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Entrepreneurial Orientation in Sports Entrepreneurship - A Mixed Methods Analysis of Professional Soccer Clubs in the German-Speaking Countries

Abstract: In recent years, sports entrepreneurship has emerged as a promising discipline in the field of sports management research. However, the research field is still fragmented. This study gives an overview of sports entrepreneurship and coopetition research and is the first work analyzing EO and performance in professional sports. First, quantitative results about EO, organizational performance and coopetition of 22 professional soccer clubs were obtained. Following the mixed method approach, the data was then extended by qualitative expert interviews. Entrepreneurial orientation had a significant positive relationship with both financial and sporting performance of professional soccer clubs in German-speaking countries during the 2017/18 season. We suggest coopetition as a promising strategy for professional soccer clubs to succeed. Hence, our study fosters the concept of sports entrepreneurship and offers evidence that entrepreneurial orientation is a well-suited managerial approach to enhance organizational performance in professional soccer.

Keywords: Sports Entrepreneurship, Entrepreneurial Orientation, Coopetition, Professional Soccer

1 Introduction

Sports entrepreneurship has received increased attention as a promising conceptual interface between entrepreneurship and sports management research. The sports industry represents a large and growing element of the global economy (Frisby, 2005). Some sports organizations transformed from non-profit sports clubs to serious sports enterprises with professional management structures. Research suggests entrepreneurial characteristics to be an integral part of sports management and a critical force behind the success and welfare of sport businesses (Ball, 2005; Berrett, Burton, & Slack, 1993). Nevertheless, the actual effects of entrepreneurial activity in the field of sports remain an unsolved puzzle.

Sports entrepreneurship is not specialized on a distinctive sector of sports, though the sector of professional sports seems to be the most likely area for entrepreneurial activity to occur (Ratten, 2012; Santomier, 2002; Trequattrini, Del Giudice, Cuzzo, & Palmaccio, 2016). Further, research highlighting evidence of a positive relationship between entrepreneurial orientation (EO) and business performance (Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005). This is in line with the finding that EO can be advantageous for small-to-medium sized enterprises (SMEs) (Kraus, Rigtering, Hughes, & Hosman, 2012), given that the sports sector is populated by SMEs (Moore & Levermore, 2012). Professional soccer clubs can be closely compared to archetypal SMEs in terms of number of employees, annual turnover and characteristics (Moore & Levermore, 2012).

The aim of this study is to quantify theoretical evidence of sports entrepreneurship research. This will be the first work addressing the relationship between EO and performance in the field of sports. Soccer is the most popular sport in the world, professional soccer clubs can be closely compared to SMEs and professional sport is highly entrepreneurial. Hence, we examine the relationship between EO and organizational performance of professional soccer organizations and thereby focus on clubs competing in German-speaking countries.

Although the sports market is hostile and competitive, it can be proposed that a collaborative strategy can enhance the business performance of the organizations involved (Dyer, Kale, & Singh, 2001; Zaheer, McEvily, & Perrone, 1998). Further, cooptition (cooperation with competitors) can be advantageous for SMEs to overcome liabilities of smallness or newness (Morris, Koçak, & Ozer, 2007). Cooptition is generally linked to innovation (Gast, Filser, Gundolf, & Kraus, 2015) and may strengthen the effects of EO. Hence, the research question is twofold: What is the relationship between EO and organizational performance in professional soccer clubs and how cooptition relates to each of them?

First, there is a need to clarify the fuzzy concept of sports entrepreneurship and present current conceptual work in the field of sports entrepreneurship. With illustrating a scope of current literature, definitional issues can be tackled. EO seems to enhance sports businesses performance and it is apparent that the relationship should be examined. In addition, cooptition seems to be a promising managerial approach in the sports sector. Addressing these problems requires an analysis of EO, organizational performance and cooptition in the field of professional soccer clubs. However, quantitative data can only offer partial insights and may be affected by a small population size. Based on the preliminary results, expert interviews will be conducted to provide a more nuanced picture of the underling relationships and to identify key variables (Johnson & Onwuegbuzie, 2004). The results focus on the entire soccer season of 2017/18.

2 Theoretical framework

2.1 Entrepreneurship in sports management

Hart, Stevenson and Dial (1995) (p.86) suggest entrepreneurship is “the process by which individuals pursue opportunities without regard to alienable resources they currently control.” EO is a company-wide mindset and captures “processes, practices and decision-

making activities that lead to new entry” (Lumpkin & Dess, 1996) (p.136). EO is commonly assessed through the three dimensions, innovativeness, proactiveness and risk-taking (Miller, 1983). Firms competing in business environments in which future revenue streams are uncertain can profit from the effects of entrepreneurship, EO and entrepreneurial activities (Wiklund & Shepherd, 2005).

Hence, the concept of entrepreneurship tends to be a capable approach to support sports management with its probably most known characteristic: the uncertainty of (sporting) outcome (Peel & Thomas, 1992). Sports entrepreneurship is a mean to tackle managerial challenges of the uncertainty of outcome by improving the ability to handle the fast-changing demands of the sports environment. However, there is a lack of consensus in existing literature conceptualising sports entrepreneurship (Bjärsholm, 2017).

