear to be decisive for the match since it does not have an immediate effect on the game (such as a red card leading to a short-handed team). However, a yellow card does affect future actions of the sanctioned player, as he has to be cautious in following tackles in order to avoid a second yellow card and the connected sending-off.

Having a chat before the match does not only show an influence on the number of yellow cards for the chatting coach's team, but also on the yellow cards for the opponent team (see Table 8). The reducing effect is slightly stronger than for the coach's team. A possible explanation for this result may be that the conversation before the match can help to learn more about each other and thus reduce existing information asymmetries. After having met the coach in person, prejudices (e.g., a negative image of the coach) may be refuted. This may lead to a positive prevailing mood before the match and a benevolent treatment of the players (from both teams) on the pitch.

Table 8: Linear Regression with 'Small Talk' as Predictor and the awarded yellow Cards for the Opponent Team as dependent Variable (N = 306).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben	-.197	.092	-.122	-2.142	.033
R^2 (adj.) = .012					

Applied method in SPSS: Enter

With respect to the effect of this strategy on the number of red cards for the coach's team, the regression model results in a positive B. This means that the more coaches state to have a chat with the referee before the game, the more red cards are awarded to his team (see Table 9).

An interpretation of this effect seems to be difficult when contemplating the reduced number of yellow cards for both teams. However, exactly this result may be the basis for the increased number of red cards for the coach's team. The positive atmosphere created by the chat before kick-off may result in a benevolent treatment of the players (with respect to yellow cards). Following this assumption, the players might take notice of the relatively 'lackadaisical' referee and try to max out this situation (e.g., by unreasonable tackles). Consequently, the referee might be forced to sanction this behavior and award more red cards on average in order to re-establish player behavior that is in accordance with the laws of the game.

Table 9: Linear Regression with 'Small Talk' as Predictor and the awarded red Cards for the Coach's Team as dependent Variable (N = 304).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben	.034	.012	.168	2.974	.003
R ² (adj.) = .025					

Applied method in SPSS: Enter

Having a chat with the referee in advance leads to a reduced number of yellow cards for both teams. Due to the fact that the effect for the opponent's team is slightly stronger, this strategy is not profit maximizing for the influencing coach. Additionally, it leads to a negative consequence in terms of red cards for the coach's team. The increased number of sending-offs for the coach's players deteriorates this effect. However, these results shall not be over-interpreted, because all of them only explain a low part of total variance (R² adj. > .10).

12.3.2 Praise

Referring to the principal-agent relationship between an employer with an information advantage and his employee, Rosaz (2012) found that (formal) appraisal is an effective mean to increase employees' motivation. Consequently, transferring this finding to the application in amateur soccer should result in an advantageous treatment of the coach's team when he praises the referee. However, the regression models with the applied strategy and the goals (scored and conceded) do not show significant results with

- Sig. = .268 for the goals scored by the coach's team until half-time,
- Sig. = .732 for the goals scored by the opponent team until half-time,
- Sig. = .403 for the goals scored by the coach's team until final whistle,
- Sig. = .236 for the goals scored by the opponent team until final whistle.

Similar (not significant) results can be found regarding the question if the strategy has an impact on the points (victory, draw, or loss). Neither the model with the points for the coach's team in the respective match shows a significant result (Sig. = .208), nor does the model with the points for the opponent team as dependent variable (Sig. = .217).

The same findings result from regression models with personal sanctions as dependent variables:

- Sig. = .628 for the yellow cards (coach's team),
- Sig. = .483 for the yellow cards (opponent team),
- Sig. = .673 for the second yellow cards (coach's team),
- Sig. = .395 for the second yellow cards (opponent team),
- Sig. = .195 for the red cards for the (coach's team).

The model which is the closest to a significant result is depicted in Table 10.

Table 10: Linear Regression with ‘Praise’ as Predictor and the awarded red Cards for the Opponent Team as dependent Variable (N = 306).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich lobe den Schiedsrichter für seine Entscheidungen lautstark während des Spiels	.035	.019	.107	1.886	.060
R ² (adj.) = .008					

Applied method in SPSS: Enter

As opposed to Rosaz (2012), this sports-related study states that praising the agent is not an effective strategy. A coach praising the referee will therefore not maximize profits (e.g., reach an advantageous treatment by the referee). However, it has to be acknowledged that there are also no drawbacks when applying this strategy.

The reason for these findings may be seen in the referee’s distrust in the coach’s praise. He might not consider this form of intervention as an objective and honest form of feedback, but rather as the attempt to influence him. As a consequence, he might not see a reason for a change of action. An alternative (opposing, but yet valid) interpretation may be that the referees perceive praise as a form of confirmation. Following this view, the referee may assume that the praising coach seems to consider his performance as good. Thus, there is no need to adapt his decision-making in any direction (e.g., by making favorable decisions for one of the teams).

12.3.3 Sporadic Criticism

Sporadic criticism represents a moderate form of verbal influence. Similarly to praising the referee, sporadically criticizing him does not lead to advantages with respect to the outcomes of the match. However, this form of criticism does not lead to disadvantages either. The regression models with this kind of strategy and the goals (scored and conceded) and points (victory, draw, or loss) result in the following significance levels:

- Sig. = .861 for the goals scored by the coach's team until half-time,
- Sig. = .479 for the goals scored by the opponent team until half-time,
- Sig. = .889 for the goals scored by the coach's team until final whistle,
- Sig. = .338 for the goals scored by the opponent team until final whistle,
- Sig. = .743 for the points of the coach's team,
- Sig. = .387 for the points of the opponent team.

Just as the analyses with reference to the goals scored and conceded, the regression models elaborating on the impact of the strategy on the number of personal sanctions are not significant. In Table 11, the model which is closest to a significant result is depicted.

Table 11: Linear Regression with 'Sporadic Criticism' as Predictor and the awarded yellow Cards for the Coach's Team as dependent Variable (N = 307).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich kritisiere den Schiedsrichter vereinzelt für seine Entscheidungen	.177	.093	.108	1.902	.058
R ² (adj.) = .008					

Applied method in SPSS: Enter

Further levels of significance with reference to the personal sanctions are illustrated below.

- Sig. = .267 for the yellow cards (opponent team),
- Sig. = .143 for the second yellow cards (coach's team),
- Sig. = .786 for the second yellow cards (opponent team),
- Sig. = .885 for the red cards (coach's team),
- Sig. = .777 for the red cards (opponent team).

To conclude, this strategy does not represent a profit maximizing approach for the third party taking over a 'principal-like' role. This can be explained in analogy with the findings for the constellation in which the coach decides to praise the referee during the match. Just as in this case, the referee might not see the need to adapt his decisions since he is merely criticized sporadically. Based on this past experience, the coach's behavior might be considered as 'usual' and does not provoke conscious decisions in favor of or against the criticizing coach.

12.3.4 Repeated Protest

In contrast to sporadic criticism, repeated protest does have an influence on the match results. More precisely, the coach can reach a reduced number of second yellow cards for his team (see Table 12). In accordance with the aforementioned results, the regression model again explains a relatively low part of total variance (.017).

Table 12: Linear Regression with 'Repeated Protest' as Predictor and the awarded second yellow Cards for the Coach's Team as dependent Variable (N = 304).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich reklamiere mehrere Male beim Schiedsrichter	-.044	.018	-.141	-2.472	.014
R ² (adj.) = .017					

Applied method in SPSS: Enter

This form of verbal influence therefore represents a (slightly) profit maximizing strategy even though it does not directly lead to an advantage in terms of points in the related match (see Table 13).

Table 13: Linear Regression with ‘Repeated Protest’ as Predictor and the Points for the Coach’s Team as dependent Variable (N = 307).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich reklamiere mehrere Male beim Schiedsrichter	-.004	.008	-.029	-.502	.616
R ² (adj.) = -.002					

Applied method in SPSS: Enter

To sum up, repeated (not constant) protest represents an advantageous strategy for the coach with regard to the awarded second yellow cards. However, this strategy does not have a direct effect on the final result in terms of goals and/or victory/loss. In contrast to sporadic criticism, uttering repeated protest seems to have an impact on the referee. Due to the similarity of both strategies (the referee is approached with negative feedback), it can be assumed that the frequency of influencing attempts seems to have an impact on the effectiveness of the coach’s intervention. More precisely, constant negative feedback may induce the perception that the decision-making has to be adjusted in order to avoid further influences by the coaches.

12.3.5 Keeping Calm

All of the aforementioned strategies comprise a direct verbal influence on the referee. The principal-agent theory considers confidence-building measures as a possible solution to reduce problems resulting from this specific constellation (Casadesus-Masanell, 2004; Bottom, Holloway, Miller, Mislin, & Whitford, 2006, p. 44). The coach might express his trust in the referee’s abilities by not influencing him in any way.

The latter might take notice of this behavior and act with extraordinary effort in the further course of the match. The empirical analysis shows that this strategy indeed has an impact on the match results. A linear regression with the strategy as the independent variable and the specific match results as the dependent variable identifies an advantageous treatment of the coach's team with respect to the awarded yellow cards (see Table 14).

Table 14: Linear Regression with 'Keeping Calm' as Predictor and yellow Cards for the Coach's Team as dependent Variable (N = 305).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich verhalte mich durchgehend ruhig.	-.151	.077	-.112	-1.968	.050
R ² (adj.) = .009					

Applied method in SPSS: Enter

Following this table, staying calm is slightly beneficial for the coach's team. However, the strategy does not only influence the number of yellow cards, but also the number of second yellow cards for both teams involved in the match. Again, R² (adj.) is low (.009). Consequently, it can be assumed that the strategy applied by the coach cannot be considered as a main factor influencing referee decisions in amateur soccer, but again as one of several impacts.

Table 15: Linear Regression with 'Keeping Calm' as Predictor and second yellow Cards for the Coach's Team as dependent Variable (N = 302).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich verhalte mich durchgehend ruhig	.036	.017	.120	2.099	.037
R ² (adj.) = .011					

Applied method in SPSS: Enter

In Table 15, a positive correlation between the coach's agreement to be calm during the match and the number of second yellow cards for his team is displayed. This drawback outweighs the advantage in terms of yellow cards, since a sending-off leads directly to a reduction of players. Furthermore, being calm also affects the number of red cards for the opponent team. The more the coach stays calm, the fewer red cards are awarded to the other team (see Table 16).

Table 16: Linear Regression with 'Keeping Calm' as Predictor and red Cards for the Opponent Team as dependent Variable (N = 304).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich verhalte mich durchgehend ruhig	-.051	.019	-.151	-2.663	.008
R ² (adj.) = .020					

Applied method in SPSS: Enter

Against the background of utility maximization, staying calm during the match does not represent a successful influencing approach for coaches. Based upon these results, it is rather not advisable for a coach to stay calm as this increases the number of second yellow cards for the own team on the one hand and leads to fewer red cards for the opponent on the other hand. This interpretation is confined to a weak effect of the coach's strategy due to the relatively low *B* and the low adjusted R² (< .10).

The ambiguous results do not allow for a simple interpretation. Firstly, the reduced number of yellow cards for the coach's team may be considered as a form of 'reward'. This is, because referees are criticized most often for their taken decisions. Possibly, the referee shows a preferential treatment in this respect to enforce and encourage this form of coach behavior - and to avoid uncomfortable criticism. Secondly, the number of second yellow cards for the coach's team increases.

A reason for this might be that single players over-interpret the referee's benevolence in terms of the awarded yellow cards and show behavior (e.g., tackles) that has to be sanctioned according to the rules. In this regard, the increased number of second yellow cards might also be the referee's attempt to re-establish a fair game. This can be the case after having lost control over the game due to few yellow cards - which are basically a means of warning (FIFA - Laws of the Game 2013/2014, p. 38). Thirdly, the opponent team is awarded slightly fewer red cards in total.

A coherent interpretation of this finding appears difficult as the strategy does not represent an active influence on the referee. However, it goes along with the reduced number of yellow cards for the coach's team. It may be assumed that the referee appreciates the coach's reservation and reacts with benevolence - also with respect to the red cards for the opponent team. However, it shall be kept in mind that the respective model can only explain two percent of total variance. As a consequence, further aspects that have not been in the focus of this study may explain this result more accurately.

12.3.6 Sporadically Remarking Displeasure with Gesture and Facial Expression

The analysis of strategies has so far been limited to verbal influence. However, gesture and facial expression may also be helpful tools in order to exert influence on other persons. Garibano and Li (2012) have identified an influence of hand gesture on people's generosity.

This influence, however, cannot be detected in the given setting as linear regressions do not lead to significant results. The regression model with the goals scored by the opponent team until the final whistle marginally fails to fulfill the required level of significance (see Table 17).

Table 17: Linear Regression with ‘Sporadically Remarkings Displeasure with Gesture and Facial Expression’ as Predictor and the Goals scored by the Opponent Team until final Whistle as dependent Variable (N = 306).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich äußere meinen Unmut vereinzelt durch Gestik und Mimik	-.192	.112	-.098	-1.711	.088
R^2 (adj.) = .006					

Applied method in SPSS: Enter

Further regression models with sporadic criticism as independent variable are significant neither.

