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The application and adaption of the organizational capacity framework on sports clubs to identify causes for organizational problems

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Summary
Scientific reflections of sports clubs are confronted with the problem of finding an appropriate approach to reflect the diversity of sports-related organizations. The purpose of this study is to observe the performance of sports clubs by considering the problems that occur. In order to capture the organizations in a model, the organizational capacity framework is presented. Since previous scientific studies have not resulted in standardized variables, a specific selection of relevant aspects is required. The framework captures the interdependent influence of human, financial, process and infrastructural, network and relationship as well as planning and development resources within the organization. The potential usefulness of the application of the framework is tested on sports clubs in the Rhineland (n = 1,000). The results of the multiple regression show that the organizational capacity framework is suitable to be applied on sports clubs, but requires further research to obtain more meaningful statements. Regarding organizational problems, it is indicated that board members, sufficient finances, strategic planning, and availability and accessibility of facilities are most important to reduce problems. Practical implications are addressed to both sports clubs and umbrella organizations.

Keywords
Organizational Capacity, Resources, Sports Clubs, Organizational Problems, Performance

Zusammenfassung
Die wissenschaftliche Betrachtung von Sportvereinen steht vor dem Problem, einen geeigneten Ansatz zu finden, der die Vielfalt der sportbezogenen Organisationen abbildet. Das Ziel dieser Studie ist es, die Leistung von Sportvereinen unter Berücksichtigung der auftretenden Probleme zu beobachten. Um die Organisationen in einem Modell zu berücksichtigen, wird der Ansatz Organizational Capacity vorgestellt. Da die bisherigen wissenschaftlichen Untersuchungen nicht zu standardisierten Variablen geführt haben, muss jeweils eine spezifische Auswahl der relevanten Aspekte vorgenommen werden. Organizational Capacity erfasst den gegenseitigen Einfluss von Human-, Finanz-, Prozess- und Infrastruktur-, Netzwerk- und Beziehungsressourcen sowie Planungs- und Entwicklungsressourcen innerhalb der Organisation. Der praktische Nutzen wird an Sportvereinen im Rheinland (n = 1.000) getestet. Die Ergebnisse der multiplen Regression zeigen, dass die Heuristik für die Anwendung auf Sportvereine geeignet ist, aber weitere Forschung erfordert, um aussagekräftigere Aussagen zu erhalten. In Bezug auf organisatorische Probleme wird angegeben, dass Vorstandsmitglieder, ausreichende finanzielle Mittel, strategische Planung sowie die Verfügbarkeit und Zugänglichkeit von Sportanlagen am wichtigsten sind, um Probleme in Sportvereinen zu verringern. Praktische Implikationen richten sich sowohl an Sportvereine als auch an den Verband.

Schlagwörter
Organizational Capacity, Ressourcen; Sportvereine; Organisatorische Probleme, Performance

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1 Introduction

The relevance of grassroots sports organizations in Germany is largely indisputable. The current situation around the Covid-19 pandemic shows what many researchers have discussed for a long time: sport is considered relevant within society (Digel, 2020; Heinemann & Horch, 1981). Furthermore; grassroot sports clubs constitute the basis for sports in Germany. The mentioned relevance of sports clubs is evidenced through various reasons. Notably since sport represents a healthy lifestyle and offers entertainment. Moreover, sports clubs, in particular, create a sense of community, enable personal development and knowledge generation and contribute to the socialization of their members (Breuer & Feiler, 2019b; Thieme, 2017b).

The German sports landscape comprises almost 90,000 clubs (DOSB, 2020) that represent a great variety of different sports, performance levels, sizes, and ages. Moreover, although all sports clubs aim at promoting sports, each club aspires to different sub-goals. While some organizations focus on offering high-performance sports, other clubs attach importance to train children or the inclusion of immigrants, refugees or women (Breuer & Feiler, 2015, 2019b). Nevertheless, because the commonalities in the subject, scientific reflections primarily focus on sports clubs, regardless of their peculiarities (Breuer & Feiler, 2021; Thibault et al., 1999). The omnipresence of sports clubs is also reflected in the increasing number of scientific papers. A hitherto unanswered concern is the identification of independent overarching factors that explain or influence the performance of sports clubs (Weinberg & McDermott, 2002).

Frequently, established economic approaches to success, such as revenues, profit, market share or growth, are unsuitable for non-profit organizations (NPO) due to a regional focus and the lack of profit orientation. Moreover, generalizations reduce the expressive power of research since the internal alignment differs. While major clubs might capture their success by increasing membership numbers, smaller clubs and those that put focus on conviviality and community might perceive increasing numbers as problematic. Accordingly, scientific studies primarily focus on identifying aspects, conditions or benchmarks that operate as indicators for success (Glanzmann et al., 2002; Meier & Thiel, 2017).

These organizational considerations are further relevant, as various environmental factors require the adaption of the sports clubs. The growing number of alternative recreational

opportunities and the competition through commercial sports providers exacerbate problems in sports clubs (Gutzeit, 2007). Solutions can be found in the identification and development of strengths and the avoidance or minimization of weaknesses.

Alongside the problem of identifying suitable factors to capture the performance or success of sports clubs, researchers face the problem of converting the complex interdependence of the sports clubs, their members and the environment into a scientific model to understand the provision of sports offers and logics of action in sports clubs (Nagel, 2007). Accordingly, scientific research typically focuses on a specific area of interest in order to refine resulting implications (for example economic or social interests, see Burrmann, 2019; Wicker, 2017a). The large number of sports clubs, their unique focus, structural conditions and circumstances require a broad understanding of sports clubs and their success factors (Flatau & Fuchs, 2017).

To examine the organization of sports clubs, a resource based view is applied that captures an organization as a pooling of resources. A scientific development of this approach is the organizational capacity (OC) framework that considers the ability to draw on various resources (Hall et al., 2003). Besides intra-organizational resources, external resources, such as cooperation with other organizations and support services, can be examined. The human resource capacity dimension represents the key aspect of OC with influence on financial and structural capacities (infrastructure and process, network and relationship and planning and development, see Hall et al., 2003). In previous research, the framework was considered suitable to understand organizational ambition, voluntary engagement and integration (Balduck et al., 2015; Kitchin & Crossin, 2018; Swierzy et al., 2018).

This study attempts to capture sports clubs and associate them with the analysis of success by examining their problems, as they might reveal weaknesses of the organization that need to be solved. Although the method of solving the problem is not considered in this approach, the non-existence of problems can be equated with successful club management (Geisinger & Hoepfner, 2008). More specifically, the success of sports clubs is measured through the sum of problems encountered in recruiting and retaining members, voluntary officials, trainers and instructors, the availability of sports facilities, competition from other recreational and commercial sports providers and restrictions imposed by all-day schools (Breuer, 2015; Breuer & Feiler, 2019b).

In summary, the present study is concerned with two aspects: the adaption of the organizational capacity framework to sports clubs in the Rhineland in order to develop a suitable method to capture the organization and contribute to the present theory in understanding cause-effect relationship between organizational resources and success. Following Sontag (2012), who puts success potentials as upper limit for realizable success, this study pursuits the assumption that OC functions as framework for problem solving in sports clubs.

With regard to the scientific literature, this work offers a first attempt to summarize the different applications of the organizational capacity framework in relation to sports clubs. The framework has been applied on sports clubs in quantitative and qualitative studies without assigning fixed variables to each capacity dimension (Doherty & Cuskelly, 2020; Swierzy et al., 2018). Although this enables an individual adaption by placing focus on aspects that were chosen to be relevant by the applier, there is a lack of comparability of the studies.