The field of sports incorporates a number of different perspectives from different stakeholders as for example fans, sponsors, communities, athletes, coaches or regions. Sports is a rich base for entrepreneurial activities. Sports inherent characteristics like commitment, ambition and a hands-on mentality are supporting circumstances for EO to occur (Hemme, Morais, Bowers, & Todd, 2017). Entrepreneurial activities emerge in diverse sports management areas and in different, dynamic types of entrepreneurship such as community-based entrepreneurship, corporate entrepreneurship or social entrepreneurship (Ratten, 2010). Examining sports management through the lens of entrepreneurship is helpful to understand different stakeholder perspectives and to break down its complexity. Thus, entrepreneurship has the power to increase economic efficiencies in sports management (Ball, 2005; Ratten & Ciletti, 2011). Legg (2012) mentioned the necessity of an entrepreneurial mindset to persist in the competitive and hostile professional sports market. It is essential to pursue an entrepreneurial strategy to become a competitive and financially successful professional sports club.

The sports industry is highly populated by SMEs. In terms of number of employees, annual turnover and characteristics, professional soccer clubs can be closely compared to archetypal SMEs (Moore & Levermore, 2012). Small businesses with entrepreneurial spirit can operate more effectively than in competitive markets (Covin & Slevin, 1989) and EO can be a sufficient condition for success of small businesses in the sports sector (Núñez-Pomar, Prado-Gascó, Sanz, Hervás, & Moreno, 2016). However, the sports-related mission statement of professional clubs leads to an organizational focus on sporting success. As a result, sports performance attracts more important than financial performance which distinguishes sports organizations from other small or medium-sized firms (Garcia-del-Barrio & Szymanski, 2009; Ratten, 2012).

In the last four decades, the number of publications addressing the interface of entrepreneurship and sports management has experienced a steady growth. The leading scholar in the field is Vanessa Ratten by number of outputs and citations. An overview of Ratten defining sports entrepreneurship can be found in the following table.

Table 1: Definitions of sports entrepreneurship

Authors	Definition
Ratten (2010)	“[...] is a sports-related organization acting innovatively in a business context” (p. 559).
Ratten (2011a)	“[...] is therefore the result of a process in which an organisation involved in sport acts entrepreneurially” (p. 315). “[...] is the process of creating value. This value includes the innovativeness, proactive nature and level of risk taking inherent in the activity” (p. 316).
Ratten (2011b)	“[...] any form of enterprise or entrepreneurship in a sport context” (p. 60). “[...] when an entity in sport acts collectively to respond to an opportunity to create value” (p. 60).
Ratten (2012)	“[...] is the entrepreneurship leading to the establishment of new sports-related enterprises and the continued innovation of existing sports organizations” (p. 2).
Ratten (2012b)	“[...] is described as the mindset of people or organizations actively engaged in the pursuit of new opportunities in the sports-context” (p. 66).

“[...] is any innovative activity that has a sports objective” (p. 67).

“[...] is the set of values that influence an organizations or individuals propensity to create and develop innovative activities” (p. 67).

Ratten and Ferreira (2016) “[...] is innovative, risk-taking and proactive behaviour in the sports-related industry” (p. 244).

Ratten (2018) “[...] is defined as developing new start-ups or ventures that engage with sport” (p. 13).

“A more refined definition [...] is the exploitation of opportunities within the sports sector to create change” (p. 13).

Looking at the definitions, the focus of Ratten’s conceptualizations is on innovativeness and the exploitation of opportunities. That is a more integrated approach with regards to all three EO sub-dimensions that also focuses on scarce resources and the entrepreneurial process. Hence, sports entrepreneurship can be defined as the process by which individuals, acting in a sports environment, pursue opportunities without resources currently controlled.

2.2 Assessing performance of soccer clubs

According to Garcia-del-Barrio and Szymanski (2009), European soccer clubs finance players by accepting financial losses/debts to enhance league performance. Soccer clubs can usually be considered sporting success maximizers instead of profit maximizers. However, measuring financial performance is important for managers for strategic decision making and investors and other stakeholders to assess management performance. It is also a commonly used indicator to compare overall performance with competitors (Carlsson-Wall, Kraus, & Messner, 2016). Hamil and Walters (2010) examined the financial performance of the English Premier League since its inception in 1992. Even though there are increases in available financial resources, clubs are incurring losses and increasing levels of debt. In contrast, Dimitropoulos (2014) researched 20 Greek soccer clubs and showed that the investment in player salaries positively correlates with athletic and financial performance. In addition, Szymanski

and Smith (2010) as well as Frick and Simmons (2008) found that investments in player contracts can enhance athletic performance. Hall (2002) analyzed English soccer club performance over a time span of 26 years and revealed that an increase of investment in player talent resulted in an increase of athletic performance. Pinnuck and Potter (2006) reinforce the investment theory but also suggest that recruiting capable staff, therefore the efficient use of resources, is a factor to increase financial and athletic performance. Tesone et al. (2004) indicate that the attraction, retention and development of human capital is a mean to overcome barriers of resource allocation to achieve sports organizational success. Millar and Stevens (2012) showed that training improved the learning ability and individual performance of sports managers, resulting in an increased sports organization's overall performance.