- Sig. = .415 for the goals scored by the coach’s team until half-time,
- Sig. = .139 for the goals scored by the opponent team until half-time,
- Sig. = .509 for the goals scored by the coach’s team until final whistle,
- Sig. = .178 for the points of the coach’s team.

This does also apply for the model elaborating on the impact of the strategy on the points for the opponent team in the respective match. The model also fails marginally to be of acceptable significance (see Table 18).

Table 18: Linear Regression with ‘Sporadically Remarkings Displeasure with Gesture and Facial Expression’ as Predictor and the Points for the Opponent Team in the specific Match as dependent Variable (N = 306).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich äußere meinen Unmut vereinzelt durch Gestik und Mimik	-.150	.086	-.099	-1.740	.083
R^2 (adj.) = .007					

Applied method in SPSS: Enter

The findings allow for the assumption that sporadically remarking displeasure with gesture and facial expression does not lead to a referee bias in any form. In accordance with the explanation for other insignificant strategies (praise and sporadic criticism), sporadically remarking displeasure with gesture and facial expression does not seem to be an effective strategy to reach a favorable referee bias. The reason for that might be that the scattered attempts may not make the referee feel uncomfortable with the situation on the pitch. This, in turn, does not lead to a significant change in the referee's decisions.

12.3.7 Repeatedly Remarking Displeasure with Gesture and Facial Expression

Repeatedly remarking displeasure with gesture and facial expression represents the most drastic form of influence. Indeed, this strategy does have an impact on the match results (see Table 19).

Table 19: Linear Regression with 'Repeated Displeasure with Gesture and Facial Expression' as Predictors and Goals scored until Half-Time for the Opponent Team as dependent Variable (N = 304).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Ich äußere meinen Unmut wiederholt durch Gestik und Mimik	-.131	.066	-.112	-1.968	.050
R^2 (adj.) = .009					

Applied method in SPSS: Enter

The more the coach remarks displeasure with gesture and facial expression (regarding the referee's decisions), the fewer goals the opponent team scores until half-time. Even though this result displays a slight advantage for the influencing coach' team, this shall not be given too much attention. This is due to the fact that no direct influence on the further course of the match (e.g., such as a sending off) can be reliably assumed based upon this finding. However, in contrast to sporadic attempts, repeatedly remarking displeasure with gesture and facial expression seems to have a (weak) impact on a referee's decisions.

It can be assumed that not only the strategy is the decisive factor in this setting, but also the frequency itself. Only if the coach constantly exerts influence, the referee shows significant reactions. The reason for that might be that he potentially feels that his performance is not satisfactory at the current stage. In order to adjust to this circumstance, his decision-making needs to be adapted. This can result in a little bias.

12.3.8 Interim Results II

The empirical analysis has identified various strategies that may be applied by the third party with the aim of influencing the agent. However, when interpreting the results, it has to be acknowledged that the strategy only contributes to a small part of total variance with an adjusted $R^2 > 10\%$ and shows a rather weak influence. Not all of the strategies are successful when assuming that the third party wants to maximize its utility. Praising the referee, expressing sporadic criticism, and sporadically remarking displeasure with gesture and facial expression do not lead to significant deviations in the match results and therefore are no utility maximizing strategies in the given setting.

In contrast, however, having a chat with the referee before the game and keeping calm have an impact on the match results. However, in both cases, the coach's team experiences a slightly disadvantageous treatment by the referee. The only strategies that are of advantage are repeated protest and repeatedly remarking displeasure with gesture and facial expression.

Question 1b cannot be negated! It becomes obvious that repeated actions are the only strategies which lead to advantages in terms of match results. However, no drastic advantages (e.g., more points on average per match) can be reached by the coach interference. Again, it shall be pointed out that all linear regressions result in a relatively low adjusted $R^2 (< 10\%)$. This means that the linear regressions models explain a relatively low percentage of total variance.

As a consequence, other factors also contribute to the explanation of this phenomenon and might be elaborated in further works regarding similar settings. The strategy chosen by the third party is only one component forming the working model of this work. The results are so far based upon the assumption that the agent always reacts consistently to influencing attempts by a third party. However, people are different in real life - and so are their reactions. In the following, it shall be found out if the influence of a third party's strategy is also impacted by the agent's reaction to respective attempts.

12.4 Impact of the Agent's Reaction to influencing Attempts

The impact of a third party's influencing attempts on an agent was analyzed in *Question 1b*. The question assumes that the agents always react in a perfect way. However, according to Angleitner and Ostendorf (2004, p. 31), personality dimensions are reflected in concrete human behavior. Following this view, agents will react differently to influencing attempts by external parties. The model assumes that the agent can either react with favoritism or discrimination (of the coach's team). Therefore, the underlying question is the following:

Given that the agent takes notice of a third party's influencing attempts, the success or failure is affected by the basic form of his reaction (favoritism or discrimination). (Question 2)

In analogy with *Question 1b*, the results for *Question 2* will be presented separately for every single strategy and again also focus on the reduced sample with specific referee-coach dyads.

12.4.1 Small Talk before the Service Provision & the Agent's Reaction

In 12.3.1, a significant relationship between the strategy and the number of yellow cards for the coach's team was identified with $B = -.154$ ($N = 307$; $p = .017$). As illustrated in Table 20, this tendency is slightly stronger ($B = -.162$) when incorporating discrimination as the agent's reaction to this strategy in the given model.

However, the reaction itself is not a significant determinant and the relation between strategy and the number of yellow cards for the coach's team is not moderated by the agent's discrimination ($B = .158$). The integration of the referee's reaction to influencing attempts leads to a slight increase of R^2 (adj.). Still, only about two percent of total variance can be explained by this model. Drastic changes in the basic model (without the referee's reaction) cannot be detected.

Table 20: Linear Regression with 'Small Talk' & 'Discrimination' as Predictors and yellow Cards for the Coach's Team as dependent Variable (N = 270).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	1.520	.245	-	6.191	.000
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben	-.162	.067	-.146	-2.409	.017
Benachteiliger	.014	.098	.009	.145	.885
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben * Benachteiliger	.118	.084	.087	1.416	.158
		R^2 (adj.) = .021		Sig. of the model: .034	

Applied method in SPSS: Enter

Similar results can be identified when the agent reacts with favoritism to the third party's strategy. Again, the strategy represents a significant determinant for the number of yellow cards for the coach's team. The agent's reaction does neither impact the outcome independently nor does it moderate the given relationship (see Table 21). Again, R^2 (adj.) slightly increases compared to the model exclusively incorporating the coach strategy.

Table 21: Linear Regression with ‘Small Talk’ & ‘Favoritism’ as Predictors and yellow Cards for the Coach’s Team as dependent Variable (N = 275).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.603	.336	-	1.795	.074
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben	.165	.067	.149	2.466	.014
Bevorzuger	-.050	.178	-.018	-.282	.778
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben * Bevorzuger	.181	.153	.075	1.180	.239
		R ² (adj.) = .018		Sig. of the model: .049	

Applied method in SPSS: Enter

The linear regression model does not only identify a significant connection between this strategy and the number of yellow cards for the coach’s team, but also for the opponent team ($B = -.197$; $N = 306$; $Sig. = 033$). When adding the agent’s possible reaction to the linear regression, the model is not significant anymore ($B = .089$ for discrimination; $B = .080$ for favoritism). Consequently, it can be assumed that the agent’s reaction has a slightly positive influence on the number of yellow cards for the opponent team, but cannot be considered as an independent variable. In section 12.3.1, a positive correlation between the coach’s intention of having a small talk before the service provision and the number of red cards for his team was identified ($B = 034$; $N = 304$; $Sig. = 0.034$). This finding can be substantiated when integrating discrimination as the referee’s reaction (see Table 22). Neither the product term ($B = .243$), nor the referee’s reaction ($B = .135$) is significant. In analogy with the aforementioned influence of the strategy, a similar relation ($B = .038$) can also be detected when integrating the reaction as a second possible predictor.

Table 22: Linear Regression with ‘Small Talk’ & ‘Discrimination’ as Predictors and red Cards for the Coach’s Team as dependent Variable (N = 267).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.219	.054	-	4.070	.000
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben	-.040	.013	-.190	-3.119	.002
Benachteiliger	-.013	.019	-.041	-.673	.502
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben *	.008	.016	.033	.528	.598
Benachteiliger					
		R ² (adj.) = .025		Sig. of the model: .020	

Applied method in SPSS: Enter

This finding is also valid when changing the reaction to favoritism (see Table 23).

Table 23: Linear Regression with ‘Small Talk’ & ‘Favoritism’ as Predictors and red Cards for the Coach’s Team as dependent Variable (N = 272).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.264	.065	-	4.086	.000
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben	-.038	.013	-.179	-2.987	.003
Bevorzuger	-.051	.034	-.095	-1.498	.135
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben *	-.034	.029	-.074	-1.171	.243
Bevorzuger					
		R ² (adj.) = .038		Sig. of the model: .004	

Applied method in SPSS: Enter

Again, only the chosen strategy seems to have an impact on the match results. All other aspects do not lead to significant results. This allows for the interpretation that having an informal chat before the actual service provision might have the effect on the outcome. However, this strategy does not represent a utility maximizing approach. The outcome is not moderated by the agent's reaction in this case. A possible reason for this finding is that the influencing attempts are made before the actual kick-off. This means that the referee cannot directly react to them. This might lead to a reduced significance of the reaction and the absence of moderation effects.

12.4.2 Praise & the Agent's Reaction

Considering this strategy as the only independent variable on the match result does not lead to significant results (see 12.3.2). However, when extending this model by integrating the referee's reaction, it is significant in one case (see Table 24).

Table 24: Linear Regression with 'Praise' & 'Discrimination' as Predictors and the Goals scored by the Opponent Team until Half-Time as dependent Variable (N = 270).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.370	.204	-	1.814	.071
Ich lobe den Schiedsrichter für seine Entscheidungen lautstark während des Spiels	.038	.066	.037	.573	.567
Benachteiliger	.230	.075	.185	3.062	.002
Ich lobe den Schiedsrichter für seine Entscheidungen lautstark während des Spiels * Benachteiliger	.028	.104	.017	.271	.786
	R ² (adj.) = .026		Sig. of the model: .019		

Applied method in SPSS: Enter

Even though the strategy itself remains insignificant, the referee's discrimination of the coach's team seems to find expression in the number of goals scored by the opponent team until half-time. This result is consistent when considering the reaction in question (discrimination). All other linear regression models remained insignificant regardless whether the referee reacts with favoritism or discrimination (see Table 25).

Table 25: Praise & the Agent's Reaction - Significance Levels of the Linear Regression Models.

Referee Reaction	<i>Favoritism</i>	<i>Discrimination</i>
Match Data		
Goals scored by the coach team until half-time	Sig. = .404	Sig. = .457
Goals scored by the opponent team until half-time	Sig. = .494	Sig. = .019
Goals scored by the coach's team until the final whistle	Sig. = .464	Sig. = .119
Goals scored by the opponent team until the final whistle	Sig. = .699	Sig. = .461
Points for the coach's team	Sig. = .866	Sig. = .702
Points for the opponent team	Sig. = .675	Sig. = .657
Yellow cards for the coach's team	Sig. = .637	Sig. = .406
Yellow cards for the opponent team	Sig. = .190	Sig. = .311
Second yellow cards for the coach's team	Sig. = .263	Sig. = .191
Second yellow cards for the opponent team	Sig. = .809	Sig. = .125
Red cards for the coach's team	Sig. = .144	Sig. = .656
Red cards for the opponent team	Sig. = .347	Sig. = .206
Applied method in SPSS: Enter		

12.4.3 Sporadic Criticism & the Agent's Reaction

In analogy with the aforementioned strategy, sporadic criticism does not lead to significant results when considering the strategy as the only independent variable. Again, the coach's team experiences a weak disadvantage with respect to the goals scored by the opponent team until half-time. The more the referee indicates to react with discrimination to influencing attempts, the more goals are scored by the opponent team until half-time (see Table 26).

Table 26: Linear Regression with 'Sporadic Criticism' & 'Discrimination' as Predictors and the Goals scored by the Opponent Team until Half -Time as dependent Variable (N = 270).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.640	.265	-	2.417	.016
Ich kritisiere den Schiedsrichter vereinzelt für seine Entscheidungen.	-.060	.074	-.049	-.804	.422
Benachteiliger	.240	.075	.193	3.199	.002
Ich kritisiere den Schiedsrichter vereinzelt für seine Entscheidungen. * Benachteiliger	-.051	.100	-.031	-.509	.611
		R ² (adj.) = .028		Sig. of the model: .015	

Applied method in SPSS: Enter

Just as for 'praise', this slight advantage does not seem to be a consequence of the strategy, but rather of the referee's reaction (discrimination). The advantage for the opponent team is consistent with the discrimination of the coach's team, but does not find expression in the final score. Taking this into consideration, the advantage can be seen as a temporary one. Table 27 depicts further significance levels.