In order to gain a deeper insight into the theoretical background and previous literature, the following chapter is concerned with the distinctive features of sports clubs and the German sports system as distinguished from other non-profit organizations. In particular, strategic considerations and different concepts of success will be addressed. The second part of the theoretical considerations deals with organizational considerations and approaches to capture sports clubs as organizations. The chapter ends with an introduction into the organizational capacity framework and previous applications to NPOs. Chapter 3 explains the methodological choices and the quantitative method that emerges from these considerations. Chapter 4 and 5 are concerned with the presentation and the scientific evaluation of the results. Moreover, the sixth chapter provides a conclusion with practical implications for sports clubs, umbrella organizations and political decision makers. In addition, limitations based on scientific inaccuracies and data used were transformed into suggestions for further scientific research.

2 Theory

The following chapter is concerned with outlining the theoretical foundations. After presenting the legal basis for sports clubs, their peculiarities, success, problems and the German sports system, an overview about previous organizational considerations of

sports clubs is given. In conclusion, organizational considerations and the organizational capacity framework are theoretically introduced and explained.

2.1 Clubs

The basis for sports clubs is found in §21 of the German Civil Code (Bürgerliches Gesetzbuch, BGB) which states that associations can operate independently and acquire "legal personality by entry in the register of associations of the competent local court" (§21 BGB). Furthermore, it defines the German term "Verein" as an organization whose purpose is not geared towards an economic business operation. These two principles represent the basic legal framework of each (non-profit) organization regardless of the sector. All associations that have acquired legal personality are labeled as e.V. (eingetragener Verein, registered organization) to demonstrate their ability to hold rights and obligations. Although organizations do not focus primarily on economic activities, organizations can take part in economic markets, offer programs and charge membership fees (Gutzeit, 2007, pp. 121–125). The official capacity, limited liability and the ability to acquire funding are the main motivations to found an organization.

Sports clubs and organizations in general are important for the good of the public as they provide programs, activities and social gatherings for a wider audience. There are diverse organizations in various fields such as sports, environmental protection, music, social activities and inclusion. Since the state has limited financial and human resources, it relies on organizations to take responsibility in these areas (Coates et al., 2014, p. 230). In succession, the state offers advantages for organizations if they pursue selflessly, exclusively and directly a charitable, ecclesiastical or non-profit purpose according to the established statutes as well as the actual business activity (§§51-57 Fiscal Code of Germany (Abgabenordnung, AO)). All organizations and companies, i.e. not only associations, that meet these requirements can obtain the status of public benefit, which leads to the term: non-profit organization. In addition to government agencies, which are financed by taxes and offer prices independent of the market, and companies, which are market-driven, NPOs represent the third sector (Zimmer & Priller, 2007). The diversity of purposes required for non-profit status leads to a broad variety of non-profit organizations. Besides sports, NPOs can be found in particular in the promotion of art and culture, humanitarian aid or development cooperation (§52 AO).

The non-profit status offers various advantages for organizations. A key point is the exemption from corporate income tax and trade tax based on the Corporate Income Tax

Act (Körperschaftssteuergesetz (KStG) §5 par. 1 no. 9 KStG). Moreover, these organizations may receive donations (§10b sentence 2 no. 2 EStG) and in turn, issue a donation receipt that can be claimed for tax purposes (§63 par. 5 AO). In addition to government benefits, sports clubs can apply for financial support for programs or trainers and benefit from organized educational opportunities for their members offered by umbrella organizations and professional associations. This dichotomy of the German sports system is explained in chapter 2.1.1.

Almost all organizations operating in the field of sports are NPOs, so the non-profit status is justified by the content of the sport club. Sports clubs pursue a charitable purpose in accordance with their statutes of association and are usually entered in the register of associations of the responsible local court. This is due to the requirements that the umbrella and professional associations expect from organizations applying for membership (for example Aufnahmerichtlinien SBR, 2018/5). As a result of the high level of professionalization of a few sports clubs, a distinction is made at this point. While highly professionalized organizations such as the clubs in the German Bundesliga may be initially perceived as sports clubs because they focus primarily on soccer, these clubs actually cover a variety of different organizations under one brand (including for-profit organizations). This offers the advantage that the parent club benefits from the regulations on NPOs, since the promotion of sport is one of the 25 purposes that meet the requirements of the charitable purposes listed in §52 AO, while other parts of the organization are allowed to generate income that does not have to be spent on the statutory purpose. Compared to the large number of grassroots sports clubs, these highly professional (soccer) clubs are not representative of the system of organized sports in Germany and are therefore not the subject of this work.

In addition to legal considerations, there are several social functions of organizations, such as being a stabilizing factor in social change, personality development, fair-play education, integration, socialization, identification as well as political and cultural functions (an overview is offered by Jaitner & Körner, 2019, pp. 7–8, see also Emrich et al., 1998; Heinemann & Horch, 1981; Wicker & Breuer, 2011). This results in a high relevance of organizations in German society, since they offer opportunities and benefits for members on the individual level on the one hand and are capable of acting within the economy and politics on the other hand (Heinemann & Horch, 1981). Sports clubs unite people with similar goals, which cannot be achieved individually but in a group. The most important example is the training for children, offered in the club by qualified trainers,

because parents often cannot provide this qualification and the time commitment. Heinemann identifies five still applicable characterizations to sports clubs and organizations in general today:

- Voluntary Membership
- Independence from the State / Self-Government
- Orientation towards Members' Interests
- Democratic Decision-making Structures
- Voluntary Work (Heinemann, 1998)

Heinemann (1998) states that the combination of these individual variables shapes the sports club in its tangible appearance and its working and functional mode. Gutzeit (2007, p. 172) includes a focus on resources instead of financial gains to the characterization of sports clubs. Not all organizations operating in the non-profit sector represent registered organizations, so these characterizations apply exclusively to certain organizations. Other types of organizations, such as food banks, are not built on the membership of individuals, so these characteristics cannot be applied to all NPOs.

All characterizations put emphasis on the internal orientation in sports clubs resulting from the omnipresent decision-making power of the members (Nagel, 2007). On the one hand, members decide on the goals and the structure of their club, written down in the association's statutes, and thus determine the supreme imperative for action of an organization. In addition, the members decide on the board of directors and are therefore, on the other hand, responsible for the achievement of the goals or the functioning of the board. Accordingly, they are consumers, producers and financiers at the same time (Nowy et al., 2015). At the decision-making and production level, sports clubs are structured bottom-up, because without members and their requirements, there is no need for organizations (Breuer, 2003). In this construct, members are both stakeholders and shareholders of the organization (Gutzeit, 2007).

Sports clubs in particular find themselves in a complex network of different stakeholders (Gutzeit, 2007, p. 184). In addition to internal interests, sports clubs face requirements from political actors, professional associations and umbrella organizations, sometimes sponsors, other sports clubs and more. The complex structure and necessity that sports clubs face, leads to a multifaceted raison d'être. Besides economic and political functions, sports clubs are considered as social actors that strengthen the development of the community (Schimank, 2012). The social impact of sports clubs emerges in various

aspects. Whereas some clubs focus on the mediation of values such as fair play or personality development, other sports clubs promote health or operate in the field of violence prevention (Breuer & Feiler, 2019b). Accordingly, sports clubs combine several social functions and those that specialize in one particular function, such as training of competitive athletes. Varying membership structures lead to different requirements and ultimately to diverse orientations of the organizations.

NPOs generate their funding mainly from membership fees and donations (for sports clubs see Emrich et al., 2001). All German sports clubs charge membership fees, these fees are namely the key source of revenue (Breuer & Feiler, 2019b, p. 45). Membership fees differ across age groups, sports and the activity level of the member. Sports clubs usually make a redistribution by charging adults a higher membership fee than children or adolescents. In addition, a distinction is made between active and passive (supporting) members. While the first group actively participates in sports, the latter group are members who pay a membership fee but do not participate directly in club activities (Fink, 2020). The Sport Development Report (Sportentwicklungbericht, SEB) from 2015/2016 reveals that the median annual membership fee for adults is more than twice as high as the contribution for children (children: 30 Euro, adults: 75.6 Euro; Breuer, 2017, p. 274). Moreover, the sport and region where the club operates leads to varying membership fees. The revenues from membership fees are constant, internal and autonomously determinable by the organizations and therefore, important for the organization (Emrich & Pitsch, 2005, p. 51).