Hence, there are two paradigms used to assess performance of sports organizations: financial performance and sporting or athletic performance. Given the overall positive relationship between EO and business performance and the finding that EO plays an important role in sports organizations we propose the following:

Proposition 1: There is a positive relationship of EO and financial performance of professional soccer clubs.

Proposition 2: There is a positive relationship of EO and sporting performance of professional soccer clubs.

2.3 Linking entrepreneurial competencies to cooptation

Due to their size, SMEs suffer from a lack of relationships, poor market presence and limited access to resources (Morris et al., 2007). Professional sports clubs, which can be classified as SMEs (Moore & Levermore, 2012), are above all characterized by their limited access to resources. Professional soccer clubs generally reinvest profits, or even accept financial losses or debts, by financing new players and player salaries (Garcia-del-Barrio & Szymanski,

2009). Sports clubs are focusing on directly maximizing sports performance rather than organizational related investments and hence they struggle to cumulate resources. Coopetition, a “strategy that combines cooperation and competition between firms” (Morris et al., 2007, p. 35), can be advantageous for SMEs and hence professional soccer clubs. By cooperating with their competitors, organizations can achieve and accumulate knowledge, skills and missing resources. With access to unique assets, sports clubs can innovatively distinguish themselves in the market. Thus, both SME alliance partners can increase their national and international market shares, especially when they have a strong EO (Brouthers, Nakos, & Dimitratos, 2015).

In general, there is a positive relationship between coopetition and innovation (Gast et al., 2015). An alliance strategy provides a solution-related approach to gain competencies (Dyer et al., 2001; Zaheer et al., 1998) and EO is a competence that creates opportunities, which are supportive for small organizations to succeed in the dynamic sports market (Jones et al., 2014; Legg & Gough, 2012). As a result, we suggest coopetition to be positively linked to entrepreneurial competencies and consequently hypothesize:

Proposition 3: There is a positive relationship between EO and coopetition that, in turn, positively relates to financial and sporting performance.

3 Methodology

3.1 Research design and sample

Mixed methods research is an emphasized approach in present entrepreneurship research (Coviello & Jones, 2004; Hoang & Antoncic, 2003; Molina-Azorín, López-Gamero, Pereira-Moliner, & Pertusa-Ortega, 2012; Ritchie & Lam, 2006). Given the nature of our research question and based on the small number of professional soccer clubs in German speaking countries, we chose a sequential triangulation with qualitative and quantitative data

collection instruments (Hussein, 2009). That is, strengths of qualitative research can be added to the quantitative approach in order to overcome weaknesses of the quantitative research model (Johnson & Onwuegbuzie, 2004). The subsequent analysis is a semi-structured expert interview which is useful if research objectives are focusing on understanding experiences, opinions, attitudes, values and processes (Rowley, 2012). The aim is not only to analyze an individual expression of a universal structure but rather to detect an overall consensus among the participating experts. Therefore, experts will be treated twofold: as individual participant, presenting their personal view and as representative for expertise in the processes of professional soccer. This research design allows us to further foster the quantitative results and then to identify key variables (Johnson & Onwuegbuzie, 2004; Molina-Azorín et al., 2012).

In the quantitative part of the study, we used a *key informant approach* and sent an email survey to top decision makers (Kumar, Stern, & Anderson, 1993). In this case, the questionnaire was sent to executives of professional soccer clubs in Germany (League 1-4), Austria (League 1-3) and Switzerland (League 1-3). German-Speaking countries were chosen because of their soccer-related culture and the low language barriers between researcher and participants regarding the expert interviews. Since some clubs have second teams playing in a professional league, the actual population size of professional clubs decreases by the number of second teams. In sum, the questionnaire was sent to key individuals of 222 professional soccer clubs. Data was collected towards the end of the 2017/18 season (April 2018 to May 2018), which reflected the organizational development and performance throughout the season.

Overall, 30 executives participated and 22 questionnaires were fully filled out which results in a response rate of 10.1%. Most of the responding teams (9) were playing in their domestic second league. However, 8 of the participating professional soccer clubs played in their domestic first league. The clubs organization size was categorized according to their

number of employees from >10 (5), 10-49 (6), 50-250 (7), to >250 (4), following the definition of the European Union Commission (2003). Nearly 87% of the respondents were executives of a business unit or the CEO, 9% were board members and one participant was a team leader in the sporting department. Results of this quantitative stage were revealed through correlation analysis. An overview of the participants can be found in table 2. Three clubs chose to remain anonymous.

Subsequently, a qualitative analysis was conducted to introduce subjective experiences to verify the validity of our previous results. By means of a semi-structured expert interview, the participants of the quantitative study were confronted with the preliminary results of the data assessment. To have both, a general and an individual classification of the preliminary results, the experts were asked to first state their opinion as soccer experts in general and second their personal opinion. In total, 16 of 22 participants of the initial sample left their email contact and 5 of them took part in the interview. Further expertise was included by adding external soccer experts (2).

The expert interviews lasted from 10 to 15 minutes each and were conducted over the phone. With the help of the expert interviews, information about common practices in the soccer industry, specifications of EO in sports management and visionary prospects regarding the economic future of soccer were collected.