Table 27: Sporadic Criticism & the Agent's Reaction - Significance Levels of the Linear Regression Models.

	Referee Reaction	<i>Favoritism</i>	<i>Discrimination</i>
Match Data			
Goals scored by the coach team until half-time		Sig. = .160	Sig. = .789
Goals scored by the opponent team until half-time		Sig. = .364	Sig. = .015
Goals scored by the coach's team until the final whistle		Sig. = .490	Sig. = .968
Goals scored by the opponent team until the final whistle		Sig. = .446	Sig. = .299
Points for the coach's team		Sig. = .935	Sig. = .818
Points for the opponent team		Sig. = .601	Sig. = .681
Yellow cards for the coach's team		Sig. = .503	Sig. = .436
Yellow cards for the opponent team		Sig. = .608	Sig. = .233
Second yellow cards for the coach's team		Sig. = .121	Sig. = .667
Second yellow cards for the opponent team		Sig. = .878	Sig. = .133
Red cards for the coach's team		Sig. = .428	Sig. = .900
Red cards for the opponent team		Sig. = .335	Sig. = .260
Applied method in SPSS: Enter			

12.4.4 Repeated Protest & the Agent's Reaction

Repeated protest turned out to be a successful strategy since it leads to a preferential treatment in terms of second yellow cards for the coach's team (see Table 12). Integrating the referee's reaction to the model brings the results illustrated in Table 28.

Table 28: Linear Regression with ‘Repeated Protest’ & ‘Discrimination’ as Predictors and the second yellow Cards for the Coach’s Team as dependent Variable (N = 267).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.239	.053	-	4.497	.000
Ich reklamiere mehrere Male beim Schiedsrichter	-.046	.017	-.164	-2.725	.007
Benachteiliger	-.033	.021	-.099	-1.581	.115
Ich reklamiere mehrere Male beim Schiedsrichter * Benachteiliger	.041	.017	.146	2.337	.020
R ² (adj.) = .042		Sig. of the model: .002			

Applied method in SPSS: Enter

Regarding the combination of the chosen strategy and the referee’s reaction, a moderation effect can be detected. More precisely, the advantage arises when considering the strategy independently ($B = -.046$) and it turns into a disadvantage when the coach applying this strategy meets a referee who reacts with discrimination to influencing attempts ($B = .041$). This is, even though the reaction does not have a significant effect as an independent factor.

This result is particularly interesting since coaches who do not know which type of referee they face during the match may experience an advantage with respect to second-yellow cards. However, this is only the case if the referee reacts with favoritism to influencing attempts. However, he may also experience a disadvantage in case the referee reacts with discrimination. This uncertainty can be referred to as information asymmetries which play an important role in principal-agent relationships. The coach can reduce the risk of meeting a discriminating referee when gathering information about him. This can be done by looking at past matches (e.g., the number of personal sanctions), or by learning more about him in form of personal conversations (e.g., talking to the referee or asking colleagues).

Table 29: Linear Regression with ‘Repeated Protest’ & ‘Favoritism’ as Predictors and second yellow Cards for the Coach’s Team as dependent Variable (N = 272).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.303	.071	-	4.257	.000
Ich reklamiere mehrere Male beim Schiedsrichter	-.048	.020	-.153	-2.431	.016
Bevorzuger	-.079	.038	-.124	-2.082	.038
Ich reklamiere mehrere Male beim Schiedsrichter * Bevorzuger	.058	.055	.067	1.065	.288
R ² (adj.) = .039			Sig. of the model: .003		

Applied method in SPSS: Enter

Moderation does not take place when the referee reacts with favoritism (see Table 29). Both separate factors (the strategy chosen by the third party and the agent’s reaction) have a significantly negative effect on the number of second yellow cards for the coach’s team (B = -.048 and B = -.079).

12.4.5 Keeping Calm & the Agent’s Reaction

The contemplation of this strategy has independently identified a slight advantage with regard to the number of yellow cards for the coach’s team. Integrating discrimination as a second possible determinant, however, does not lead to a significant model (Sig. = .437). This also applies when the agent reacts with favoritism to this strategy. The model is insignificant with B = .124. The situation is different when looking at the number of second yellow cards for the coach’s team. The strategy has an increasing effect on the dependent variable (B = .036) when it is the only determinant in the model. When integrating discrimination as a second determinant in the model, the strategy is not significant anymore (see Table 30).

The reaction itself can also be neglected when interpreting the results (Sig. = .141). Instead, the product term has a moderating effect on the output as it leads to a decreased number of second yellow cards ($B = -.055$).

Table 30: Linear Regression with ‘Keeping Calm’ & ‘Discrimination’ as Predictors and the second yellow Cards for the Coach’s Team as dependent Variable (N = 265).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.020	.066	-	.309	.757
Ich verhalte mich durchgehend ruhig	.033	.018	.114	1.880	.061
Benachteiliger	-.030	.020	-.091	-1.478	.141
Ich verhalte mich durchgehend ruhig * Benachteiliger	-.055	.021	-.161	-2.630	.009
R^2 (adj.) = .032			Sig. of the model: .010		

Applied method in SPSS: Enter

This result does not appear to be in consistence with the referee’s behavior since the influencing coach is facing a favorable treatment. Therefore, it seems as if the referees are not consistent regarding their action when coaches do not actively influence them.

A different view arises when the agent reacts with favoritism to the third party’s strategy. In this case, both factors are significant. However, there is no moderation in this model (see Table 31). The negative effect of the agent’s reaction ($B = -.083$) on the number of second yellow cards for the coach’s team is foreseeable as this represents a form of favoritism.

Table 31: Linear Regression with ‘Keeping Calm’ & ‘Favoritism’ as Predictors and the second yellow Cards for the Coach’s Team as dependent Variable (N = 270).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.052	.079	-	.652	.515
Ich verhalte mich durchgehend ruhig.	.044	.019	.139	2.300	.022
Bevorzuger	-.083	.039	-.129	-2.145	.033
Ich verhalte mich durchgehend ruhig * Bevorzuger	-.043	.032	-.081	-1.345	.180
R ² (adj.) = .028			Sig. of the model: .015		

Applied method in SPSS: Enter

A decreasing effect on the number of red cards for the opponent team was detected when the coach stays calm during the match. When adding the agent’s reaction to this linear regression, the model becomes insignificant with Sig. = .098 for discrimination and Sig. = .173 for favoritism. Consequently, a moderating effect cannot be identified in the given constellation. However, this result is interesting as the strategy does not represent an active impact on the referee. Therefore, it is not surprising that the product term (strategy and reaction) does not give a significant result. Basing upon these findings, keeping calm does not lead to negative consequences with regard to second yellow cards for the coach’s team. This finding applies for both referee reactions.

12.4.6 Sporadically Remark Displeasure with Gesture and Facial Expression & the Agent's Reaction

The linear regression models with a coach sporadically remarking displeasure with gesture and facial expression identified do not show significant results. When incorporating the referee's reaction as the second independent variable, two models shows significant results (see Table 32).

Table 32: Sporadically Remark Displeasure with Gesture and Facial Expression & the Agent's Reaction - Significance Levels of the Linear Regression Models.

	Referee Reaction	<i>Favoritism</i>	<i>Discrimination</i>
Match Data			
Goals scored by the coach team until half-time		Sig. = .104	Sig. = .306
Goals scored by the opponent team until half-time		Sig. = .270	Sig. = .002
Goals scored by the coach's team until the final whistle		Sig. = .165	Sig. = .489
Goals scored by the opponent team until the final whistle		Sig. = .425	Sig. = .035
Points for the coach's team		Sig. = .428	Sig. = .209
Points for the opponent team		Sig. = .278	Sig. = .257
Yellow cards for the coach's team		Sig. = .083	Sig. = .197
Yellow cards for the opponent team		Sig. = .356	Sig. = .192
Second yellow cards for the coach's team		Sig. = .233	Sig. = .649
Second yellow cards for the opponent team		Sig. = .513	Sig. = .072
Red cards for the coach's team		Sig. = .385	Sig. = .191
Red cards for the opponent team		Sig. = .348	Sig. = .409
Applied method in SPSS: Enter			

Both significant models incorporate discrimination (as the referee reaction) to influencing attempts. Table 33 illustrates that the referee's reaction has a significant (increasing) impact on the number of goals scored by the opponent team until half-time.

The reason for this is not the strategy, but the fact *that* he tries to influence the referee. It has to be noticed that this disadvantage only appears when the referee reacts with discrimination to influencing attempts.

Table 33: Linear Regression with ‘Sporadically Remarking Displeasure with Gesture and Facial Expression’ & ‘Discrimination’ as Predictors and the Goals scored by the Opponent Team until Half-Time as dependent Variable (N = 270).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.813	.274	-	2.962	.003
Ich äußere meinen Unmut vereinzelt durch Gestik und Mimik	-.096	.072	-.080	-1.339	.182
Benachteiliger	.214	.074	.173	2.880	.004
Ich äußere meinen Unmut vereinzelt durch Gestik und Mimik * Benachteiliger	.164	.098	.101	1.677	.095
	R ² (adj.) = .043		Sig. of the model: .002		

Applied method in SPSS: Enter

A similar effect arises with respect to the goals scored by the opponent team until the final whistle (see Table 34). Similarly to the goals scored until half-time, the model shows a significant B. In contrast, however, this increase is a consequence of the combination between the strategy and the referee’s reaction. This implies that when a coach sporadically remarks displeasure with gesture and facial expression in a match with a referee reacting with discrimination to influencing attempts, the coach’s team concedes significantly more goals. Thus, the reaction moderates the relation between the strategy and this match outcome. As a consequence, this strategy does not represent a profit maximizing approach. However, when judging the impact of both independent variables, it has to be noticed that their contribution to the explanation of total variance is relatively low with R^2 (adj.) = .021.

Table 34: Linear Regression with ‘Sporadically Remarking Displeasure with Gesture and Facial Expression’ & ‘Discrimination’ as Predictors and the Goals scored by the Opponent Team until final Whistle as dependent Variable (N = 269).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	2.236	.453	-	4.941	.000
Ich äußere meinen Unmut vereinzelt durch Gestik und Mimik	-.169	.118	-.087	-1.430	.154
Benachteiliger	.138	.123	.068	1.124	.262
Ich äußere meinen Unmut vereinzelt durch Gestik und Mimik * Benachteiliger	.322	.162	.122	1.994	.047
R^2 (adj.) = .021			Sig. of the model: .035		

Applied method in SPSS: Enter

12.4.7 Repeatedly Remarking Displeasure with Gesture and Facial Expression & the Agent’s Reaction

In cases in which a coach repeatedly remarks displeasure with gesture and facial expression (strategy as the only independent variable), the opponent team experiences a slight advantage in terms of goals scored until half-time ($B = -.131$; $N = 304$; $Sig. = .05$). When inserting the agent’s reaction to this influencing attempt as a second predictor, the interaction between the strategy and discrimination by the agent leads to an increased number of goals until half-time for the opponent team (see Table 35). This is of particular interest since the strategy does not show a significant influence itself (as opposed to the model which comprises the strategy as the exclusive variable). The second predictor (discrimination) by the referee has an increasing impact on the goals scored by the opponent team until half-time. Thus, the referee’s reaction seems to be the decisive factor with regard to the regression model as it moderates the effect of the strategy on the goals conceded by the coach’s team.

To sum up, this constellation between the chosen strategy and the referee's reaction is disadvantageous for the coach's team. In contrast, however, the model is not significant when replacing discrimination with favoritism (Sig. = .195).

Table 35: Linear Regression with 'Repeatedly Remarking Displeasure with Gesture and Facial Expression' & 'Discrimination' as Predictors and the Goals scored until Half-Time by Opponent Team as dependent Variable (N = 267).

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>
Konstante	.842	.231	-	3.640	.000
Ich äußere meinen Unmut wiederholt durch Gestik und Mimik.	-.118	.071	-.099	-1.659	.098
Benachteiliger	.188	.076	.153	2.490	.013
Ich äußere meinen Unmut wiederholt durch Gestik und Mimik * Benachteiliger	.248	.093	.163	2.654	.008
	R ² (adj.) = .062		Sig. of the model: .000		

Applied method in SPSS: Enter

12.4.8 Interim Results III

Regarding **Question 2**, it is assumed that the success or failure of a third party's influencing attempts is moderated by the agent's reaction towards these attempts. This assumption finds empirical evidence in this study. A moderating effect of the agent's reaction can be identified when the third party chooses repeated protest as the influencing strategy. The advantage in terms of second yellow cards when contemplating the strategy independently (B = -0.44; N = 304; Sig. = .014) turns into a disadvantage (B = .041; N = 267; Sig. = .002) if the coach faces discrimination by the referee.