It is demonstrated that sports clubs are relevant for Germans and their sporting activities (Nagel, 2007). A closer look at the broad landscape of clubs reveals that each club has a different mission, framework and vision. This leads to a diversification of functions and finally, to different types of social and financial member retention (Heinemann & Horch, 1981). In fact, structural variables such as sporting activities, sizes, member structures or the location of the club stand in conflict with the general term *the sports club*. Another distinction can be made through the alignment of the sports clubs. While traditionally oriented sports clubs focus on the needs of their existing members, future-oriented sports clubs incorporate the wishes of potential members (Anders, 2001, p. 590). The first group of sports clubs is characterized by homogeneous members and prefers the closedness of the club. New members are accepted if they adapt to the demands of existing members, while new sports programs or other activities are viewed skeptically. These classic sports clubs are different from modern clubs that focus on future development. The second

group of sports clubs endorses new offers and focusses on attracting and retaining new members, without necessarily implying the goal of membership growth (Emrich et al., 2001; Meier et al., 2017, pp. 408–409).

A higher chance of receiving subsidies and greater media exposure may explain the structural changes that Cachay predicted in 1988 (pp. 223-226). Mergers of associations, a trend toward more and different sports divisions, relaxation of the conditions of participation and the expansion of the importance of sports activity are signs of cultural change and greater individualization that are evident in this sector. In 1995, Digel updated the anticipated changes in Hesse to a tendency of leisure-oriented, nature-based sport, an increase in fitness and health sports and a growth in health and prevention programs that can still be observed today. Structural and behavioral changes are primarily perceived in individuals, but since sports clubs are shaped by their members, they must adapt to current changes (for further literature, see Nagel & Schlesinger, 2012; Schlesinger & Nagel, 2013).

A connection between health and sports can clearly be established. Moreover, the growing number of sports clubs in Germany shows the increasing relevance of physical or health-promoting activity and the desire for individualization, leading to the development of new sports and sports programs. At the beginning of 2020, the German Olympic Sports Confederation (DOSB), the non-governmental umbrella organization of sports in Germany, counted a total of 27 million memberships in around 90,000 clubs (DOSB, 2020). At this point, however, it should be mentioned that memberships are not the same as people, since a person can be a member of a soccer club and a gymnastics club, resulting in two memberships of one person.

Sports clubs in Germany are subject to a high level of scientific interest. Every two to three years, German sports clubs are asked to provide data for the SEB, a longitudinal study colleting fundamental structural data and sheds light on various aspects. The latest SEB, which examines data concerning 2017 and 2018, provides an overview of what sports clubs are focusing on (Breuer & Feiler, 2019b). "The sports club values the community" (4.58/5) and "The sports club values democratic participation" (4.39/5) receive the highest level of agreement. This again shows that members are the most essential resource and stakeholder of a sports club. In addition, Breuer and Feiler (2019b, p. 18) provide data showing that only 15.3 percent of sports clubs have athletes supported and promoted in squads. Squads are selected athletes who promise to reach national or

international championships or medals at these competitions. This low proportion of squad athletes indicates that the majority of sports clubs in Germany offer grassroots sports. The lower focus on competitive sport is supplemented by additional activities that typically go beyond the sport itself. Nearly all clubs (93.9 percent) organize parties or other social events for their members (Breuer & Feiler, 2019b, p. 22). Emrich et al. (2017) assign high member loyalty and the stabilization of member relationships to those extraordinary activities (pp. 321-322). In a similar context, relationships among members are referred to as social capital, indicating that members retain social connections that sports clubs use to their own advantage (Bühlmann & Freitag, 2004).

2.1.1 Structure of the German Sports System

German sports clubs, professional associations and umbrella organizations are summarized as organized sports. In contrast, leisure or recreational sports covers all athletes who train irregularly and spontaneously with no primary focus on participating in competitions. Organized sports and leisure sports are grouped together as grassroot sports and form the basis for the pyramidal representation of the German sports system with professional sports at the top (Müller-Platz et al., 2006).

From an economic point of view, each activity within the organization is identified as a club good, characterized by excludability and non-rivalry. In sports clubs, only the individuals who are part of the club can participate in offered trainings (excludability). In addition, there is little competition among club members for participation in sports activities, since in principle every member can benefit from the activities in the same way (non-rivalry, Cornes & Sandler, 2003). For example, stadium facilities represent a common club good because, usually, members can train on the facility at the same time. One person's training does not necessarily diminish the benefit of other members utilizing the facility. The same applies to the sports clubs that are members of the umbrella organizations and professional associations by also benefiting from their offers.

Individuals who want to benefit from the structures and offers such as training, facilities or other activities mostly become members of sports clubs. In contrast, some organizations also create offers for external customers who pay the maximum price for the service. These customers are not considered in this study because they are not relevant to the operation and structure of most grassroot sports organizations. The German sports system is double-tracked based on memberships. One track follows the regional allocation of the clubs whereas the other track is sport- or subject-related. Most sports

clubs are members of the regional umbrella organization that include the sporting activities within a city, a region or a federal state. While the higher-level federations are qualified to provide monetary support, which is partly granted by state institutions to their member organizations, the sports clubs have to pay levies for their members or teams (see for example FLVW, 2019a). Whereas sports clubs unite individuals who share similar interests and goals, umbrella organizations unite sports clubs that operate in the same region. Therefore, these organizations represent not only grant-giving organizations, but also represent the interests of their members.

In addition, the sports clubs that provide training for the same sports are united in professional associations. In addition to content-related support, such as training for exercise instructors or board members, they target the organization of regional or national competitions for athletes, the selection of regional squads, and the teaching and development of democratic, ethical, and social values (see for example FLVW, 2019b). Hence, professional associations are sport-specific advocacies and responsible for the education and promotion of professional and young talented athletes.

Professional associations, umbrella organizations and sports clubs are partly financed by subsidies from state actors. Since the government itself has a large number of responsibilities, the subsidization of sports clubs is outsourced to the umbrella organizations. Because of the fact that the market fails to offer sufficient opportunities in the area of sports for children, the state promotes this area through subsidies (Pierdzioch & Emrich, 2017). Subsidies are a selective financial assistance which allow organizations to offer a membership fee that potential members find attractive (or are able to pay), without the need to reduce the quality of the service offered. However, subsidies typically lead to other conditions for the organizations (Boss & Rosenschon, 2002). In Germany, all sports clubs can apply for subsidies, but large organizations or those that have newly established facilities are more likely to receive these subsidies (Pierdzioch & Emrich, 2017).

The establishment of sport centers, which focus exclusively on the development of elite athletes and talented young athletes, lead to a split of the German sports system. While professional sports in the sports centers are largely financed by the state, amateur athletes practice their sports in sports clubs, which are mainly financed by membership fees (Krüger, 2019). Since most professional athletes begin their careers in grassroots organizations, these high performers are important brand ambassadors for their sport and

raise awareness of the sport. Not only elite athletes require a structural network to achieve sporting excellence, but also large clubs that unite heterogeneous members. The professionalization of sports clubs is relevant for the growth of the sport and is partly accompanied by the renumeration of officials, which enables these individuals to earn a living. The complexity resulting from professionalization and the time required for this prevent a person from performing the tasks in their free time (Cachay, 1988, p. 225). Since 1974, the largest German sports clubs have represented their interests through the *Freiburger Kreis*, an organization that unites more than 900,000 members in more than 180 clubs (Freiburger Kreis e.V., no date). The professionalization and establishment of working communities, the subsidization of sports clubs and more than 27 million memberships illustrate the relevance of sports clubs in Germany.

The German sports system is based on membership and interdependencies between members, sports clubs, umbrella organizations and professional associations. The present work focuses on sports clubs that are a member of one regional umbrella organization.