Table 2: Participants of the quantitative and qualitative parts of the study

	<i>Quan.</i>	<i>Qual.</i>	<i>League level</i>	<i>Firm size</i>
Germany				
1. FC Schalke 04	x		1	> 250
2. 1. FSV Mainz 05	x		1	> 250
3. SV Werder Bremen	x	x	1	50-250
4. <i>Anonymised</i>	x		1	50-250

5.	Eintracht Braunschweig	x		2	> 250
6.	Fortuna Düsseldorf	x		2	50-250
7.	1. FC Union Berlin	x		2	50-250
8.	DSC Arminia Bielefeld	x		2	50-250
9.	MSV Duisburg	x	x	2	50-250
10.	Fortuna Köln	x		3	10-49
11.	FC Wegberg-Beeck 1920	x		4	10-49
12.	FC Viktoria 1889 Berlin	x		4	< 10
Austria					
13.	SCR Altach	x	x	1	< 10
14.	FC Blau Weiß Linz	x	x	2	10-49
15.	KSV 1919	x		2	10-49
16.	<i>Anonymised</i>	x		2	< 10
17.	Wiener Neustadt	x		2	< 10
18.	ASK BSC Bruck	x		3	10-49
Switzerland and Liechtenstein					
19.	FC Basel 1893	x	x	1	> 250
20.	FC Luzern	x		1	50-250
21.	<i>Anonymised</i>	x		1	10-49
22.	FC Kickers Luzern	x		4	< 10

Quan./Qual. = participants of the quantitative/qualitative part; League level “1” represents the domestic highest league; Firm size = number of employees

3.2 Measures

3.2.1 Entrepreneurial Orientation

Most EO scales used in the literature are based on the three item approach by Miller (1983) and Covin and Slevin (1989) (Covin & Wales, 2012; Rauch, Wiklund, Lumpkin, & Frese, 2009). Covin et al. (2006) argue that EO captures the shared variance of innovativeness, proactiveness, and risk-taking, that is, the three scale items together constitute EO. In contrast, Lumpkin and Dess (1996) propose a five-item scale (autonomy, innovativeness, risk

taking, proactiveness and competitive aggressiveness) and argue that the five scale dimensions can exist independent from each other. This approach derives from the intention to examine the effects of the sub-dimensions on firm performance independently. Hughes and Morgan (2007) used the five EO sub-dimensions proposed by Lumpkin and Dess (1996) and constructed a scale that avoids terms such as “products”, “services” and “market.” These terms may be appropriate for a competitive, free economic environment but they do not fit to the specifics of the sports management discipline. In this study, we base the EO scale on Hughes and Morgan (2007) and only focus on the three sub-dimensions proposed by Miller (1983) and Covin and Slevin (1989). Thus, we focus on innovativeness, proactiveness and risk-taking, measure them in a way that is appropriate for soccer organizations and treat these dimensions independent from each other. EO was measured on a five point Likert type scale from 1 (“strongly disagree”) to 5 (“strongly agree”).

3.2.2 Coopetition

Current research was analyzed to detect appropriate items for measuring coopetition and different conceptualizations were found. Based on these findings, a 7-item scale was constructed (CO1-CO7, see Appendix). The item CO1 is based on the findings of Jap (2000) and examines the investment in the exploitation of cooperation partners which is a basic action for cooperation. An investment underlines the commitment and has a signaling effect for a long-term cooperation (Kale, Dyer, & Singh, 2002; Zaheer et al., 1998). CO2 measures the investment in fostering cooperation relations. Mutual care and dedication for a proper relationship to a partner is a specific value for future development of both alliance partners (Kale et al., 2002). Ostgaard and Birley (1994) propose an item to measure the density of the cooperation network (CO3) as a variable for proper coopetition. The density of the cooperation network indicates the relation of the size of their network of cooperation and the extent to

which they know each other. Bengtsson et al. (2010) indicates coopetition as a phenomenon that arises when two parties, who are formally competing with each other, forge a strategic alliance in order to cooperate and therefore builds the basis for scale item CO4. In reference to Bouncken and Friedrich (2012), we measure to what extent a clear goal for the coopetition activities was communicated (CO5). A strategy with clear goals can further enhance the positive effect of coopetition due to a greater commitment of both alliance partnership towards the inter-firm cooperation. CO5 measures structure to manage coopetition. A professional alliance management increases the positive development of competencies as for example partner selection, partner management or knowledge flows (Bouncken & Friedrich, 2012) and has a positive influence on coopetition activities (Dyer et al., 2001). Learning capabilities can reduce the dependence on the cooperation partner by being more efficient in absorbing knowledge from the collaborative counterpart (Fang & Zou, 2010). Kale et al.(2002) assumes that there is a need to spread the accumulated knowledge of a collaborative relationship within the firm to serious profit from the cooperation and therefore build an item to measure internal knowledge sharing emanating from the cooperation (CO7). To represent the examined content, German sentences were constructed with the premise to measure the purpose in an appropriate way. Each item is rated on a 5 point Likert type scale with a response range from 1 (“strongly disagree”) to 5 (“strongly agree”).