A similar tendency can be seen when looking at the independent effect of another strategy. If the coach decides to remark displeasure with gesture and facial expression on an ongoing basis, his team experiences a slight advantage. The reason for that is that the opponent team scores significantly fewer goals until half-time ($B = -.131$; $N = 304$; $\text{Sig.} = .050$). The results are different when looking at the product term consisting of the strategy and the referee's reaction. In this case, the coach experiences a disadvantageous treatment since more second yellow cards are awarded to his team ($B = .248$; $N = 267$; $\text{Sig.} .008$).

The opposite effect can be detected for cases in which the third party chooses to keep calm during the service provision. The strategy itself is not utility maximizing as it leads to an increased number of second yellow cards for the coach's team. Surprisingly, when incorporating discrimination as the agent's reaction, this disadvantage changes and leads to a reduced number of second yellow cards. All significant results are shown in Table 36.

Table 36: Significant Impacts on Match Results

Strategy	<i>Significant impacts on match results (Strategy only)</i>	<i>Significant impacts on match results (Strategy and Referee Reaction)</i>
<i>Small Talk before the Match</i>	☺ Fewer yellow cards for coach's team	-
	☹ More red cards for coach's team	-
	☹ Fewer yellow cards for opponent	-
<i>Praise</i>	-	-
<i>Sporadic Criticism</i>	-	-

<i>Repeated Protest</i>	😊 Fewer second yellow cards for coach's team	😞 More second yellow cards for coach's team
<i>Keeping Calm</i>	😊 Fewer yellow cards for coach's team	😊 Fewer second yellow cards for coach's team
	😞 More second yellow cards for coach's team	-
	😞 Fewer red cards for opponent	-
<i>Sporadically Remark Displeasure with Gesture and Facial Expression</i>	-	-
<i>Repeatedly Remark Displeasure with Gesture and Facial Expression</i>	😊 Fewer goals until half-time for opponent	😞 More goals until half-time for opponent

Question 2 cannot be negated! The linear regression models prove a significant moderation effect of the agent's reaction to a third party's influencing attempts. However, this effect can be identified only for an agent's discrimination. Furthermore, moderation does not seem to exist for every strategy, but only for repeated actions (protest and remarking displeasure with gesture and facial expression) and the third party's choice to be calm during the service provision. Similarly to the analysis with respect to the influence of the third party's strategy, the adjusted R² remains low (< 10 %) if the agent's reaction is integrated in the model. This finding substantiates the assumption that further factors (e. g., the player quality) also have an important impact on the match results. Still, the analysis allows for the interpretation that a third party may indeed influence another principal's agent and thereby reach a preferential exertion of the agent's discretionary power.

IV Discussion of the Results

13 Discussion & Transfer

The following discussion is divided into seven sections. The results of *Question 1a* and *1b* will be dealt with in sections 13.1 (The Role of a Third Party in an existing Principal-Agent Relationship) and 13.2 (The Impact of a Third Party's influencing Attempts on the Agent's Performance). Section 13.3 (The Effect of the Agent's Reactions to influencing Attempts of a Third Party) will refer to the findings regarding *Question 2*. The implications for the principal-agent theory will be illustrated in 13.4 (Implications for the Principal-Agent Theory). In this section, it will be elaborated if and which elements can be enriched against the background of the findings of this study. The following section (13.5) aims at transferring the findings to the business life of a manager dealing with project management issues. It shall be figured out if and how the findings can help superiors to manage subordinates in daily life effectively. In 13.6 (Limitations of the Study), aspects which limit the work will be presented. The discussion ends with section 13.7 (Perspectives for further Research) in which suggestions for further related research will be made.

13.1 The Role of a Third Party in an existing Principal-Agent Relationship

Perrow (1986, p. 224) delivers a simple, yet suitable understanding for the description of a basic principal-agent relationship in economic theory:

'In its simplest form, agency theory assumes that social life is a series of contracts. Conventionally, one member, the 'buyer' of goods or services is designated the 'principal', and the other, who provides the goods or service is the 'agent' - hence the term 'agency theory.' The principal-agent relationship is governed by a contract specifying what the agent should do and what the principal must do in return.'

Following this statement, there is exactly one principal and one agent (Perrow, 1986, p. 224; Eisenhardt, 1989, p. 58). However, further literature identified the need for a broader view. Among others, Hammond and Knott (1996), Wood and Waterman (1991, 1993, & 1994), and Brehm and Gates (1997) found out that (bureaucratic) actions can be influenced by various principals competing with each other. Beyond that, Lazear and Rosen (1981), Holmström (1979 & 1982), Nalebuff and Stiglitz (1983), and Waterman and Meier (1998) also contemplated agency theory with multiple agents.

The present study also applied a non-classical form of the principal-agent relationship by elaborating the impact of a third party on the agent. In the working model it is assumed that this party steps into an existing relationship and tries to influence the agent in favor of its own benefit. The third party can only take over a 'principal-like' role due to the lack of formal authority.

The third party does not deny to have and to make use of the right of influencing the agent. The results show that there is only a moderate frequency of attempted influences. Interestingly, only one of the Big Five Personality dimensions seems to have an impact of the number of influencing attempts. People scoring high on the scale conscientiousness tend to influence the agent less frequently. Presumably, this behavior can be explained by their propensity to be ethical and ordered (DeYoung, Quilty, & Peterson, 2007, p. 880-896). The study also provides evidence for the assumption that people aiming at creating a positive image of themselves in public influence the agent more frequently than others.

Consulting these results, the assumptions made in *Question 1a* cannot be rejected. There is empirical evidence supporting the assumption that a third party tries to exert influence on the agent when stepping into an existing principal-agent relationship in which the principal lacks mechanisms to monitor the agent's performance.

13.2 The Impact of a Third Party's influencing Attempts on the Agent's Performance

There is empirical evidence for the assumption that a third party may try to influence the agent in a relationship with a principal lacking monitoring mechanisms to evaluate the agent's performance. Based upon this finding, it was particularly interesting to elaborate on the question if and which attempts can be successful. Various verbal strategies were analyzed with regard to their impact on the outcome of the agent's performance. Even though not all strategies lead to significant results, some do.

In a first step, having a chat with the agent prior to the actual performance was analyzed. The aim was to figure out if a third party can manage to create a positive atmosphere in conjunction with the agent, motivating him to perform in favor of this third party's interest. Furthermore, this strategy might also contribute to a decrease of information asymmetries. The reason for that can be that the third party learns more about the agent in this initial conversation and might adapt his behavior according to the type of agent. However, this strategy does not seem to be successful, but rather disadvantageous. There are various possible reasons for this result. The most obvious explanation is that the agent recognizes the third party's dishonest intention when starting a conversation. If the agent perceives this behavior as not purely driven by real interest, but rather by the will to reach favoritism, he might react with discrimination. This can be considered as a form of punishment by the agent with the aim of enforcing fair behavior for the future.

Another strategy leading to disadvantageous consequences for the third party is to keep calm during the agent's performance. Two explanations seem possible for this finding. First of all, the agent might (mis)conceive the third party as a casual bystander and might conclude that the person shows a low level of involvement. As a consequence, his own performance does not seem to be valuable for the third party. Following Frey and Jegen (2001, pp. 589-611), this might lead to a crowding-out effect of the agent's intrinsic motivation.

Second of all, this result is not surprising when acknowledging that the agent may not see the need or any changes regarding the way he performs. As long as the third party does not intervene, he can assume that his performance is sufficient. Even though drastic drawbacks cannot be detected, this constellation leads to a slight disadvantage for the third party.

Only two of the analyzed strategies lead to a positive treatment by the agent - repeated protest and repeatedly remarking displeasure with gesture and facial expression. In analogy with the reasons for discrimination, these strategies may convey the exact opposite impression for the agent. Due to a repeated influence, the third party shows a high level of commitment and thus cherishes the agent's role. The third party also signals discontent with regard to the performance in both cases of repeated influence. This might also be a reason for favoritism. Following this theory, the agent has to choose a higher effort level in order to satisfy the third party's expectations. With respect to the extent of the agent's bias (favoritism or discrimination), it has to be acknowledged that the analysis has shown that a third party can indeed influence the agent's effort level, but does not reach a fundamental change. Instead, the impact is rather limited, but yet significant.

Besides the strategies that show a significant effect on the agent's performance, there are also some approaches which do not have a measurable effect. The contemplated forms of sporadic criticism and displeasure do neither lead to favoritism, nor to discrimination. Following the aforementioned argumentation, sporadic influences indicate that the third party is interested in the performance, but does not overrate the agent's effort. Hence, there is no need to discriminate against the third party for not appreciating his performance. At the same time, there is no need to show favoritism. This is, because the protest does not come up on a constant basis, but rather every once in a while. The same finding is valid for third parties deciding to praise the agent. Again, no bias can be detected.

Taking the aforementioned results into consideration, it can be assumed that the agent takes notice of this influencing attempt, but might not be sure if the praise is honest. Still, the third party obviously shows involvement and therefore appreciates the agent's role. Following this ambiguous impression, the agent does neither show favoritism, nor discrimination.

Recapitulating the previously mentioned findings, it can be assumed that a third party can indeed exert influence on the agent's discretionary power. In dependence on the strategy, those can be advantageous or harmful.

13.3 The Effect of the Agent's Reactions to influencing Attempts of a Third Party

The analysis has identified a significant influence of the third party on the final outcome. However, the agent's reaction seems to be an issue which needs to be taken into account. The basic question underlying this view is if the agent's reactions to externalities can cause deviations in the outcome of their performance. One of those external factors can be verbal influencing attempts by individuals which are not the agent's formal principal (e.g., a third party).

The study has identified moderation effects of the agent's reaction to various influencing attempts. Two strategies that are advantageous when contemplating the approach independently have the opposite effect once the agent reacts with discrimination. Both of them represent forms of repeated criticism. The opposite phenomenon can be detected when a third party choosing to stay calm meets an agent reacting with discrimination to influencing attempts. In this case, the strategy results in a disadvantage when contemplated independently, but leads to a preferential treatment when it is applied to a discriminating agent.

Two issues appear questionable in this respect. First of all, one might argue that not doing anything in this respect does not represent an (active) influencing strategy. However, this view cannot be justified when assuming that the agent perceives this behavior as a conscious action by the third party. In this case, staying calm may be considered as a deliberate strategy with the intention of influencing the agent.

Second of all, it is remarkable that the outcome is advantageous when applying this strategy even though the agent reacts with discrimination. This finding is not consistent with the other results and cannot be explained satisfactorily within the frame of this study.

Regardless of this inconsistency, it is striking that only agents reacting with discrimination seem to have a significant effect on the outcome. Furthermore, an influence of the agent can be detected for repeated forms of criticism and the choice of staying calm. These tendencies are particularly interesting as they show that the agent's reaction does not only reduce a given advantage or disadvantage, but even changes to the opposite effect. Therefore, the third party has to carefully make a choice whether to influence the agent or not. More precisely, the third party has to find means allowing him to detect the type of agent and his possible reaction to influencing attempts. This form of insecurity can be referred to as asymmetric information.

13.4 Implications for the Principal-Agent Theory

The principal-agent theory has its origin in economic settings and focuses on the relation between a principal and an agent (Spence & Zeckhauser, 1971). The theory is mostly applied with regard to firms. Miller (2005, p. 349-370) elaborates on agency-related problems for managers at each level of the hierarchy by paying special attention to their task of motivating subordinates. In contrast, Roe (2008) directs his view to agency issues at the top levels of a company. The principal-agent theory has also been applied to various other fields. Among others, Mitnick (1975) applied the theory to political science, White (1985) to sociology, and Fama (1980) to finance. Following Cuevas-Rodríguez, Gomez-Mejia, and Wiseman (2012, p. 527), the high acceptance of the theory is based on its predictions on how profit maximizing individuals behave in relationships with asymmetric information.

Critics, however, consider the simplicity and narrow focus of the theory as major drawbacks leading to a low predictive value (Perrow, 1986; Eisenhardt, 1989). Fehr and Falk (2002) understand human behavior as opportunistic, hampering trust and collaboration.

This negative contemplation cannot be manifested in the present work. Instead, the principal and the agent seem to work together trustfully. Even though the agent has an information advantage over the principal, he does not make use of it. This is, because both pursue the same basic goal of enforcing the laws of the game objectively. Slight deviations in the agent's performance do not result from moral hazard, but rather from biased decisions which are caused by an external third party.

Therefore, this work supports various other studies which postulate to consider the agent as a trustful 'steward' rather than an egocentric individual (Davis, Schoorman, & Donaldson, 1997; Donaldson & Davis, 1991, 1994). The purely economic view (e.g., profit maximizing) is also criticized by Simon (1951) who doubts the theory for its idea of man of omniscient individual. In reality, people do rather show 'bounded rationality' and do not always act in a perfect economic sense (Sappington, 1991, p. 61). In Simon's (1957) words, this state can be understood as a behavior that is 'intendedly rational, but only limitedly so.' More precisely, decisions may also be influenced by past experience with the counterpart or simply by emotions.