2.1.2 Success

In the field of public funding and sponsorship, there is a trend to support sports clubs that pursue innovative ideas or those organizations that demonstrate promising performance. Svensson et al. (2017) refer to the performance of sports clubs in a non-profit-capacity that "is further influenced by the environments in which organizations operate (Hall et al., 2003) and the ambitions of internal stakeholders (Balduck et al., 2015)" (p. 2057). To increase the performance of sports clubs, they either need to get creative or measure the performance of sports clubs and seek success (Hattula et al., 2013). Barth, Emrich, and Daumann (2018) search for instruments to measure organizational performance in national sport governing bodies and national professional associations respectively, and conclude that they are open systems that constantly adapt to environmental conditions depending on national and international sports policies (2018, p. 9). Moreover, the authors perceive a scientific lack in distinguishing between indicators and predicators of performance (Barth, Emrich, & Daumann, 2018).

The whole debate on success factor research has not yet found an answer. While some researchers identify indicators and premises that function as a framework for success, there are researchers who dispute the existence of success factors. The justification for this is based on the understanding of success and the development of success factors. According to the argument, science and practice communicate differently which results

in scientific theories that are not applicable in practice (Kieser, 2012; Kieser & Nicolai, 2003). The argument continues by stating that the development of success factors would lead to multiple imitations so that the success factors become standard. Sontag (2012) further notes that there is no *one-best-way* due to the diversity of organizations that operate in different circumstances. According to Kieser (2012), these issues surrounding the definition of uniform success factors lead to the conclusion that there is no added social value in the development of success factors. Nevertheless, the author indicates the advantage of science and practice being capable of showing each other different perspectives. Following this statement, different (management) areas should be considered for a holistic analysis of organizations.

From an economic perspective, there are two fundamental principles for organizational performance: effectiveness (doing the right things) and efficiency (doing the things right). Meier et al. (2017, pp. 398–399) assign effectiveness to the strategic management and efficiency to the operating level. However, they state an application of these principles on NPOs fails as a result of research not being sufficiently advanced and hindered through the peculiarities of sports clubs (Meier et al., 2017).

Common to all considerations of sports clubs and their performance is the definition of a framework. Time horizon, level of consideration, perspective and purpose or goal are guiding and thus influencing the direction of the analyses (Cameron & Whetten, 1996; Glanzmann et al., 2002). There is a distinction between sporting and managerial performance in sports clubs. While the management focuses on medium and long-term goals, the sporting management concentrates on short-term goals, such as keeping the team in the league or good results and performances in championships (Sontag, 2012). However, any development in a certain direction bears the risk that the improvement of one aspect is accompanied by the deterioration of another aspect.

Moreover, the sporting sector is fast-moving and requires adaption from the sports clubs especially towards their members' interests. Public funding of sports clubs makes organizations reluctant to change because there is no immediate compulsion to amend and operate efficiently (Nowy et al., 2015). In the long term, structural changes due to member turnover and inconsistencies can lead to better performance, although these aspects are viewed critically when they occur (Cameron & Whetten, 1996).

Despite the need for frameworks, there are however considerable differences when trying to analyze sports clubs. Various products (training activities, social events), varying levels

of athletic performance and the various number of departments lead to a high degree of complexity and prevent generalization (Sontag, 2012). The literature provides a variety of objective indicators of success, but individual studies tend to be limited to only certain areas. Any economic consideration of success cannot ignore profit, profitability and turnover (Wolff et al., 2004). German sports clubs and other organizations may generate surpluses but they are obliged to invest these surpluses in statutory purposes, therefore economic indicators and factors fail to reflect success in organizations (§55 sentence 1, no. 1 AO). Balanced revenues from various sources can be used to evaluate the economic management of sports clubs, as they are helpful in maintaining sustainable development, however there is no direct derivation to the success of sports clubs (Breuer & Feiler, 2017; Wicker, 2017a). Other objective factors that are applicable to sports clubs, such as member growth, sporting results and the percentage of professional athletes (Barth, Güllich, & Emrich, 2018; Madella et al., 2005; Winand & Zintz, 2008) are not suitable as measures of success for a sports club because interests and targets are not considered. With regard to membership numbers, literature offers contradictory statements. While more members may lead to decreasing per capita costs (Emrich & Gassmann, 2019), it is indicated that membership numbers are not suitable for measuring success, as these numbers are independent of the achievement of statutory goals (Meier et al., 2017, p. 410).

By using subjective factors, relevant aspects of the sports club can be better represented, but the evaluation inherently faces the problem of subjectivity. Individuals, asked to evaluate the organization, can only do this from their personal point of view, which can lead to distortions through different perceptions (Gough & Madill, 2012). Nevertheless, subjectivity is an important indicator, since members only stay in the organization if they perceive membership to be meaningful and add value to their lives. Several subjectively perceived indicators are used in previous studies to measure organizational performance and success of sport and sports clubs. The perceived competence of volunteers and trainers are important to members and can be partially influenced by the organization through further education and training (Klenk et al., 2017). Glanzmann et al. (2002) add good cooperation of the management level as a basic principle for success. Beyond the sporting action, conviviality and social events are relevant to bind members to the organization in the long term. There are several opportunities for a sports club to reinforce the bond between the organization and the individual members. To be specific, club

culture, club identity and attachment to the club enable a sustainable membership development (Glanzmann et al., 2002).

The achievement of the statutory objectives represents the fundamental principle of sports clubs, as it is also the raison d'être of the organizations. However, the purpose of the organization is difficult to translate into sub-goals, which hinders control or measurement of these goals (Meier & Thiel, 2017, p. 152). Individuals choose the organizations that best fits their own interests and goals which leads to higher satisfaction. As follows, there is an interdependence between goals of a sports club and member interests (Gutzeit, 2007). Diversification of sports offerings can increase membership growth and vice versa, which automatically causes a more heterogeneous goal setting of members (Flatau & Fuchs, 2017). This leads to the consideration of member satisfaction or divergences between targets and interests to evaluate the performance of sports clubs (Barth, Emrich, & Daumann, 2018; Emrich et al., 1998; Klenk, 2011; Klenk et al., 2017). For sports clubs, it is a balancing act to meet the different interests and demands within and outside the sports club. The organization needs to find a compromise between the different objectives of members and potential members, i.e. traditional or future-oriented alignment, because divergences between legal goals and interests will in turn have a negative impact on satisfaction (Klenk et al., 2017; Meier et al., 2017).

Geisinger and Hoepfner (2008) analyze companies in order to define a strategy to avoid and prevent errors while defining the absence or the prevention of errors as efficient management. Accordingly, quality deficiencies or problem fixes are accompanied by financial or time costs that reduce the efficiency and thus the performance. Furthermore, the ultimate goal should not be the general absence of errors, but an error culture in which errors are used to improve structures (Geisinger & Hoepfner, 2008). In sports clubs, errors can be seen as the problems that organizations face. Following this line, the perceived avoidance and absence of problems in sports clubs can be understood as rather successful. The further development resulting from problem prevention might function as another success indicator but due to the significant complexity and interdependence between the resources in sports clubs, it is not usually possible to identify a direct cause-and-effect relationship.

2.1.3 Problems

Various problems are pervasive in sports clubs and organizations. Combating problems is an ongoing process because the solution of one problem can mark the start of a new

problem. Whereas the implementation of a different sports program might cause displeasure among present members, it might be helpful to reach new target groups which, in turn, is necessary for a sustainable membership development. Emrich et al. (2001, pp. 60–61) provide the fictive example of a handball club that decided to build a gym open both to members and those external to the club. This form of commercialization enables the generation of additional sources of income for the club. The founding members, in turn, had difficulty identifying with the club and wanted to keep the traditional handball club. In summary, development and professionalization contradict the traditions and original identity of the sports club (Thieme, 2017a). This shows that organizations should find causes and solutions for occurring problems, but should consider the emergence of new problems or inconsistencies. This way, long-term improvement can be forced (Geisinger & Hoepfner, 2008).