3.2.3 Performance

In this study, business performance is evaluated through four indicators: growth of sales (Wiklund & Shepherd, 2005), growth of profit (Chen, Tzeng, Ou, & Chang, 2007; Rigtering, Kraus, Eggers, & Jensen, 2014), growth of employees (Wiklund & Shepherd, 2005) and growth of the value of the professional team. These indicators are commonly used to assess business performance of soccer teams (Carlsson-Wall et al., 2016; Dimitropoulos &

Limperopoulos, 2014; Hamil & Walters, 2010). As there are no archival performance numbers available for the season 2017/18, perceived financial performance indicators are used. Although perceived financial indicators can be unfavorable because they are dependent on the CEOs ability to indicate financial performance, subjective measures are widely accepted in research and typically asserted as appropriate to objective measurement methods (Wall et al., 2004). Participants were asked to evaluate their performance in comparison with their competition. Scale items for business performance were displayed on a Likert-type scale with response options from 1 (“strongly disagree”) to 5 (“strongly agree”).

Szymanski and Smith (2010) and Carlsson-Wall (2014) highlight that the league position can be considered a practical and commonly used sporting performance indicator. Dimitropoulos (2014) uses the number of wins achieved over a season as a variable in order to capture athletic success of soccer clubs. However, the league models differ in programme, number of teams and promotion/relegation rules. Therefore, an international or national equation is unfeasible due to the varying league standards. Pieper et al. (2014) used expected points as an indicator for athletic performance, which are estimated by using official betting odds for match outcomes. The betting odds were converted into probability ratios and subtracted by the bookmakers’ margin. These probability ratios were then multiplied with the expected number of points of the particular outcome of the match and added up:

$$p_e = \left(p_w \times \frac{\frac{1}{x_w}}{\frac{1}{x_w} + \frac{1}{x_d} + \frac{1}{x_l}} \right) + \left(p_d \times \frac{\frac{1}{x_d}}{\frac{1}{x_w} + \frac{1}{x_d} + \frac{1}{x_l}} \right)$$

adjusted

$$p_e = \frac{p_w}{x_w} \times \left(\frac{1}{x_w} + \frac{1}{x_d} + \frac{1}{x_l} \right) + \frac{p_d}{x_d} \times \left(\frac{1}{x_w} + \frac{1}{x_d} + \frac{1}{x_l} \right)$$

where

p_e = estimated points

$p_{w,d}$ = points depending for win or draw
 $x_{w,d,l}$ = betting odd for win, draw or loss

Professional bookmakers' betting odds provide evidence based assumptions of match outcomes (Forrest, Goddard, & Simmons, 2005; Peel & Thomas, 1992; Sauer, 1998). Presumed that posted betting odds for wins, draws and losses are efficient and include all relevant information, they are, subtracted by the bookmakers' margin, an unbiased prediction of the match outcome. Indeed, Peel and Thomas (1992) are instrumentalizing betting odds as a vehicle in order to determine the sports specific uncertainty of outcome suggesting that sporting performance based on betting odds is more reliable than a short term examination of match points. To match up with the time horizon of the variables EO and financial performance, sporting performance will capture the athletic success of the season 2017/18 as a whole. Betting odds were received from the archive of *wettportal.com*, an internet platform which provides extensive retrospective betting data as well as betting odds averages of all betting odds available from more than 50 different bookmakers. Betting odds are slightly varying between different bookmakers, therefore we are confident that the average of betting odds gathered from the biggest bookmakers is even more precise and reliable than single betting odds from one certain bookmaker. As mentioned above, league models and constellations vary in the inter- and intra-disciplinary perspective. Consequently, estimated points were accumulated and divided by the total number of games in the season 2017/18. The result is a refined approach of Pieper et al. (2014) with the standardized indicator "estimated points per game" for sporting performance, which will be used as measurement:

$$p_{eg} = \frac{1}{n} \sum_{k=1}^n \frac{p_w}{x_{w_k}} \times \left(\frac{1}{x_{w_k}} + \frac{1}{x_{d_k}} + \frac{1}{x_{l_k}} \right) + \frac{p_d}{x_{d_k}} \times \left(\frac{1}{x_{w_k}} + \frac{1}{x_{d_k}} + \frac{1}{x_{l_k}} \right)$$

where

p_{eg} = standardized estimated points per game

$p_{w,d}$	=	points for win or draw
x_{w_k,d_k}	=	betting odd for win, draw or loss for the particular match day
n	=	number of matches in one season
k	=	match day

4 Results

4.1 Correlation analysis

Cronbach's alphas for most of the measured scale items show acceptable values (see table 3). However, the scale *risk-taking* had an overall non-adequate Cronbach alpha value of .61. Following Tavakol and Dennick (2011), items with low inter-correlations should be deleted. *Risk-taking* item EO9 was eliminated resulting in an alpha value of .70. For the EO scale, the alpha test resulted in a relative low value of 0.69. The low value can be a result of the relative short scale size. The elimination of the item risk-taking would increase the alpha value for the EO scale. However, risk-taking was retained as a part of the EO scale and the value of 0.69 was accepted.

Data were analyzed and assessed using Pearson correlations. Sample size for measuring financial performance was $N = 22$. Two participants were playing in leagues where no archival data was available for betting odds. Therefore, sample size for sporting performance was $N = 20$. A general overview of results is provided in table 3.