This view is also supported by the findings of the present study and goes hand in hand with the postulation of adapting the purely economic perspective and idea of man. Wiseman, Cuevas-Rodriguez, and Gomez-Mejia (2012) also criticize the theory because it disregards the social context in which the contract between the principal and the agent is effective. Following their view, the social context also affects the party's interests and the mechanisms which help to reduce the resulting problems. The given setting in non-professional soccer underlines this criticism. The contract between the principal and the agent is rather informal. The social context in which the contract is concluded does not force any party to strictly strive for profit maximizing. In general, both pursue the same goal by aiming at a correct enforcement of the rules.

As a consequence, their relationship is affected by mutual trust and the will to cooperate. Monetary issues do not play a dominant role and therefore do not influence the relationship.

To conclude, the principal-agent theory also faces criticism for its formality leading to a very restrictive view (Cuevas-Rodríguez, Gomez-Mejia, & Wiseman, 2012, p. 527). This criticism also finds support in this study. Due to the absence of incentive mechanisms, the agent's behavior (favoritism or discrimination) cannot be explained by pure economic intentions. In contrast, the reaction to influencing attempts is rather determined by behavioral aspects. The absence of this behavioral view has also been criticized by Tirole (2002) and is supported by this study. Furthermore, the reasons for an agent's low effort level may not only be determined by economic behavior (with the effort representing the agent's expenses). In fact, it may also be a consequence of missing skills (e.g., due to a lack of training). Thus, the effort level may not be low because the agent does not want to perform poorly, but rather because he cannot perform better.

In order to substantiate the principal-agent theory and its predictions, it is necessary to integrate further theoretical perspectives. With this claim, this study follows Rabin (1998, p. 13) who recommended taking a psychological view into account:

‘Some important psychological findings seem tractable and parsimonious enough that we should begin the process of integrating them into economics.’

The analysis of character traits and their effect on the behavior in this sports-related setting supports this view. It was shown that human personality may indeed influence the party's behavior in a principal-agent relationship. Principals showing a high-level of conscientiousness, for example, tend to influence the agent less frequently than others.

Furthermore, the study elaborated on an anomaly of the classical principal-agent view. Basically, the theory focuses on interactions between a principal assigning an agent to perform a specific task on his behalf (Baiman, May, & Mukherji, 1990, p. 761).

In this case, however, this rigid contemplation is adapted to a constellation in which a third party steps into a given relationship.

The integration of externalities is not a new phenomenon with regard to agency theory literature. Spemann (1987), for example, also worked on the impact of externalities in this kind of relation. However, the principal-agent model in this study foresees a third party as the interesting externality. More precisely, the question is if such a third party can successfully impact the agent by biasing his decisions. Herewith, the external party aims at reaching his own goals. What differentiates this study from classical models with more than one principal (Brehm & Gates, 1997) is that in the given case, the third party tries to exert influence on the agent without having the formal right (e.g., fixed in a contract) to do so. The practical relevance of this view has been supported by empirical findings and again supports the critics who accuse the theory of having too narrow confines (Cuevas-Rodríguez, Gomez-Mejia, & Wiseman, 2012; Tirole, 2002). The purely theoretical view neglects this form of external influence even though it can be of practical relevance. Therefore, it might be advisable to integrate this kind of constellations in future principal-agent literature.

13.5 Practical Implications for Managers dealing with Project Management Issues

The presented setting in non-professional soccer represents a specifically interesting principal-agent constellation in which the principal's aims might be undermined by a third party. A similar principal-agent relationship may also come up in a project in a company which is managed by an agent (the employee) on behalf of a principal (the manager). Project-based management is connected with the organization of tasks in order to reach aims in terms of time, costs, and scope (Turner, 1999; Project Management Institute, 2004). These aims are commonly defined in a project budget. The relevance of project-management issues is also stated by Shenhar and Dvir (2007) who point out the growing significance of project-related tasks in organizations.

Assuming that various managers from different departments (e.g., controlling, marketing, research and development, customer service, etc.) assign their specialists to a joint project, every agent has to cope with the interests of other principals.

In analogy with a basic assumption of the theory, it shall be assumed that the manager assigns the employee to the project without having the opportunity to monitor him during his work. Referring back to Turner's (1999) understanding, utility maximizing managers aim at reaching the project goals with the lowest possible input in terms of time and costs. In this constellation, it might happen that they try to verbally convince another (not their own) employee of taking over certain tasks in order to save own resources. In this constellation, the managers appear to represent the third party (similarly to the coaches trying to influence the referees). This is, because they do not have the formal right to influence another, but rather their own employee. Still, they might try to exert power on the other manager's employees and thus maximize own utility. This can be reached by shifting own tasks to him or by convincing him of decisions that are favorable for him. In case of a successful influence, the employee shows a biased decision and does not act in his manager's perfect sense.

Following the principal-agent theory, the manager has various options to avoid a successful influence on his employee by third parties. In order to elaborate which of them can be successful in the described example, they will be analyzed consecutively. The basic question in this setting is: How can the manager make his employee reluctant to influencing attempts by external parties in order to secure the employee's dedication to his own goals?

To start with, the role of trust seems to play a decisive role in this constellation. Zaheer, McEvily, and Perrone (1998) identify a reduction of conflicts when trust is prevalent, whereas McAllister (1995) and Currall and Judge (1995) find empirical proof for the positive effect of trust on individual performance. Due to missing monitoring devices, the manager is forced to rely on the optimal allocation of resources.

In order to prevent the employee from influencing attempts by third parties such as other managers, a trustful relation seems to be a basic requirement. This postulation goes along with the findings of Whyte and Williams (1963) and Williams, Whyte, and Green (1966).

They found that Peruvian clerical workers with a low level of trust appreciate close supervision, whereas workers with a high level of trust prefer a general, loose supervision relating to other behavior in the organization. Following Argyris (1962), trust can be increased when openness, the ownership of feelings, experimentation with new behavioral forms, and the non-evaluative feedback are accepted by the parties. The manager may therefore be challenged to create an open atmosphere with his employee, empowering him reasonably. Establishing a high level of trust therefore implies that monitoring the employee is not the right means. The reason for that is that the control does not represent trust in the employee and thus is counter-productive in this kind of setting.

Mayer, Davis, and Schoorman (1995) identify benevolence, integrity and the trustee's ability as influencing factors with separate and combined effects for trust. Especially the trustee's ability seems a promising factor for the development of trust. In order to reduce - or even avoid - successful influencing attempts by external parties, the employee needs to blank out the respective verbal influence. This can be reached if the employee is convinced of his qualities (e.g., to be unswayable). If he is successful in doing so, he can also manage to convince others that influencing attempts are useless (Bénabou & Tirole, 2002, p. 877). As a consequence, it should be the manager's task to provide access to relevant training fostering the employee's self-confidence and rhetoric abilities.

In contrast to the presented referee setting, managers in companies could potentially install (monetary) incentives schemes to foster the correct behavior of their employees (Sappington, 1991, p. 48). Even though he can assess if the given project budget (time and money) has been kept, he cannot figure out if the employee could have performed even better.

This constellation can also be found in the referee example - the referee boards can figure out what the outcomes of a match are (e.g., the score and personal sanctions), but lack the means of evaluating if this is the optimal result that bases on the referee's best effort. In the example of a manager's life, it remains questionable how to determine possible incentives if the effort cannot be supervised.

Viewing the employee as a purely profit maximizing individual may be helpful in order to elaborate on the effectiveness of incentives, but it ignores other determinants of the employee's performance such as pride, loyalty, and identification with the company (Simon, 1951). The results of this study allow for the interpretation that the measures to avoid external influence on the employee by a third party can only be successful when the employee is intrinsically motivated to perform well.

The most feasible approach for managers seems to be the reduction of existing information asymmetries (with respect to his subordinates) in order to learn how to lead them. Generalized recommendations seem inappropriate as the individuals are far too diverse and do not allow for a 'one-size-fits-all' solution. Instead, the manager needs to get to know his employees in order to foster (intrinsic) motivation purposefully. Additionally, the image of the employees (and the means to motivate them accordingly) will change gradually leading to a constant adaptation of the relationship. However, this is exactly the challenge that a manager has to cope with.

13.6 Limitations of the Study

This study is based on an interdisciplinary approach and combines an economic theory with a sports-related setting. This basic idea may not be self-explanatory at first glance, but has produced valuable results for a modification of elements of the principal-agent theory and the practical challenges for a manager in business life.

It was shown that the theory is applicable to settings in sports in which one person performs a specific task on behalf of another. In the described case, the relationship consists of the referee boards acting as the principal and the referees appearing as agents. In contrast to the basic understanding of the theory, the relation between the referees and their boards is additionally disturbed by coaches (third party) having the intention to influence the referees for their own benefit.

In order to find answers to the question if this third party can indeed successfully influence the agent, separate questionnaires for referees and coaches were developed and distributed online. Due to existing connections to the association and the collegiality, the referees were approached directly via e-mail. With a return rate of nearly 50%, the approach chosen for the referees turned out to be successful. In detail, more than 2,500 questionnaires were returned. A different approach was applied for the coach questionnaires. Due to data protection reasons, the coaches were not approached directly. Instead, the link to the questionnaire was sent to all clubs within the association with an official e-mail address. In this e-mail, the club representatives were asked to forward the e-mail to their coaches. As a result, approximately 900 coaches replied. The results of the empirical analysis are therefore based on a very solid basis.

However, exclusively relying on data from a survey was not the intention of this study. In order to figure out if the results are indeed relevant for real settings in sports, official match data were consulted. The data were supposed to serve as an objective means to determine the extent of influences on the referee. The large number of completed questionnaires is particularly remarkable when considering that the respondents had to reveal their name. This indication was required as it is the only way to identify matches in which a referee met a coach with both having answered the questionnaire.

Some persons that were approached stated that they did not finish the questionnaire, because they considered the item ‘I have doubted my qualities as a lover occasionally’ (‘An meinen Fähigkeiten als Liebhaber habe ich schon gelegentlich gezweifelt’) to be inappropriate and intimate. Due to the low number of complaints with respect to this item and the fact that it forms part of the validated self-deception scale, the concerns may be neglected.

When interpreting the results, it has to be acknowledged that the coach’s strategy and the referee’s reaction explain a relatively low part of total variance. Furthermore, significant results show a rather weak impact and have to be interpreted conservatively. These findings allow for the assumption that further factors might affect the results of a match. Among others, the players’ abilities and skills may be one of the most decisive aspects. However, this study did not elaborate on these aspects due to its focus of referee-coach transactions.

13.7 Perspectives for further Research

The application of the principal-agent theory to sports-related settings has been limited to professional leagues so far (Sutter & Kocher, 2004; Altman, 2011). This study, however, shows that a transfer of the theory to non-professional leagues represents another interesting field of research. The focus of further research may thus be turned to amateur sports.

The presented setting deserves to be pursued in further research for two reasons. Firstly, the growing database (containing match data) will allow for further research in this specific setting. Future studies may, for instance, elaborate on the question if any change in the relationship between referee boards, referees, and coaches can be detected over years. Furthermore, the increasing amount of data may also help to find answers to the question if there are significant differences in the aforementioned relationship when comparing the various non-professional divisions. Due to the high level of media involvement, official data from matches in professional leagues could also be captured and set in comparison to the information from non-professional leagues.

As a result, even more approaches for further research (e.g., elaborating on the differences in referee bias between both kinds of leagues) might come up. This is especially interesting as every future match day contributes to a growing data base with official (objective) match data.

The second approach for further research results from the specificity of the analyzed constellation. The classical view of the theory focuses on the interaction between a principal and an agent. The analyzed setting underlines, however, that a third party entering an existing principal-agent relationship may also have a significant impact on the performance of the latter. It will be interesting to transfer the given setting to other sports (e.g., basketball or handball), comparing the results subsequently. On the one hand, it seems particularly interesting whether comparable principal-agent settings can be detected in other sports at all. Given that this is the case, it will be interesting to figure out if these settings result in significant influences of match data on the other hand. Based upon these insights, the results could potentially be put into relation and thus help to detect similarities and differences of several sports.

This study shows that the influencing strategy chosen by the coach and the respective referee's reaction can be considered as significant factors. However, these factors explain a relatively low part of total variance (< 10 %) and allow for the assumption that there are further factors influencing the match results. This limitation can at the same time be considered as a recommendation for further studies. More concretely, future studies may elaborate on the question which other factors impact the match results in non-professional soccer.

Résumé

This work focuses on the influence of coaches on referees' decisions. Even though this topic is not new in sports science, the present study contributes to the closing of a scientific gap by its specific application to non-professional soccer. This aim is reached by consulting the principal-agent theory as the foundation.

In a first step, a scientific gap in research on the factors influencing referees' decisions is identified with special regard to a setting in non-professional soccer. Following, the structures and specificities of refereeing in amateur soccer are presented before introducing the principal-agent theory as the major theoretical pillar of this study.