Public funding cuts, competition from commercial providers, unorganized recreational sports, alternative activities and increasing influence through external funding sources are the main problems of traditional sports organizations (Gutzeit, 2007). Progressive individualization and, consequently, the diversification of leisure activities and the focus on sustainable development increase the occurrence of problems in the more traditional oriented sports sector. Currently, sports clubs face further challenges in the increasing demands for sports, membership turnover and attracting and retaining volunteers (Breuer & Feiler, 2013; Nagel & Schlesinger, 2012).

Based on voluntary commitment, sports clubs have lower personnel expenses but a high dependence on their own members. In the beginning of the twentieth century, researchers reported a disproportion in volunteer contributions. Noticeably, 25 percent of volunteers are responsible for nearly 75 percent of volunteer hours (Cuskelly, 2004; Sharpe, 2006). This disbalance, comparable to the pareto-principle, shows that sports clubs not only need a certain number of active volunteers, but volunteers who are willing to invest more time and commit to a higher degree. In addition, the personnel problems in sports clubs are aggravated by free riders, who use the low-cost sports offer, but on the other hand are not willing to compensate the received service to the same extent by additional donations of money or wages to the sports club (Thieme, 2017b).

The SEB 2017/2018 puts emphasis on the general problems of sports clubs. Foremost, it shows that 72.5 percent of the surveyed sports clubs have at least a balanced income and expenditure account. Although this percentage has decreased compared to the last SEB

survey, it still indicates that financial problems exist, but most sports clubs are able to operate in a financially balanced manner (Breuer & Feiler, 2019b, p. 41). Moreover, the financial situation of the sports clubs is rated at an average of 2.13/5 (on a scale of 1 - no problems to 5 - very big problems) and thus represents the second smallest issue in the organizations. The survey focuses on general and existential problems in five different categories (relevance in descending order according to the authors):

- Members
- Human resources
- Cooperation
- Sports policy and facilities
- Organization / Management (Breuer & Feiler, 2019b)

In total, the survey demonstrates a variety of problems within sports clubs including members, officials and trainers, support services, accessibility of facilities (time and place related) and competitors. Predominantly, it is proven the problems have increased compared to previous studies. According to the SEB, the acquisition and retention of volunteer officials are the biggest problem for sports clubs (3,5/5). Moreover, the acquisition and retention of coaches, referees and part-time officials are three other items among the top ten problems (Breuer & Feiler, 2019b, p. 27). Since the acquisition and retention of professional athletes and members in general are also other major problems (3.16 and 2.95), this shows the considerable importance of personnel and membership issues. For more than half of the sports clubs, recruiting and retaining volunteer officials is at least a big problem (55 percent). Overall, 14.5 percent report that it is an existential problem. In contrast, the availability and condition of facilities, social media skills, and clarity about future development represent the least significant problems for sports clubs (Breuer & Feiler, 2019b).

This once again underlines the assumption that it is challenging to draw generalizations for sports clubs. There are multiple factors leading to the need to include structural data in scientific reflections. First, the different club sizes and divisions lead to a differing degree of professionalization. Second, the relevance of tradition and future orientation for the members might result from vastly varying club ages. Furthermore, the urban or rural location of the club will impact the accessibility by public transport and therefore also the number of potential volunteers. In addition, these differences among sports clubs give

rise to a variety of issues that must be included to comprehensively address organizational problems.

Researchers found a correlation between structural variables, i.e., the size and age of a club, on the one hand, and problems on the other. Emrich et al. (1998) cluster sports clubs into four different categories:

- Older – Small
- Young – Small
- Older – Medium
- Older – Large (1998, p. 44)

The distinction is based on empirically verifiable grouping effects. Principally, club size impacts the club in many ways, as cost per member and cost per sport decrease as membership increases, supporting evidence of economies of scale (Emrich & Gassmann, 2019). According to another study, this only applies up to a certain point or a certain number of members (Wicker et al., 2014). Moreover, the complexity in sports clubs increases with increasing membership, which is due to more significant heterogeneity (Wicker et al., 2014). In summary, the size of the association has an influence on various phenomena within the organization.

Recent research additionally distinguishes between different community sizes. In 2011, the results of the third sports club survey (SEB 2009/2010) were published, with a focus on differences resulting from different community sizes. One finding is that sports clubs in cities and towns with populations of up to 20,000 people tend to be more traditional than in larger cities. The emphasis on tradition is reflected in the relevance of a sense of community, voluntary leadership, youth development, and low levels of professionalization, which emphasizes the fact that sports clubs in smaller cities focus on the traditional understanding of sport (Breuer, 2011). All things considered, these clubs have fewer collaborations, a homogeneous membership structure and are less optimistic about the future than they were four years earlier. Sports clubs in medium-sized cities are less tradition-oriented and more open to new offerings or people. These organizations, for example, are likely to enter into a cooperation with commercial sports providers or youth welfare offices and offer sports for a heterogeneous target group. In contrast, problems caused by competitors are perceived to be greater. In large cities up to 500,000 inhabitants, sports clubs are most likely to have a strategic concept and squad athletes. Attracting and retaining volunteers and the availability and condition of sports facilities

are seen as the severest problems (Breuer, 2011)[1]. The 2013/2014 SEB shows that the proportion of children and adolescents among members decreases steadily with increasing community size (Breuer & Feiler, 2015). One possible explanation is the broad range of options for leisure activities. In smaller towns and communities, the range of options may be smaller.

The voluntary structure of sports clubs, the requirement to reinvest profits directly into statutory purposes and the high interdependence between members and the organization itself results in great particularities. Advantages like tax incentives and simplified accounting enable flat structures and rapid introduction of new officials. Moreover, positions are usually only given to people for a short period of time, which leads to a high demand for personnel. Organizations and especially the specifics of sports clubs are of high scientific interest. According to previous research, the sum of problems is partly representative for organizational performance, although the direct connection between problems and club performance is questioned by some researchers (Doherty & Cuskelly, 2020).

As described above, sports clubs are confronted with different problems that prevent sustainable development. Thus, it can be assumed that sports clubs try to prevent these problems. From the considerable influence of the members, the premise arises that the sports club is able to partially influence problems that occur. For example, member loyalty can be strengthened through social events and the recruitment of volunteers can be achieved through training measures. In order to develop solutions for existing problems, strategic considerations based on organizational analyses might be helpful.

2.2 Organizational Consideration

The further development of society requires sports clubs to adapt to these social changes or to look for niches to be able to continue to exist. In relation to this, Flatau and Fuchs (2017) investigate different reasons for the extinction of sports clubs. These are: *novelty*, *adolescence, obsolescence*, *senescence* and *smallness*. *Novelty* and *adolescence* describe organizations that no longer exist because they cannot create a secure market position right after their foundation or after the start-up capital is expended. In contrast, *obsolescence* and *senescence* focus on the causes derived from the age of an organization.

[1] Further information about cities with more than 500,000 inhabitants can be found in the SEB 2009/2010 (Breuer. 2011). However, since the cities in the Rhineland are smaller, these results are not considered here.

Whereas *novelty* and *adolescence* appear in organizations that fail to adapt to changing environmental circumstances, the second definition is characterized by administration costs that reduce the competitiveness of an organization leading to an unprofitable operating. The fifth mortality reason, *smallness*, is closely linked to *novelty* and refers to small organizations that are unable to acquire sufficient resources to operate sustainably (Flatau & Fuchs, 2017, pp. 136–140).

These scenarios result from a drift apart between organizational development and society's needs. If sports clubs are unable to offer programs that attract individuals to join or remain members of the sports clubs, the organizations face problems that might lead to an existential threat. Adapted to the specific situation of the club, offering attractive sports programs, enough members willing to make wage contributions, and sufficient access to the necessary resources are necessary to enable its long-term existence. By designing a strategy, the sports club might prevent or reduce problems and provide guidelines to pave the way for sustainable development.