Table 3: Means, standard deviations, Pearson correlations and Cronbach's alphas

	M	SD	1	1.1	1.2	1.3	2	3	4
1. EO	3.52	.53	(.69)						
1.1 Innovativeness	3.67	.72		(.81)					
1.2 Proactiveness	3.21	.61		.59**	(.74)				
1.3 Risk-taking	3.68	.55		.56**	.52*	(.70)			
2. Coopetition	3.12	.62	.53*	.28	.50*	.59**	(.81)		
3. Financial performance	3.10	.86	.55**	.59**	.39	.37	.34	(.87)	

4. Sporting performance	1.29	.24	.52*	.51*	.35	.46*	-.66	.27	-
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Financial performance, N = 22; Sporting performance, N = 20; Cronbach's alpha are shown in the diagonal; * $p < .05$, ** $p < .01$

Emerging from the present data analysis, EO shows a significant positive relationship with financial and sporting performance. Regarding the sub-dimensions, innovativeness demonstrated a significant positive correlation to both financial and sporting performance, suggesting that clubs with a highly innovative attitude are good performers. No correlation was found for proactiveness and performance measures. Risk-taking correlates to sporting performance, yet there was no correlation to financial performance. As expected, the results show a significant relationship between competition and EO. Though, competition is not significantly related to neither sporting nor financial performance.

4.2 From an expert's perspective

Our quantitative results suggest a positive relationship between EO and financial and sporting performance of soccer organizations. All of the experts consented to the preliminary result. Some of the respondents outlined the importance of viewing the construct as an overall entity that is as a combination of its three sub-dimensions. These opinions are underlying the findings of George (2011), who suggested to view the construct of EO as a whole and that the three sub-dimensions are co-varying. For example, a participant suggests:

“In my opinion, it's important to cover all of the three pillars in a reasonable way. Innovation, proactiveness and risk-taking, for me, the combination is just right and it's about a wholesome blend: Innovation and proactiveness is in any case part of success. But, some risk-taking is also always inherent.”

Innovation was the only sub-dimension that showed a significant positive correlation to both financial and sporting performance. For proactiveness, no correlation with the performance measures was found. Though, an executive reported that his organization always tries to act innovatively and also proactively. This statement is reinforced by an expert reporting that innovative and proactive behavior is an essential condition for sporting success in the field of professional soccer. We noticed that the executives transmitted a remarkable impression of a proactive mindset which may refer to an overall proactive character of the sports sector in general. However, following the perception of a participant, innovation is a real opportunity to create competitive advantage but also requires effective support. A participating club tries to counter the hostile sports market by means of an innovative sponsoring strategy.

“Innovation is the crucial factor. You always have to explore new paths to, for example, create new approaches to increase sales because otherwise it is difficult to maintain being financial healthy, if you are financing yourself, like the FC Basel is doing. I think, financial and sporting success cannot continue without innovation.”

Some clubs also reported to participate in open innovation software programmes within the sports business. Further, innovative action was reported to be dependent on the financing structure of the professional soccer club. Organizations financing themselves through their daily business have to be more innovative in order to sustain their competitiveness than clubs being financed by investors or having remarkable higher TV contracts and therefore more available financial resources. Thus the less money, the more innovation is required to maintain competitive. One professional club from the Bundesliga reported a high public pressure when trying new things. Fans, partners or sponsors are expecting success and do not accept failure, which increases barriers for being innovative.

Our quantitative data detected no correlation between risk-taking and financial performance, yet a significant positive relationship to sporting performance. At a first glance, the reaction of the experts was diverse when confronted with the preliminary results.

A manager of a Swiss club mentioned that risk is always present when managing a professional soccer club. For example, acquiring a new player is always connected to a lot of uncertainty, therefore creates risk. From his point of view, it is not possible to be successful, neither from a financial nor athletic perspective, without taking any risk. Other experts are affirming that risk is always present in professional soccer but they do not believe that taking more risk will lead to more success. Hence, the experts suggest balancing the amount of risk-taking due to the uncertainty of outcome.

“Risk-taking has to be handled in a healthy way. [...] We are in the lucky situation to have reliable partners [...], hence our risk is of a manageable degree. Regarding our team, the players, the salaries, everything is well calculated. [...] It’s part of being a good sports manager to manage the club by means of continuity over several years and to take risks [...]. Of course, there are also outliers, but you should stay in a balance for a continuous development”.

Financial performance is an essential factor when calculating risk and may influence the risk-taking behavior of the clubs. For example, clubs supported by investors can take higher risks due to higher financial security. Therefore, it seems to be comprehensible that risk-taking behavior in the professional soccer environment is influenced by available resources. However, risk-taking is a basic part of sports management.

Further, our findings suggested that cooperation does not have a significant positive relationship to organizational performance. Hence, the experts are jointly surprised and rejecting this theory. They suggest cooperation with other clubs as a performance enhancing strategy and therefore improving financial and sporting performance. Although rarely practiced,

intense cooperation between clubs within a league may enhance the chance to withstand against third parties in the sports environment. Professional clubs are recently practicing experience exchanges in their national or international club network and assume cooperation to be stimulating for both parties, especially as a small club with an international partner. An interesting approach is cooperation as form of mentoring. An expert reported that sharing his knowledge and therefore getting feedback is a proper mean to develop himself. Another participant states:

“If you have a best practice, why not share it with other clubs if therefore soccer and the league as a whole can profit?”