Subsequent to the presentation of the theory, its appropriateness for a transfer to the relation between referee boards (principal) and referees (agent) to non-professional soccer is evaluated. This is done against the specific background of a coach entering this dyad as a third party with a 'principal-like' role. It is elaborated that the basic contemplation of the principal-agent theory can also be found in the presented setting. In this context, the solution mechanisms proposed by the principal-agent theory are evaluated with respect to their applicability in a sports-related setting. The outcome is that the most promising approach to reduce problems is to foster intrinsic motivation, whereas other solution mechanisms can neither be realized nor seem promising in the specific setting.

After having set the framework of the empirical study, the working model is presented. It aims at investigating if and how a third party (coach) can influence the performance of an agent (referee) who actually performs on behalf of another principal (the referee board). In this respect, the scope is dedicated to the agent's discretionary power as it represents a significant, yet non-verifiable impact on the outcome of the agent's performance.

The underlying questions for this study are developed based upon this working model. Those are aimed at figuring out if and how a third party can influence an agent even though it does not possess the formal right to do so.

Subsequently, the methodology of this study is presented. Two pillars form the basis of the research project. First of all, separate questionnaires for coaches and referees are developed with the aim of learning more about their mutual relation and behavior with respect to influencing attempts. Second of all, the results of both questionnaires are evaluated against the background of official match data. This objective means shall help to find out if influencing is taking place and if it finds measurable expression in matches (e.g., the result or personal sanctions). The focus of interest is set on verbal strategies.

It is found out that the third party shows a tendency to influence the agent for his own benefit. The third party can be successful in doing so, but does not necessarily face an advantageous treatment as a consequence. Additionally, not all verbal strategies show a significant result. Even in cases in which a significant influence is detected, the extent of influences is weak. The success or failure of verbal influences is moderated by the agent's reaction (discrimination) in some cases. It is of particular interest that one has to pay attention to the kind of combination between the strategy chosen by the coach and the respective reaction of the agent. In some cases, the strategy is the decisive factor for a significant influence; in others it is the agent's reaction, or the combination of both. A general proposition with respect to the effectiveness of influencing strategies can therefore not be made. Instead, the success or failure depends on the specific constellation between the strategy and the referee's reaction.

Taking the findings from the empirical analysis into account, recommendations for an adaptation of single elements of the principal-agent theory are made. It is found that the pure economic view of the basic theory neglects that humans do not always act in a perfect economic sense. Rather, their decisions are based on past experiences or emotions.

In its postulation of integrating a psychological view of the theory, this study supports other works criticizing the theory for its rather limited view on human behavior. In contrast to the theory, this study identifies a different image of the agent. The reason for that is that he is not necessarily egoistic and profit maximizing, but may also be a trustful principal's cooperator. Following this view, poor performance may also not only be the result of the agent's missing willingness to perform well, but rather a consequence of insufficient abilities.

Aforementioned results have been transferred to the daily challenges of a manager (principal) who assigns an employee (agent) to a joint project in the company. In this constellation, the manager also needs to secure that the employee acts in his own best interest without being distracted by other project collaborators. Holistic recommendations for solutions do not seem to be applicable in this kind of setting. The most feasible measure could be to get to know the employee in order to reduce existing information asymmetries. Based upon this consideration, the manager might figure out how to properly motivate the employee and make him concentrate on the original tasks.

It is recommended that future research on this topic may be done in other non-professional sports. In contrast to professional leagues, the circumstances in amateur sports differ significantly and allow for further interesting insights into principal-agent relationships. The presented setting may be the starting point for further research. Especially the existing (and constantly growing) database with match data may be used for related studies, such as a comparison with other sports elaborating similarities and differences. Additionally, the growing database might allow for the identification of tendencies over several years. Considering the fact that the coach strategy and the referee reaction explain less than 10% of total variance, this limitation is also linked to the recommendation of elaborating on further aspects influencing match results in non-professional soccer in future studies.

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Appendix A

Referee Questionnaire

1 Willkommen

Herzlich Willkommen zur Umfrage "Beeinflussung von Schiedsrichtern im Amateurfußball"!

Die Umfrage ist Teil meiner Doktorarbeit zu oben genanntem Thema und wird in Zusammenarbeit mit der Universität Potsdam durchgeführt. Ich möchte gern untersuchen, wie sich Schiedsrichter selbst charakterisieren und wie sie im Hinblick auf die unterschiedlichen Verhaltensweisen von Trainern reagieren.

Die Beantwortung wird etwa 15 Minuten dauern und die Angaben werden selbstverständlich anonym behandelt sowie ausgewertet. Dies gilt, obwohl du im Laufe des Fragebogens deinen Namen angeben musst. Dies ist nur aus statistischen Gründen so. Es wird also nicht veröffentlicht, von welchem Schiedsrichter der jeweilige Fragebogen ausgefüllt wurde. Du kannst demnach absolut offen und ehrlich antworten!

Bitte nimm dir für die Beantwortung jeder Frage ausreichend Zeit. Einige Fragen ähneln sich auf den ersten Blick, sind aber doch unterschiedlich.

Ich hoffe auf rege Unterstützung und danke Dir im Voraus herzlich für die Teilnahme! Für Rückfragen und/oder Anmerkungen bin ich gern per E-Mail unter michael.negri@web.de erreichbar.

Sportliche Grüße

Michael Negri

2 Hinweise

Bevor du mit dem Ausfüllen des Fragebogens startest, möchte ich dir noch kurz einige Hinweise geben:

- Antworte bitte möglichst spontan und intuitiv.
- Es gibt keine richtigen oder falschen Antworten. Nur deine persönliche Meinung und Wahrnehmung zählt.
- Lasse dich nicht von ähnlichen Fragen verwirren. Dies ist so gewollt und dient der korrekten statistischen Auswertung.
- Sollte dir eine Antwort einmal schwer fallen, dann wähle die Antwortmöglichkeit, die am ehesten zutrifft.

3 Persönliche Daten

Ich bin...

Weiblich Männlich

Mein vollständiger Name (Vor- und Nachname) ist:

Bitte schreibe deinen Namen aus (in meinem Fall also "Michael Negri"). GANZ WICHTIG: Dein Name wird nur für die Zuordnung der Antworten benötigt und wird nirgendwo auftauchen! Die Umfrage ist also vollständig anonym. Die Datenschutzbestimmungen werden ebenfalls zu 100 % eingehalten.

Wie alt bist du?

Bitte trage dein Alter in das Feld ein!

Bitte trage hier den Verein ein, für den du als Schiedsrichter tätig bist.

Bitte den kompletten Vereinsnamen angeben. In meinem Fall wäre dies z. B. "Schwarz-Weiß Marienfeld."

Bitte kreuze deinen bisher erreichten (höchsten) Abschluss an
Es ist nur der höchste Abschluss anzukreuzen.

- Kein Schulabschluss
- Volksschule
- Grundschule
- Hauptschule
- Realschule
- Gymnasium
- Berufsschule
- Diplom
- Bachelor
- Master
- Promotion

4 Schiedsrichter-Karriere

Seit wie vielen Jahren bist du aktiver Schiedsrichter?

Bitte trage die Anzahl der Jahre in das Textfeld ein. Solltest du deine Laufbahn zwischenzeitlich unterbrochen haben, so zählt dieser Zeitraum nicht zur aktiven Laufbahn.

Bitte kreuze die HÖCHSTE Spielklasse an, in der du aktuell als Schiedsrichter aktiv bist. Die Klasse, in der du als Schiedsrichter-Assistent tätig bist, wird erst in der kommenden Frage wichtig sein.

Hinweis: Bitte kreuze "Jugend" nur an, wenn du ausnahmslos Jugendspiele leitest und bei Seniorenspielen nicht zum Einsatz kommst.

- Jugend
- Herren, Kreisliga D
- Herren, Kreisliga C
- Herren, Kreisliga B
- Herren, Kreisliga A
- Herren, Bezirksliga
- Herren, Landesliga
- Herren, Westfalenliga (ehemals Verbandsliga)
- Herren, NRW-Liga (ehemals Oberliga)
- Herren, Regionalliga
- Herren, 3. Liga
- Herren, 2. Bundesliga
- Herren, 1. Bundesliga

Bitte kreuze die Spielklasse an, in der du aktuell als Assistent aktiv bist oder auf Grund deiner Qualifikation sein dürftest.

- Keine Assistenten-Tätigkeit
- Jugendspiele
- Herren, Landesliga
- Herren, Westfalenliga (ehemals Verbandsliga)
- Herren, NRW-Liga (ehemals Oberliga)
- Herren, Regionalliga
- Herren, 3. Liga
- Herren, 2. Bundesliga
- Herren, 1. Bundesliga

Für welchen Kreis pfeifst du?
Bitte wähle die entsprechende Antwort aus.

- Ahaus-Coesfeld (Kreis 1)
- Arnsberg (Kreis 3)
- Beckum (Kreis 4)
- Bielefeld (Kreis 5)
- Bochum (Kreis 6)
- Hochsauerlandkreis (Kreis 7)
- Paderborn (Kreis 8)
- Detmold (Kreis 10)
- Dortmund (Kreis 11)
- Gelsenkirchen (Kreis 12)
- Gütersloh (Kreis 34)
- Hagen (Kreis 13)
- Herford (Kreis 14)
- Herne (Kreis 15)
- Höxter (Kreis 16)
- Iserlohn (Kreis 17)
- Lemgo (Kreis 18)
- Lippstadt (Kreis 19)
- Lübbecke (Kreis 20)
- Lüdenscheid (Kreis 2)
- Lüdinghausen (Kreis 21)
- Minden (Kreis 23)
- Münster (Kreis 24)
- Olpe (Kreis 25)
- Recklinghausen (Kreis 27)
- Siegen/Wittgenstein (Kreis 28)
- Soest (Kreis 29)
- Steinfurt (Kreis 30)
- Tecklenburg (Kreis 31)
- Unna-Hamm (Kreis 32)

Hast du als Schiedsrichter jemals den Kreis gewechselt, für den du gepfiffen hast, bzw. pfeifst?
Bitte kreuze Zutreffendes an.

Nein Ja

Zeitpunkt letzter Wechsel

Vor wie vielen Jahren hast du den Kreis zuletzt als Schiedsrichter gewechselt?
Bitte gebe die Zahl in das dafür vorgegebene Feld ein. Beispiele: 1, 3, 5...

5 Selbsttäuschung

Der folgende Fragebogen enthält Aussagen, die für dich persönlich mehr oder weniger zutreffend sein können.

Bitte kreuze in jeder Zeile die Antwort an, die am ehesten zutrifft!

	Völlige Ableh- nung	2	3	4	5	6	Völlige Zustim- mung
Der erste Eindruck, den ich von anderen Menschen gewinne, bewahrheitet sich meistens.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bin nicht immer mir selber gegenüber ganz ehrlich gewesen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich weiss immer, warum ich etwas mag.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Es fällt mir schwer, einen beunruhigenden Gedanken beiseite zu drängen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manchmal verpasse ich etwas, weil ich mich einfach nicht schnell genug entscheiden kann.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bin ein vollkommen rational denkender Mensch.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich kann Kritik selten vertragen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bin mir meiner Urteile sehr sicher.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
An meinen Fähigkeiten als Liebhaber habe ich schon gelegentlich gezweifelt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich weiss nicht immer die Gründe für meine Handlungen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6 Fremdtäuschung

Bitte kreuze in jeder Zeile die Antwort an, die am ehesten zutrifft!

	Völlige Zustim- mung	2	3	4	5	6	Völlige Ableh- nung
Manchmal lüge ich, wenn ich muss.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Es ist schon einmal vorgekommen, dass ich jemanden ausgenutzt habe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich fluche niemals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manchmal zahle ich es lieber anderen heim, als dass ich vergebe und vergesse.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich habe schon einmal zuviel Wechselgeld herausbekommen, ohne es der Verkäuferin zu sagen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich gebe grundsätzlich alles an, was ich zu verzollen habe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manchmal fahre ich schneller, als es erlaubt ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich habe Dinge getan, von denen ich anderen nichts erzähle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich nehme niemals Dinge an mich, die mir nicht gehören.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bin schon einmal wegen einer angeblichen Krankheit nicht zur Arbeit oder Schule gegangen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7 Persönlichkeitsstruktur

Wie schätzt du dich selbst generell ein? Du bist jemand, der...

Bitte in jeder Zeile die zutreffende Antwort ankreuzen. Mit den sieben Optionen/Feldern in jeder Zeile kannst du deine Meinung abstufen.