2.2.1 Strategy

A critical aim of sports clubs is the survival of the organization. From an economic perspective, the organizations aspire to gain competitive advantages to retain members and volunteers in the organization. This competitive lead is created through customer experiences, which is not catered to on the same level by competitors. Either a corresponding offer from the competitors does not exist or the leading organization executes the offer superiorly (Fahy & Smithee, 1999). Although competitive advantages can be identified in a number of ways, defining a strategy enables the consolidation of these advantages.

Strategy is defined as a fundamental, long-term behavior with regard to the environment to achieve long-term goals (Welge et al., 2017). Strategic management and control of sports clubs are closely connected to successful development (Flatau & Fuchs, 2017; Nagel & Schlesinger, 2012). Strategy tools include all "techniques, tools, methods, models, frameworks, approaches and methodologies that are available to support decision making within strategic management" (Clark, 1997, p. 417). While individuals typically make their decisions according to the current situation to reach maximum benefit, decisions in sports clubs should be embedded in a long-term context. The following section provides information about organizational considerations of sports clubs in order to identify long-term strategies.

Defining the strategy of a sports club requires identifying the strengths and weaknesses of the respective organization and its structures. Whereas studies like the SEB focus on descriptive statistics of organizational problems, researchers have begun to analyze causes, structures, logic of action and decision-making of sports clubs. The diversity of organizations involved in different sports, different communities, and with different numbers of divisions and members, and the advancement of sports science, result in a variety of tools to scientifically examine sports clubs. Although for-profit organizations have long been considered scientifically in terms of economic factors, the application of developed models, theories or heuristics sometimes fails to apply to NPOs, as already shown. The previously mentioned distinctive features of sports clubs and NPOs in general (for instance no profit-orientation, governmental subsidies, voluntary organized, membership structure) lead to a divergent understanding of success and sustainable development.

The commonality of organizational considerations in for-profit and non-profit organizations lies in the definition of objectives. Without specific goals or statutory purposes, examinations become less target-oriented and less meaningful to the company (Fink, 2020; Meier et al., 2017). Fink (2020) argues that goals are important for organizational analyses by attributing different functions to them. Therefore, goals are the basis in terms of decision, coordination, motivation, information, control and legitimation within sports clubs.

In general, organizational theories find their origin in traditionally profit-oriented branches. Nevertheless, monetary aspects and sustainable development are also relevant for sports clubs, which leads to the development of adapted analyses. In practice, the sports club board uses strategy tools such as the elasticity of membership fees, member satisfaction or key performance indicator systems for club management (Anders, 2017, p. 33). Regardless of the chosen method, a broad understanding of sports clubs is necessary and can be achieved through a variety of considerations.

2.2.2 Multi-Level Analysis

Changes in sports clubs are a rather long-term issue but necessary to adapt to environmental changes. Within the organization, these changes can be examined through different conceptual foundations and logics of development (Nagel & Schlesinger, 2012). Logics of action in sports clubs can be considered on the basis of a multi-level analysis. This approach focuses not exclusively on the organization itself, but also on the

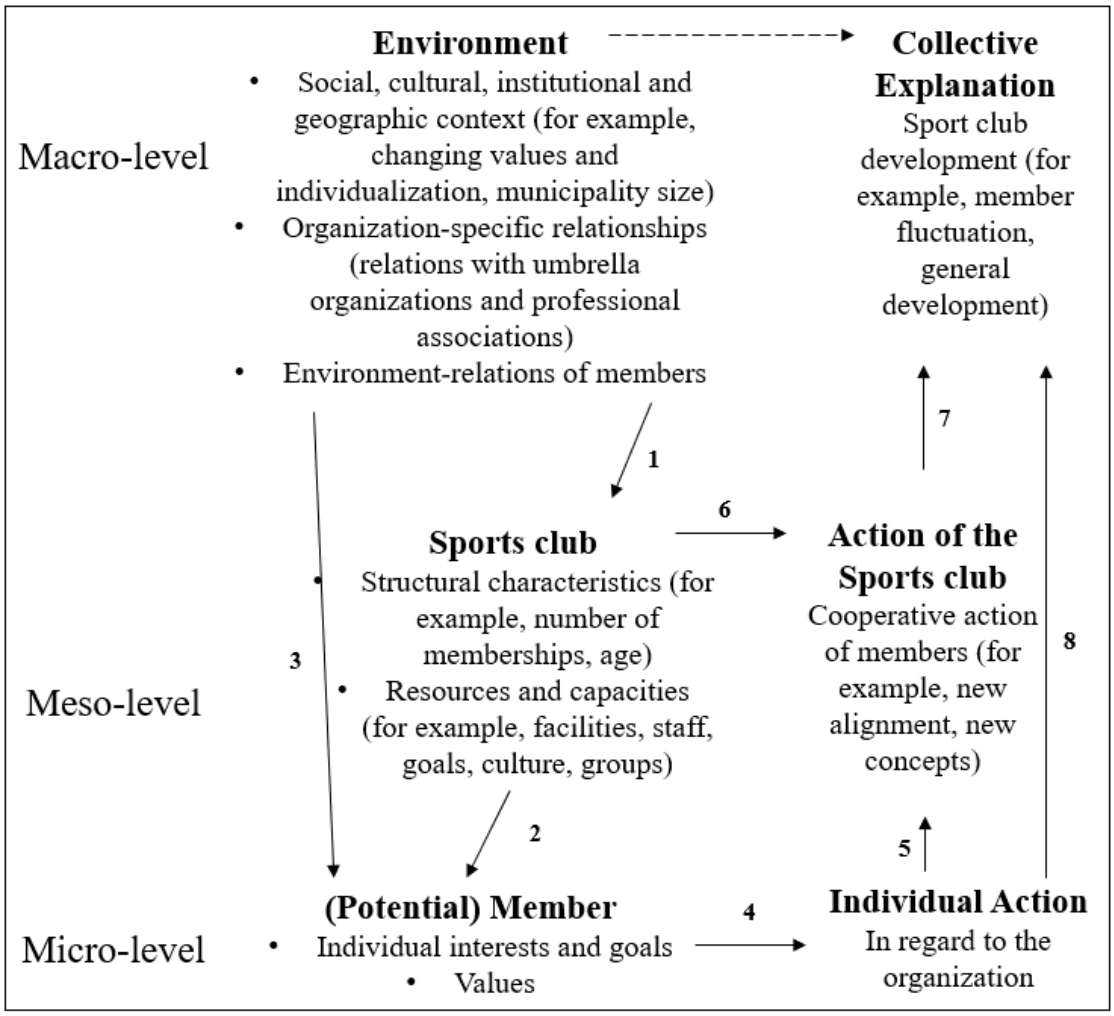
individuals who are members and decision-makers within the organization, and on the environment or society of the organizations (Nagel et al., 2017). The unique connection between organizations and their members increases the usefulness of analyzing the single levels and their interdependencies to examine the performance (Chelladurai, 1987). Furthermore, multi-level analyses enable the inclusion of environmental aspects such as individualization and health orientation, which influence individuals in their behavior and thus the sports club as a whole.

Nagel (2007) summarizes previous sport-related research and distinguishes between three different levels of analyses: *micro, meso* and *macro*, representing the members, the sports club itself, and its environment respectively. The added value of this approach is the separate consideration of the behavior of individuals in the context of the sports club and the interaction of an organization with the environment. This makes it possible to place the actions of sports clubs in a broader context, which results from the mutual influence of the actors involved. In organizations, individuals and environmental influences affect the behavior of the organization itself, while at the same time the organization influences both the environment and separate (potential) members (Swierzy et al., 2018). Since political decisions, subsidies, the existence of municipal sports facilities and cooperation with other types of organizations influence actions within the sports clubs, it is necessary to relate the organizational actions to the macro level. Furthermore, members are a principal and an agent at the same time which results in the need to include the micro level to organizational analyses. Therefore, the interdependence of the actors in the three levels that appear with sports clubs, requires the use of multi-level modeling to get a deeper insight of organizational procedures (Swierzy et al., 2018).