In sum, cooperation in professional soccer is a common practice. A CEO reports the mindset of his first league professional soccer club regarding cooperation:

“You should not compete in administrative concerns, rather on the pitch.”

Some conditions should be considered for a successful partnership. Clubs do have concerns about revealing their core knowledge and experts are recommending to well consider which information is disclosed and shared. In addition, a collaborative partnership has a promising future when both parties represent the same values, suggesting harmony as a basic element for a working cooperation.

Lastly, we presented the results of the relationship between financial and sporting performance to the experts. Current research findings are indicating that investments in players are directly enhancing sporting success (Dimitropoulos & Limperopoulos, 2014; Jane, San, & Ou, 2009; Szymanski & Smith, 2010). We asked the participants of the expert interview to comment on the findings and confronted them with a slightly provocative title of Wilkesmann (2017): Does money scores goals? The experts were in great consensus that the investment in the team, and therefore the market value of a team, is a valuable indicator for its performance.

However, good financial performance does not imply high investments in the team. A participant added “Money does score goals limitedly.”

Other experts also suggested that the competence of the executing employees is an important moderator of success in the relationship between financial resources and sporting success. These results are in alignment with the findings of Millar and Stevens (2012), Weinberg (2016), Frick and Simmons (2008), Pinnuck and Potter (2006) and Tesone et al. (2004), suggesting a capable staff to be an important factor for athletic performance and success in the field of professional sports.

5 Discussion and practical implications

Our results reinforce present entrepreneurship research, where EO has been investigated as a framework with a positive association to firm performance (Kraus et al., 2012; Wiklund & Shepherd, 2005). In this case, EO showed a significant positive correlation to financial and sporting performance of professional soccer clubs. In addition, experts are reinforcing this theory leading us to accept our first and second research proposition. However, when disassembling EO and considering the three sub-dimensions, only innovation correlates significantly with both performance measures. This result is a first step in order to quantify previous assumptions of qualitative research in the field of sports entrepreneurship suggesting innovation as engine of sports entrepreneurship (Ball, 2005; Legg & Gough, 2012; Ratten & Ferreira, 2016). From a neutral perspective, the interview participants made the impression to be highly proactive which may be inherent within sports-related individuals. Risk-taking may play a special role in the context of professional sports due to the sports-related uncertainty of outcome. Match outcomes, and therefore sporting success, are hardly predictable. That is, professional soccer clubs need proper risk calculations. In addition, risk-taking showed a positive significant correlation to sporting performance. The experts are regarding risk as a

distinctive part of professional soccer. Still, from a managerial perspective, risk needs to be treated with caution.

In this study, financial performance showed no correlation to sporting performance. However, among sports managers (and fans) it is commonly accepted that investment in players enhances potential for athletic success (Dimitropoulos & Limperopoulos, 2014; Frick & Simmons, 2008; Szymanski & Smith, 2010). Our experts are reinforcing the theory that a team with a high market value, managed by a capable staff, will be successful. In this study, financial performance was measured by self-perceived indicators which do not automatically imply an investment in the team. Hence, we suggest to use the team's market value as a measurement for the relationship between investments and sporting performance.

The quantitative analysis suggests that cooptation does not correlate with organizational performance. However, data surmises that the EO-performance relationship may be mediated by cooptation. Regarding the expert interviews, there is a common consensus that cooperation within the soccer sector can enhance overall league performance. Most of the experts are reporting from positive effects of cooperation with other clubs. Though clubs are recently cooperating, yet there is hardly any official cooperation of clubs on the same level or in the same league. Although there was no correlation found between cooptation and performance, the affirmative statements from the experts lead us to support proposition 3.

5.1 Limitations

Within the examined German-speaking countries are 222 professional soccer clubs, wherein 10% of them took part in our survey. Though such a response rate can be considered as expected for an online survey, the overall sample size of 22 (listwise 20) is small. Financial performance was examined by self-perceived indicators as opposed to objective measures which may be unfavorable because they are dependent on the ability of the executive to rate

the financial performance compared to the competition without any biases (Kraus et al., 2012). However, this approach is widely accepted in research (Wall et al., 2004) and there is evidence showing no difference on the EO-performance relationship concerning self-perceived or archival performance measurements (Rauch et al., 2009). Sporting performance is measured by the variable estimated points per game, which is calculated on the basis of betting odds and though being calculated on all relevant information, bookmakers run the risk to misjudge the rating and therefore do not indicate performance appropriately. To minimize the risk of an individual bookmaker rating outlier, average betting odds of the biggest bookmakers were used.

5.2 Recommendations for future research

Sports entrepreneurship is a commonly accepted term in the research of sport management and therefore appears as universally applicable in sports, although several authors mentioned the diversity and differences of the sports sector (Berrett et al., 1993; Hemme et al., 2017; Ratten & Ciletti, 2011). Hemme (2017) states that a fitness entrepreneur shares a variety of similarities with non-sports entrepreneurs. In contrast, Ratten (2012) mentioned the sports entrepreneur differs from other entrepreneurs.