	Trifft über- haupt nicht zu	2	3	4	5	6	Trifft voll zu
...gründlich arbeitet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...Aufgaben wirksam und effizient erledigt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...eher faul ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...eine lebhaft Phantasie, Vorstellung hat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...originell ist, neue Ideen einbringt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...künstlerische, ästhetische Erfahrungen schätzt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...kommunikativ, gesprächig ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...aus sich herausgehend, gesellig ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...zurückhaltend ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...rücksichtsvoll und freundlich mit anderen umgeht.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...verzeihen kann.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...manchmal etwas grob zu anderen ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...entspannt ist, mit Stress gut umgehen kann.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...leicht nervös wird.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...sich oft Sorgen macht.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8 Selbsteinschätzung privat

Wie schätzt du dich privat selbst ein? Im PRIVATEN LEBEN bist du...
Klicke in jeder Zeile die zutreffende Antwort an!

ruhig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	aufbrausend
unsicher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	selbstbewusst
rational	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	emotional
harmoniebedürftig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	streitlustig
offen für neue Dinge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	konservativ
introvertiert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	extrovertiert
redegewandt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nicht redegewandt
schlagfertig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nicht schlagfertig

9 Selbsteinschätzung auf dem Platz

Wie schätzt du dich als Schiedsrichter selbst ein? AUF DEM PLATZ bist du...
Klicke in jeder Zeile die zutreffende Antwort an!

ruhig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	aufbrausend
unsicher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	selbstbewusst
rational	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	emotional
harmoniebedürftig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	streitlustig
offen für neue Dinge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	konservativ
introvertiert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	extrovertiert
redegewandt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nicht redegewandt
schlagfertig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nicht schlagfertig

Bitte kreuze in jeder Zeile die zutreffende Antwort an!

	Stimme gar nicht zu	Stimme eher nicht zu	Teils teils	Stimme eher zu	Stimme total zu
Es gibt Spielsituationen, in denen es gut ist, auch mal "alle Fünfe gerade sein" zu lassen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Es gibt Spielsituationen, in denen ich auch mal "Fingerspitzengefühl" zeige und die Regeln großzügig anwende.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wenn ich die Wahl zwischen einer Ermahnung und einer persönlichen Strafe habe, ziehe ich die Ermahnung vor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ich ziehe meine Linie durch und lasse mich nicht beirren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motzenden Trainern zeige ich, wer am "längeren Hebel" sitzt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mein Ziel ist es, dass sich alle gerecht behandelt fühlen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10 Beurteilung von Zweikämpfen

Wie stark lässt du dich durch die folgenden Aspekte in deinen Entscheidungen beeinflussen?
Bitte kreuze in jeder Zeile die zutreffende Antwort an!

	Sehr stark	Stark	Mittelmäßig	Leicht	Gar nicht
Reklamierende Zuschauer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reklamierende Trainer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reklamierende Spieler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11 Verhältnis zu Trainern

Ich informiere mich im Vorfeld eines Spieles über die Trainer der beiden Mannschaften (im Hinblick auf deren Verhalten gegenüber Schiedsrichtern und deren Charakter).
Bitte kreuze Zutreffendes an!

<input type="checkbox"/>	Nie	<input type="checkbox"/>	Selten	<input type="checkbox"/>	Regelmäßig	<input type="checkbox"/>	Oft	<input type="checkbox"/>	Immer
--------------------------	-----	--------------------------	--------	--------------------------	------------	--------------------------	-----	--------------------------	-------

Was denkst du - wie viele Trainer versuchen, dich als Schiedsrichter in deinen Entscheidungen zu beeinflussen?
Bitte kreuze Zutreffendes an!

<input type="checkbox"/>	Keine	<input type="checkbox"/>	Wenige	<input type="checkbox"/>	Einige	<input type="checkbox"/>	Die meisten	<input type="checkbox"/>	Alle
--------------------------	-------	--------------------------	--------	--------------------------	--------	--------------------------	-------------	--------------------------	------

12 Wahrnehmung sachliche Kritik/Lamentieren

Wenn mich ein Trainer während eines Spieles wiederholt sachlich und konstruktiv kritisiert, dann überhöre ich dies...
Bitte kreuze Zutreffendes an! Die Antworten beziehen sich auf ein einzelnes Spiel.

<input type="checkbox"/>	...nie	<input type="checkbox"/>	...selten	<input type="checkbox"/>	...hin und wieder	<input type="checkbox"/>	...meistens	<input type="checkbox"/>	...immer
--------------------------	--------	--------------------------	-----------	--------------------------	-------------------	--------------------------	-------------	--------------------------	----------

Wenn ein Trainer während eines Spiels wiederholt unsachlich lamentiert, dann überhöre ich dies...

Bitte kreuze Zutreffendes an! Die Antworten beziehen sich auf ein einzelnes Spiel.

...nie ...selt en ...hin und wie- der ...meist ens ...im mer

13 Folgen von sachlicher Kritik

Wenn mich ein Trainer wiederholt sachlich und konstruktiv kritisiert, dann hat dies folgende Auswirkungen auf meine zukünftigen Entscheidungen.

Bitte kreuze in jeder Zeile Zutreffendes an!

	Stimme voll und ganz zu	Stimme eher zu	Teils teils zu	Stimme eher nicht zu	Stimme gar nicht zu
Das sachliche und konstruktive Kritisieren beeinflusst mich gar nicht!	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bevorzuge (bewusst) das Team des Trainers bei der Vergabe von Freistößen. Seine Mannschaft bekommt also tendenziell mehr Freistöße zugesprochen, als der Gegner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bevorzuge (bewusst) das Team des Trainers beim Aussprechen von persönlichen Strafen. Seine Mannschaft erhält demnach tendenziell weniger persönliche Strafen, als der Gegner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bevorzuge (bewusst) das Team des Trainers bei der Länge der Nachspielzeit. Bei einer Führung seiner Mannschaft spreche ich also eine kurze Nachspielzeit aus, bei einem Rückstand eine längere.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich benachteilige (bewusst) das Team des Trainers bei der Vergabe von Freistößen. Seine Mannschaft bekommt also tendenziell weniger Freistöße zugesprochen, als der Gegner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich benachteilige (bewusst) das Team des Trainers beim Aussprechen von persönlichen Strafen. Seine Mannschaft erhält also tendenziell mehr persönliche Strafen, als der Gegner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich benachteilige (bewusst) das Team des Trainers bei der Länge der Nachspielzeit. Bei einer Führung seiner Mannschaft spreche ich demnach eine längere Nachspielzeit aus, bei einem Rückstand eine kürzere.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14 Folgen von Lamentieren

Wenn ein Trainer wiederholt unsachlich lamentiert, dann hat dies folgende Auswirkungen auf meine zukünftigen Entscheidungen.

Bitte kreuze in jeder Zeile Zutreffendes an!

	Stimme voll und ganz zu	Stimme eher zu	Teils teils	Stimme eher nicht zu	Stimme gar nicht zu
Das unsachliche Lamentieren beeinflusst mich gar nicht!	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bevorzuge (bewusst) das Team des Trainers bei der Vergabe von Freistößen. Seine Mannschaft bekommt also tendenziell mehr Freistöße zugesprochen, als der Gegner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bevorzuge (bewusst) das Team des Trainers beim Aussprechen von persönlichen Strafen. Seine Mannschaft erhält demnach tendenziell weniger persönliche Strafen, als der Gegner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bevorzuge (bewusst) das Team des Trainers bei der Länge der Nachspielzeit. Bei einer Führung seiner Mannschaft spreche ich also eine kurze Nachspielzeit aus, bei einem Rückstand eine längere.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich benachteilige (bewusst) das Team des Trainers bei der Vergabe von Freistößen. Seine Mannschaft bekommt also tendenziell weniger Freistöße zugesprochen, als der Gegner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich benachteilige (bewusst) das Team des Trainers beim Aussprechen von persönlichen Strafen. Seine Mannschaft erhält also tendenziell mehr persönliche Strafen, als der Gegner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich benachteilige (bewusst) das Team des Trainers bei der Länge der Nachspielzeit. Bei einer Führung seiner Mannschaft spreche ich demnach eine längere Nachspielzeit aus, bei einem Rückstand eine kürzere.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15 Zugestehen von sachlicher Kritik/Lamentieren

Wie oft darf dich ein Trainer während eines Spiels bezogen auf deine Entscheidungen sachlich und konstruktiv kritisieren?

Bitte kreuze Zutreffendes an!

Nie Selten Hin und wieder Meistens Immer

Wie oft darf ein Trainer während eines Spiels bezogen auf deine Entscheidungen unsachlich lamentieren?

Bitte kreuze Zutreffendes an!

Nie
 Selten
 Hin und wieder
 Meistens
 Immer

16 PAT-Aussagen

Bitte kreuze bei den folgenden Aussagen die zutreffende Antwort an!

Pro Zeile ist nur eine Antwort anzukreuzen.

	Stimme voll zu	Stimme eher zu	Teils teils	Stimme eher nicht zu	Stimme gar nicht zu
Trainer haben das Recht, zu versuchen, meine Entscheidungen zu beeinflussen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich verstehe mich als ein "Dienstleister" für die Spieler, der dafür sorgen muss, dass das Spiel ordnungsgemäß über die Bühne geht.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich versuche, ein gutes Verhältnis zu den Trainern aufzubauen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich lege Wert auf die Meinung der Trainer in Bezug auf meine Leistung als Schiedsrichter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich versuche, Anmerkungen des Trainers direkt im Spiel umzusetzen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich verstehe mich als "Dienstleister" für die Trainer und bin verpflichtet, das Spiel ordnungsgemäß über die Bühne zu bringen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich mache mir Gedanken über die Anmerkungen des Trainers in Bezug auf meine Entscheidungen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17 Bereit für Interviews

Neben dieser Umfrage sollen im Rahmen der Doktorarbeit auch sogenannte telefonische oder persönliche "Experteninterviews" (Dauer ca. 20 Minuten) mit Schiedsrichtern durchgeführt werden. Ich würde gern wissen, ob du für ein solches Gespräch zur Verfügung stehst. Solltest du zur Verfügung stehen, bedeutet dies jedoch nicht automatisch, dass du auch ausgewählt wirst. Diverse Kriterien entscheiden über die Teilnahme. Bitte werte dies in diesem Fall nicht als Aussage über deine Qualität als Schiedsrichter!

Die Experteninterviews werden selbstverständlich ebenfalls anonym und streng vertraulich ausgewertet!

- NEIN, ich stehe nicht für ein Experteninterview zur Verfügung
- JA, ich stehe für ein Experteninterview zur Verfügung

18.1 Kontaktdaten

Herzlichen Dank für deine Bereitschaft, an einem Experteninterview teilzunehmen. Für die Kontaktaufnahme mit dir benötige ich in jedem Fall deine Telefonnummer (Festnetz, inkl. Vorwahl). Gern kannst du zusätzlich auch deine Handynummer sowie deine E-Mail-Adresse angeben!

Festnetznummer inkl. Vorwahl

Handynummer

E-Mail

19 Endseite

Du hast nun das Ende der Umfrage erreicht!

Herzlichen Dank für die Teilnahme!

Appendix B

Coach Questionnaire

1 Titelseite

Herzlich Willkommen zur Umfrage "Beeinflussung von Schiedsrichtern im Amateurfußball"!

Die Umfrage ist Teil meiner Doktorarbeit zu oben genanntem Thema und wird in Zusammenarbeit mit der Universität Potsdam durchgeführt. Ich möchte gern untersuchen, wie sich Trainer selbst charakterisieren und ob/wie sie versuchen, den Schiedsrichter zu beeinflussen.

Die Beantwortung wird etwa 15 Minuten dauern und die Angaben werden selbstverständlich anonym behandelt sowie ausgewertet. Dies gilt, obwohl Sie im Laufe des Fragebogens Ihren Namen angeben müssen. Dies ist nur aus statistischen Gründen so. Es wird also nicht veröffentlicht, von welchem Trainer der jeweilige Fragebogen ausgefüllt wurde. Sie können demnach absolut offen und ehrlich antworten!

Ich hoffe auf rege Unterstützung und danke Ihnen herzlich im Voraus für die Teilnahme! Für Rückfragen und/oder Anmerkungen bin ich gern per E-Mail unter michael.negri@web.de erreichbar.

Sportliche Grüße

Michael Negri

2 Hinweise

Bevor Sie mit dem Ausfüllen des Fragebogens starten, möchte ich Ihnen noch kurz einige Hinweise geben:

- Antworten Sie bitte möglichst spontan und intuitiv.
- Es gibt keine richtigen oder falschen Antworten. Nur Ihre persönliche Meinung und Wahrnehmung zählt.
- Lassen Sie sich nicht von ähnlichen Fragen verwirren. Das ist gewollt und dient der korrekten statistischen Auswertung.
- Sollte Ihnen eine Antwort einmal schwer fallen, dann wählen Sie die Antwortmöglichkeit, die am ehesten zutrifft.

3 Persönliche Daten

Ich bin...

Weiblich Männlich

Wie heißen Sie?

Bitte schreiben Sie Ihren vollständigen Namen (Vor- und Zuname, in meinem Fall also "Michael Negri") in das Feld. WICHTIG: Ihr Name wird nur für die Analyse benötigt. Selbstverständlich wird Ihr Name streng vertraulich behandelt und nicht veröffentlicht. Sie haben also keinerlei negative Konsequenzen zu befürchten!

Bitte tragen Sie Ihr Alter in das Feld ein!