A more profound heuristic (see figure 1) is based on the further development of the "bathtub" model of social change that Coleman (1995) initially developed. The original model considers the influence of acting of individuals at the collective level (Hirschle, 2015). Moreover, Esser (1993) analyzed each action in the context of the situation. The explanation of the action results from three different logics. The *logic of situation* is based on how an individual perceives the current situation, resulting in different subjective action alternatives. Second, the individual selects an alternative that is covered by the *logic of selection*. In the last step, the *logic of aggregation*, the sum of independent actions is viewed at the collective level (Esser, 1993; Nagel, 2007, pp. 192–193).

The further development of the model considers both the influence of the actions of individuals at the organizational level and the influence of the actions of the sports club at the collective level. Thus, Nagel (2007) doubles the bathtub model and emphasizes the interdependence between the environment, the individuals and their decisions, and the sports club and its actions. Expectation and interpretation structures do not solely arise within the sports club, but also at the level of interaction between the independent actors (Nagel, 2007, p. 195). Accordingly, the members are crucial for the development of the club, as they are responsible for decisions and actions. This model illustrates the logic of action within an organization and clarifies the relevance of different factors which influence decisions and is therefore essential for recognizing the functions of sports clubs.

Figure 1: Heuristic Multi-Level-Model (adapted and translated, from Nagel, 2007, p. 194)



Although the multi-level bathtub model represents a holistic approach that makes it possible to look at the structural courses of action of organizations, it remains primarily at an abstract level. Despite its ability to explain decisions and actions in sports clubs, it does not provide an approach to identify problems and indicators of success. Although

the development of long-term strategies cannot be based on this model, it is important to understand the logic of action to implement strategies.

2.2.3 Resource Based View

The identification of problems and indicators of success should be based on a comprehensive yet practical perspective. In business, success is based, among other things, on the use of competitive advantages. Two approaches to identify competitive advantages or weaknesses are the market-based view and the resource-based view (RBV, Mahoney & Pandian, 1992). The market-based view primarily examines the influence of the environment on the success of the organization, focusing on industries and competitors (Kollmann & Kuckertz, 2008). The specific structure of the sports sector and the non-profit sector in general, as well as the range of services, distort the usefulness of applying the market-based view due to the lack of original market activity, including competitors and price development based on supply and demand.

The RBV is a heuristic that regards the organization as an interplay of resources. Compared to economic analyses, it focuses on strengths and weaknesses of an organization rather than on products and services (Wernerfelt, 1984). Furthermore, it not only provides the framework for organizational analysis, but can also be customized to meet the needs of researchers or users. From a business perspective, the goal is to create more value in its product market than its competitors and therefore gain a competitive advantage by focusing on the organization rather than the environment (Bresser & Powalla, 2012; Peteraf, 1993). Peteraf (1993) perceives the advantage of resource-based models in explaining differences between organizations that operate within similar circumstances. Moreover, focusing on internal resources, i.e., those that the organization produces or uses without external influence, can lead to changes that would otherwise have been attributed to external circumstances. Internal resources are considered the more quality resource because they reduce dependence on external partners. Thus, focusing on internal resources is a way to manage strategic development within the organization (Wright et al., 2001).

The basic assumption of the RBV is resources are necessary for the production of goods and the provision of services (Wernerfelt, 1984, p. 171). However, resources are not product-related, as the need for a resource can be present in different products and services. In summary, resources are considered critical to the success or failure of an organization (Fink, 2020; Franco & Haase, 2017).

Literature offers multiple understandings of resources: whereas Wernerfelt (1984) defines resources as “anything that could be thought of as a strength or weakness” (p. 173), Mwai et al. (2018) unite capabilities, skills, assets and intangible possessions as resources. Therefore, resources can be understood as every tangible or intangible value that an organization uses to fulfill its purpose. Resources should be rare, valuable, inimitable, and non-substitutable (Barney, 2001; Mwai et al., 2018). A further advantage is established if resources are heterogenic, superior to the resources of competitors and permanently available (Fink, 2020; Mwai et al., 2018).

The resource-based view has been criticized as a tautology because it does not provide a coherent causal analysis of competitive advantage. This is due to “the RBV statement "if a resource is valuable and rare, then it can be a source of competitive advantage" is necessarily true by logic […] if "valuable" and "competitive advantage" are defined in the same terms” (original emphasis, Priem & Butler, 2001, p. 58). Accordingly, the resources included in the consideration are per se a competitive advantage, since the definition of both is the same. Furthermore, there is a low-market orientation by analyzing the organization itself instead of its market (which can be perceived as an advantage in sports environments) so that environmental influences are ignored (Priem & Butler, 2001). Therefore, Wicker (2017b) proposes longitudinal studies that help to identify changes in resources and the assessment of resources.

The intra-organizational approach enables the application to sports clubs that are viewed as resource pools where members contribute human, financial or network resources in order to meet the requirements of the club and to reach the goals (Nagel et al., 2017). Most NPOs share a need of members who take the lead in making decisions, acquiring financial resources or planning events. Since human resources are needed for the acquisition and utilization of other resources, they represent the most important resource of non-profit organizations (Coates et al., 2014; Sharpe, 2006). In summary, the resource-based view requires extensive (internal) insight into the organization.

Building on the RBV, the resource dependency theory, established by Pfeffer and Salancik in the 1970s, places the focus on the scarcity of resources. According to the principles of this theory, organizations are seen as resource pools that cannot internally produce or generate all resources that are needed for the organization to work (whereby there is a broad understanding of the concept of *resource,* Pfeffer & Salancik, 2003). The organizations are characterized as open systems that establish partnerships to acquire

other necessary resources in order to prevent a resource shortage within the organization (Hillman et al., 2009; Wicker & Breuer, 2011).

The resource dependency theory functions on the one hand as an approach to analyze the structure and behavior of an individual organization by considering its resources; on the other hand the theory focuses on an organization's relationship with its stakeholders (Nienhüser, 2008; Wicker, 2017b). One advantage is the ability to cover different types of organizations simultaneously by identifying resources relevant to all organizations. In addition, it can be used to examine how organizations deal with instability, since relevant resources frequently lead to external dependencies (Wolf, 2020, pp. 289–290). The aspects of resource dependency theory include the relevance of each resource to the organization, allocation or access to resources, and concentration of control over resources.

Based on the divergent control of resources by organizations, the theory points to a mutual dependence of the organizations, which leads to an interdependence within the organizational system (Hillman et al., 2009, p. 1405). Hence, whoever has control over a resource also has power over the organizations that require the resource (Nienhüser, 2008). The comprehensive approach, thus maps not only the organization and its structures, but also the power of the environment and the relationship network (Davis & Adam, 2010).

According to the authors, the core idea of the theory is to not only depict the resources of an organization, but to also look at the relevance of the environmental context. Therefore, organizations, that face a dependency on other actors, search for strategies to enhance their autonomy and pursue their own interests. This has also brought power into the focus of organizational theories (Davis & Adam, 2010). Pfeffer and Salancik (2003) put emphasis on the influence of managers and decision makers in the organization. The primary goal of an organization is the independency of external actors to reduce or avoid uncertainty (Nienhüser, 2008, p. 12). Managers or decision makers within the organization can develop strategies to reduce external dependency, shifting responsibility back to the organization (Hillman et al., 2009; Davis & Adam, 2010).

The assumption of resource dependence theory is that resource dependence influences the behavior, decisions, and actions of an organization and its stakeholders. Strategic decisions of the organization aim to reduce external dependency and maintain sustainable development, which in turn leads to a reduction of problems.