The field of sports entrepreneurship runs the risk to become elusive a diffuse research area. Science is based on the use of well-defined concepts. Ratten being the only researcher defining the concept of sports entrepreneurship opens the field for misinterpretations (Bjärsholm, 2017). Further research is required to create new perspectives which can enrich the understanding of how to define sports entrepreneurship.

Although there is broad and commonly accepted theoretical evidence, the empirical effects of EO in the field of sports are still rather unexplored. Hence, the approach of EO seems to be a useful framework to highlight the effects of entrepreneurship in sports management.

Further transfer of results from entrepreneurial research covering the occurrence and outcome of EO in sports organizations offers an interesting research topic for future empirical studies.

6 Conclusion

The findings of this study reinforce the commonly accepted theory that EO enhances organizational performance, demonstrating that the sports sector can profit from entrepreneurial concepts. The sports market is a very fast-changing, competitive and diverse environment and EO already showed to be a valuable vehicle to meet those demands. Yet, the findings for proactiveness and risk-taking were controversial and more evidence is required in the future. Executives of professional soccer clubs are in consensus that especially innovation is an essential part of the corporate mindset to constantly develop the organization. Innovation seems to assume the leading role as most valuable mean to outperform on the sports market. Although financial performance showed no relationship to sporting performance, we can confirm current research that an investment in the team enhances athletic success (Dimitropoulos & Limperopoulos, 2014; Frick & Simmons, 2008; Szymanski & Smith, 2010). This effect can be strengthened when the investment is managed by capable staff (Millar & Stevens, 2012; Pinnuck & Potter, 2006; Tesone et al., 2004). Our overall results are leading to the assumption that cooptation is a promising and applicable concept for the special sports sector and may act as a mediator between the EO-performance relationship. A decisive factor for the supportive role of cooptation was the experts' perspective which suggests that even inter-league cooperation may be a useful tool for especially small clubs to bundle available resources and stand up to third parties.

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Appendix

Coopetition Items

- CO1 Investments in exploring cooperation partners
- Wir tätigen hohe Investitionen und setzen viel Energie ein, um geeignete Kooperationspartner zu finden.
- CO2 Investments in fostering cooperation relations
- Wir tätigen hohe Investitionen und setzen viel Energie ein, um unsere bestehenden Kooperationen intensiv zu pflegen.
- CO3 Density of cooperation network
- Wir sind in ein dichtes Netzwerk von Kooperationen eingebettet.
- CO4 Cooperation with competitors
- Wir haben Partnerschaften mit Organisationen, die gleichzeitig (im gleichen od. anderen Teilgebieten) Konkurrenten sind („Koopetition“).
- CO5 Clearness of cooperation activity goals
- Wir entwickeln klare und eindeutige Ziele für unsere Koopetition-Aktivitäten.
- CO6 Structures for managing coopetition
- Wir schaffen Strukturen und Steuerungsmechanismen, um Koopetitionen zu managen.
- CO7 Internal knowledge sharing emanating from coopetition
- Wir verteilen und nutzen das erlangte Wissen aus den Koopetitionsbeziehungen in der Organisation.

All items rated on 5-point Likert-type scales ranging from 1 (“strongly disagree”) to 5 (“strongly agree”)

Entrepreneurial Orientation Items

EO1 Risk-taking Items

- Der Begriff "Risikobereitschaft" wird bei Mitarbeitern in unserer Organisation als ein positives Attribut betrachtet.
- Personen in unserer Organisation werden dazu ermutigt, mit neuen Ideen ein kalkulierbares Risiko einzugehen.
- Unsere Organisation legt Wert darauf, neue Möglichkeiten zu entdecken und damit zu experimentieren.

EO2 Innovativeness Items

- Wir führen aktiv Verbesserungen und Innovationen in unserer Organisation ein.
- Die Arbeitsverfahren unserer Organisation sind kreativ.
- Unsere Organisation strebt danach, in der Art und Weise wie sie handelt, neue Wege zu gehen.

EO3 Proactiveness Items

- Unsere Organisation versucht immer und in jeder Situation die Initiative zu ergreifen (z.B.: mit Wettbewerbern, in Kooperationsprojekten).
- Wir sind hervorragend im Identifizieren von neuen Möglichkeiten.
- Wir initiieren Aktivitäten auf die andere Organisationen reagieren.

All items rated on 5-point Likert-type scales ranging from 1 ("strongly disagree") to 5 ("strongly agree")

Financial Performance Measures

- FP1 • Im letzten Geschäftsjahr erzielten wir ein höheres Umsatzwachstum als unsere (direkten/indirekten) Wettbewerber.
 - FP2 • Im letzten Geschäftsjahr erzielten wir ein höheres Gewinnwachstum als unsere (direkten/indirekten) Wettbewerber.
 - FP3 • Im letzten Geschäftsjahr erzielten wir einen höheren Mitarbeiterzuwachs als unsere (direkten/indirekten) Wettbewerber.
 - FP4 • Im letzten Geschäftsjahr erzielten wir ein höheres Wachstum des Marktwertes der Lizenzmannschaft als unsere (direkten/indirekten) Wettbewerber.
-

All items rated on 5-point Likert-type scales ranging from 1 (“strongly disagree”) to 5 (“strongly agree”)