In meinem Fall wäre dies z. B. "28".

Bitte kreuzen Sie Ihren bisher erreichten (höchsten) Abschluss an.

Es ist nur der höchste Abschluss anzukreuzen.

- Kein Schulabschluss
- Volksschule
- Grundschule
- Hauptschule
- Realschule
- Gymnasium
- Berufsschule
- Diplom
- Bachelor
- Master
- Promotion

4 Verein + Funktion

Bitte tragen Sie hier den Verein ein, für den Sie als Trainer tätig sind.

Bitte den kompletten Vereinsnamen angeben. In meinem Fall wäre dies z. B. "Schwarz-Weiß Marienfeld."

In dem genannten Verein bin ich...

Bitte nur eine Antwort ankreuzen.

- Trainer
- Co-Trainer
- Torwarttrainer
- Konditionstrainer
- Techniktrainer

5 Trainer-Karriere

Seit wie vielen Jahren sind Sie als Trainer (Junioren und/oder Senioren) aktiv?

Bitte tragen Sie die Anzahl der Jahre in das Textfeld ein. Sollten Sie Ihre Laufbahn zwischenzeitlich unterbrochen haben, so zählt dieser Zeitraum nicht zur aktiven Laufbahn.

Sind Sie im Junioren- oder Seniorenbereich tätig?

Bitte kreuzen Sie Zutreffendes an.

- Juniorenbereich Seniorenbereich

Trainieren Sie eine Mädchen- oder Jungenmannschaft?

Zutreffendes bitte ankreuzen.

- Mädchenmannschaft
 Jungenmannschaft

Welche Jugendmannschaft trainieren Sie?

Zutreffendes bitte ankreuzen.

- Minikicker
 F-Jugend
 E-Jugend
 D-Jugend
 C-Jugend
 B-Jugend
 A-Jugend

In welcher Liga spielt die von Ihnen trainierte Mannschaft?

Zutreffendes bitte ankreuzen.

- Kreisliga C / 3. Kreisliga
 Kreisliga B / 2. Kreisliga
 Kreisliga A / 1. Kreisliga
 Bezirksliga
 Landesliga
 Westfalenliga
 Regionalliga
 Bundesliga

Trainieren Sie eine Damen- oder Herrenmannschaft?

Zutreffendes bitte ankreuzen.

- Damenmannschaft
 Herrenmannschaft

In welcher Liga spielt die von Ihnen trainierte Mannschaft?
Zutreffendes bitte ankreuzen.

- Alte Herren-Liga
- Kreisliga D
- Kreisliga C
- Kreisliga B
- Kreisliga A
- Bezirksliga
- Landesliga
- Westfalenliga (Verbandsliga)
- NRW-Liga (Oberliga)
- Regionalliga
- 3. Bundesliga
- 2. Bundesliga
- 1. Bundesliga

6 Dauer in Funktion

Wie lange sind Sie in der von Ihnen soeben angegebenen Funktion in dem angegebenen Verein tätig?

Bitte kreuzen Sie die zutreffende Dauer an.

- 0 bis 6 Monate
- 6 Monate bis 1 Jahr
- 1 bis 2 Jahre
- 2 bis 3 Jahre
- 3 bis 4 Jahre
- 4 bis 5 Jahre
- 5 bis 6 Jahre
- 6 bis 7 Jahre
- 7 bis 8 Jahre
- 8 bis 9 Jahre
- 9 bis 10 Jahre
- Mehr als 10 Jahre

7 Selbsttäuschung

Der folgende Fragebogen enthält Aussagen, die für Sie persönlich mehr oder weniger zutreffend sein können.

Bitte kreuzen Sie in jeder Zeile die zutreffende Antwort an.

	Völlige Ableh- nung	2	3	4	5	6	Völlige Zustim- mung
Der erste Eindruck, den ich von anderen Menschen gewinne, bewahrheitet sich meistens.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bin nicht immer mir selber gegenüber ganz ehrlich gewesen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich weiss immer, warum ich etwas mag.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Es fällt mir schwer, einen beunruhigenden Gedanken beiseite zu drängen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manchmal verpasse ich etwas, weil ich mich einfach nicht schnell genug entscheiden kann.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bin ein vollkommen rational denkender Mensch.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich kann Kritik selten vertragen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bin mir meiner Urteile sehr sicher.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
An meinen Fähigkeiten als Liebhaber habe ich schon gelegentlich gezweifelt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich weiss nicht immer die Gründe für meine Handlungen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8 Fremdtäuschung

Der folgende Fragebogen enthält Aussagen, die für Sie persönlich mehr oder weniger zutreffend sein können.

Bitte kreuzen Sie in jeder Zeile die zutreffende Antwort an!

	Völlige Zustim- mung	2	3	4	5	6	Völlige Ableh- nung
Manchmal lüge ich, wenn ich muss.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Es ist schon einmal vorgekommen, dass ich jemanden ausgenutzt habe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich fluche niemals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manchmal zahle ich es lieber anderen heim, als dass ich vergebe und vergesse.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ich habe schon einmal zuviel Wechselgeld herausbekommen, ohne es der Verkäuferin zu sagen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich gebe grundsätzlich alles an, was ich zu verzollen habe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manchmal fahre ich schneller, als es erlaubt ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich habe Dinge getan, von denen ich anderen nichts erzähle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich nehme niemals Dinge an mich, die mir nicht gehören.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bin schon einmal wegen einer angeblichen Krankheit nicht zur Arbeit oder Schule gegangen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9 Persönlichkeitsstruktur

Wie schätzen Sie sich selbst generell ein? Sie sind jemand, der...
Bitte in jeder Zeile die zutreffende Antwort ankreuzen. Mit den sieben Optionen/Feldern in jeder Zeile können Sie Ihre Meinung abstimmen.

	Trifft überhaupt nicht zu	2	3	4	5	6	Trifft voll zu
...gründlich arbeitet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...Aufgaben wirksam und effizient erledigt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...eher faul ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...eine lebhaft Phantasie, Vorstellung hat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...originell ist, neue Ideen einbringt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...künstlerische, ästhetische Erfahrungen schätzt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...kommunikativ, gesprächig ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...aus sich herausgehend, gesellig ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...zurückhaltend ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...rücksichtsvoll und freundlich mit anderen umgeht.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...verzeihen kann.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...manchmal etwas grob zu anderen ist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...entspannt ist, mit Stress gut umgehen kann.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...leicht nervös wird.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...sich oft Sorgen macht.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10 Selbsteinschätzung privat

Wie schätzen Sie sich privat selbst ein? Im PRIVATEN LEBEN sind Sie...
Bitte kreuzen Sie in jeder Zeile die zutreffende Antwort an!

ruhig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	aufbrausend
unsicher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	selbstbewusst
rational	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	emotional
harmoniebedürftig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	streitlustig
offen für neue Dinge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	konservativ
introvertiert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	extrovertiert
redegewandt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nicht redegewandt
schlagfertig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nicht schlagfertig

11 Selbsteinschätzung auf dem Platz

Wie schätzen Sie sich und Ihr Verhalten als Trainer ein? Als Trainer sind Sie...
Bitte kreuzen Sie in jeder Zeile die zutreffende Antwort an.

ruhig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	aufbrausend
unsicher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	selbstbewusst
rational	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	emotional
harmoniebedürftig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	streitlustig
offen für neue Dinge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	konservativ
introvertiert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	extrovertiert
redegewandt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nicht redegewandt
schlagfertig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nicht schlagfertig

12 Meinung über Schiris

Bitte kreuzen Sie in jeder Zeile die zutreffende Antwort an!
Pro Zeile ist nur eine Antwort anzukreuzen. Gefragt ist Ihre generelle Meinung.

	Stimme voll zu	Stimme eher zu	Teils teils	Stimme eher nicht zu	Stimme gar nicht zu
Ich denke, dass die Schiedsrichter in unserer Liga den Anforderungen gewachsen sind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich denke, dass die Schiedsrichter in unserer Liga freundlich sind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich habe ein gutes Verhältnis zu den Schiedsrichtern.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Schiedsrichter in unserer Liga sind regelsicher.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Schiedsrichter setzen das Regelwerk gut um.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Die Schiedsrichter in unserer Liga sind souverän.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Schiedsrichter in unserer Liga sind selbstbewusst.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Schiedsrichter in unserer Liga sind sprachgewandt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich habe Respekt vor den Schiedsrichtern.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich sage dem Schiedsrichter nach dem Spiel, wie ich über seine Leistung denke.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich kenne die Schiedsrichter und weiss, ob sie grundsätzlich gut oder schlecht pfeifen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich glaube, dass die Schiedsrichter in unserer Liga objektiv entscheiden.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Schiedsrichter in unserer Liga lassen sich nicht beeinflussen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bitte kreuzen Sie in jeder Zeile die zutreffende Antwort an!
Pro Zeile ist nur eine Antwort anzukreuzen. Gefragt ist Ihre generelle Meinung.

	Immer	Meistens	Manchmal	Selten	Nie
Ich akzeptiere auch mal offensichtliche Fehlentscheidungen des Schiedsrichters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bedanke mich nach Abpfiff bei dem Schiedsrichter, auch wenn er aus meiner Sicht schlecht gepfiffen hat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bedanke mich nach Abpfiff bei dem Schiedsrichter, wenn er aus meiner Sicht gut gepfiffen hat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In den Spielen werden wir durch schlechte Schiedsrichter benachteiligt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13 Beeinflussung des Schiedsrichters

Wie häufig versuchen Sie, den Schiedsrichter bei Spielen Ihrer Mannschaft in irgendeiner Art und Weise zu beeinflussen?
Bitte Zutreffendes ankreuzen!

<input type="checkbox"/>	Nie	<input type="checkbox"/>	Selten	<input type="checkbox"/>	Hin und wieder	<input type="checkbox"/>	Meistens	<input type="checkbox"/>	Immer
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14 Beeinflussungsstrategie

Wie versuchen Sie, den Schiedsrichter zu beeinflussen?

Bitte kreuzen Sie in jeder Zeile die zutreffende Antwort an!

	Stimme voll zu	Stimme eher zu	Teils teils	Stimme eher nicht zu	Stimme gar nicht zu
Ich suche vor Anstoß gezielt das Gespräch mit dem Schiedsrichter, um ein bisschen "Small Talk" zu betreiben.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich äußere meinen Unmut wiederholt durch Gestik und Mimik.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich lobe den Schiedsrichter für seine Entscheidungen lautstark während des Spiels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich kritisiere den Schiedsrichter vereinzelt bei seinen Entscheidungen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich reklamiere mehrere Male beim Schiedsrichter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich verhalte mich durchgehend ruhig.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich äußere meinen Unmut vereinzelt durch Gestik und Mimik.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15 PAT-Aussagen

Bitte kreuzen Sie bei den folgenden Aussagen die zutreffende Antwort an.

Bitte kreuzen Sie in jeder Zeile die zutreffende Antwort an!

	Stimme voll zu	Stimme eher zu	Teils teils	Stimme eher nicht zu	Stimme gar nicht zu
Der Schiedsrichter ist Dienstleister und somit für den ordnungsgemäßen Ablauf des Spiels zuständig.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich habe das Recht, den Schiedsrichter zu kritisieren.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich nutze das Recht, den Schiedsrichter zu kritisieren.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich versuche, ein gutes Verhältnis zu den Schiedsrichtern aufzubauen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich bin den Schiedsrichtern hierarchisch übergeordnet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ich informiere mich vor Spielen über den jeweiligen Schiedsrichter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16 Bereit für Interviews

Neben dieser Umfrage sollen im Rahmen der Doktorarbeit auch sogenannte telefonische oder persönliche "Experteninterviews" (Dauer ca. 20 Minuten) mit den Trainern durchgeführt werden. Ich würde gern wissen, ob Sie für ein solches Gespräch zur Verfügung stehen. Sollten Sie zur Verfügung stehen, bedeutet dies jedoch nicht automatisch, dass Sie auch ausgewählt werden. Diverse Kriterien entscheiden über die Teilnahme. Bitte werten Sie dies in diesem Fall nicht als Aussage über Ihre Qualität als Trainer!

Die Experteninterviews werden selbstverständlich ebenfalls anonym und streng vertraulich ausgewertet!

- NEIN, ich stehe nicht für ein Experteninterview zur Verfügung
- JA, ich stehe für ein Experteninterview zur Verfügung

17 Bereitschaft

Herzlichen Dank für Ihre Bereitschaft, an einem Experteninterview teilzunehmen. Für die Kontaktaufnahme mit Ihnen benötige ich in jedem Fall Ihre Telefonnummer (Festnetz, inkl. Vorwahl). Gern können Sie zusätzlich auch Ihre Handynummer sowie E-Mail-Adresse angeben!

Festnetznummer inkl. Vorwahl

Handynummer

E-Mail

18 Endseite

Sie haben nun das Ende der Umfrage erreicht!

Herzlichen Dank für die Teilnahme!