2.3 Organizational Capacity

The term *capacity* attracted scientific attention in recent years. In a first mention, internal capacity is divided into leadership and vision, management and planning, fiscal planning as well as practice and operational support and, therefore, captures development capacities (Fredericksen & London, 2000). In 2003, Hall et al. presented the concept of *Organizational Capacity* for non-profit organizations that can be understood as further development of the resourced-based view by capturing internal and external assets. Although this heuristic is a new line of inquiry (Balduck et al., 2015, p. 2026), there are various studies applying the framework in the context of sports organizations. In linguistic usage, the capacity is known as maximum ability to perform or produce (Hall et al., 2003, p. 3). Capacities are defined as the organization's ability to draw on and marshal various internal and external resources and mobilize different forms of capital (Balduck et al., 2015; Doherty et al., 2013; Kitchin & Crossin, 2018; Svensson et al., 2017, p. 2055). In return, capacity can be considered as dependent on the interplay of the resources (Wicker & Breuer, 2011).

There are different capacity dimensions that, taken as a whole, represent the potential of a sports club to fulfill its purpose or achieve objectives. Hence, OC determines organizational effectiveness (Doherty et al., 2013; Eisinger, 2002). Svensson et al. (2020) note that the term capacity is extremely vague because there is no clear or consistent definition or conceptualization that indicates what, when, and where capacities are useful in understanding organizational performance. In research, considerable relevance is attributed to the concept of capacity, as it helps to identify critical intangible and tangible resources or to determine resources that are not fully utilized within the organization (Svensson et al., 2020).

The basic assumption for application in NPOs is organizations are reactive rather than proactive (Hall et al., 2003). Since sports clubs and other organizations usually respond to the needs and requirements of their members, they refrain from creating new offerings as long as this is not necessary. There is no need to acquire and build new or more resources, as this can lead to a lack of consideration of spare capacity in organizations.

The advantage of this framework is the possibility to relate the capacities to each other. The interconnection and interdependency of the capacities, which may have significant impacts, result in a more holistic approach (Hall et al., 2003; Misener & Doherty, 2009; Svensson et al., 2017). Furthermore, the heuristic can be adapted to the researcher's or

user's needs and therefore, enables the customization in different contexts because there are no predefined variables for each category (Hall et al., 2003; Misener & Doherty, 2009). Although sports clubs are non-profit organizations, there are differences when considering different types of NPOs that lead to various adaption of the organizational capacity framework. Moreover, the set of variables used to capture OC defines the direction of the analysis. Like this, the selection of items may differ across industries. Hall et al. (2003) emphasize the relevance of information technology within organizations, but in locally acting sports clubs, however, the focus tends to be on other resources.

OC is divided into five dimensions, whereby the last three dimensions are also listed as a subcategory of structural capacity (Hall et al., 2003):

- Human Resource Capacity
- Financial Capacity
- Infrastructure and Process Capacity
- Network and Relationship Capacity
- Planning and Development Capacity

} Structural Capacity

The dimensions are interdependent, yet human resource capacity is the most important, since volunteers or paid staff are responsible for acquiring and using financial and structural capacity. Furthermore, through partnerships and extended networks, it is possible to recruit potential members and volunteers or eligible cooperation (Misener & Doherty, 2009). The multidimensionality of the approach leads to one capacity dimension being relevant to develop other capacity dimensions (Kitchin & Crossin, 2018; Misener & Doherty, 2009; Sharpe, 2006).

OC is identified as a requirement for sports clubs to fulfill the club mission (Misener & Doherty, 2009). Moreover, the heuristic forms the basis for further development and innovational ideas as "capacity has become a focal point in the hunt to decipher and identify the elements that trigger or hinder organizational sustainability and impact in the field" (Svensson et al., 2020, p. 695). Nevertheless, there are critical statements on the use of OC, since it is tempting to exclude aspects that cannot be primarily assigned to a dimension (Wicker & Breuer, 2014b). Furthermore, the different specific capacity needs vary across the organizations, which results in limited understanding in the relevance of OC (Andersson et al., 2016). Moreover, the demands within the capacity differ across regions. For example, the location in a rural or urban area affects costs of facilities,

accessibility through public transport or the pool of potential volunteers (Guo & Acar, 2005; Snavely & Tracy, 2002).

The organizational capacity framework is implemented in various scientific studies on organizations inside and outside the sports sector. On the one hand, the possibility of adjustment provides an application that can be precisely tailored to the type of organization or environment. Sports clubs can use OC internally as an evaluation tool providing the basis for long-term planning. Nevertheless, this could lead to a risk of bias because the organization is responsible for identifying the data requirements (set of variables in each capacity dimension) and data collection at the same time. On the other hand, the lack of determined capacity items can represent the origin of inaccuracies if relevant items are not considered or ignored.

2.3.1 Human Resource Capacity

As stated above, human resource capacity is the most essential dimension for an organization. In scientific studies about sports, volunteering is a much-discussed topic in the field of motivations, sociodemographic characteristics or problems. In the context of OC, it includes all variables about volunteers, members and paid staff, and is critical to the development of other capacities (Wicker, 2017b, p. 78). Misener and Doherty (2009) identified human resources as the biggest pillar for sports clubs.

Several objective and subjective factors are used to capture human resource capacity. On the one hand, volunteer training, enthusiasm, competencies, knowledge, attitudes, motivation, and behaviors of individuals in the organization are used to depict the ability in the area of human resources (Balduck et al., 2015; Doherty & Cuskelly, 2020). On the other hand, the number and percentage of volunteers, paid staff, and club size or membership are objective variables (Doherty & Cuskelly, 2020, p. 242; Wicker & Breuer, 2012). In the context of sports clubs, volunteers are divided into central volunteers, with a specified area of responsibility, and secondary volunteers, to whom no specific area of responsibility is assigned. The first group includes individuals who are elected to the board or trainers who work regularly for the organization. Secondary volunteers are those individuals who offer their help sporadically and irregularly, such as parents who drive the children to competitions or support bake sales (Doherty & Carron, 2003; Wicker & Breuer, 2012). Central volunteers are important for the sports clubs because they support the statutory purpose of the organization by working at either the strategic or operational level. Whereas subjective variables depend on the perception of each individual which

minimizes the comparability of different sports clubs, there is currently no recognized way of comparing objective figures relating to the success of an organization. Although the proportion of volunteers can be compared in different sports clubs, each club may have a different benchmark for a sufficient percentage.

At this point, it is important to distinguish between internal and external use of OC to determine the items used to capture the capacities. For example, if an organization analyzes strengths and weaknesses it might be helpful to use the total number of members or volunteers to evaluate whether sufficient individuals support the organization or secure a sustainable membership development in the long-term. For external use in scientific studies or by organizations themselves, the proportion of volunteers or active members permits a comparison with other organizations which allows general conclusions to be drawn.

In a qualitative study, Doherty et al. (2013) use individual focus, sufficient volunteers, volunteer continuity, and follow-up as metrics, directing the focus to volunteers already working for the sports club. All the above aspects represent internal resources by considering individuals who are part of the organization. The heuristic approach allows to include external human resources considered relevant for this capacity dimension. In organizations that do not exclusively focus on the sport, the participants of social events or customers who use the sports program can be useful to capture human resource capacity (Wicker & Breuer, 2012).

The items used to capture human resource capacity in sports clubs sometimes differ from the variables applied on other NPOs. For social service delivery, human resources are not only captured through enough volunteers or paid staff but also through leadership and management (Paynter & Berner, 2014). Especially in larger NPOs with many employees, the need for leadership increases. For instance, in a qualitative study examining public health organizations, the authors focus on interpersonal staff relationship, their experience and willingness to learn something new (Meyer et al., 2012).

2.3.2 Financial Capacity

Financial resources are secondary conditions for the achievement of goals in NPOs (Wicker, 2017b). Subsequently, financial capacities are understood as the ability of an organization to develop and utilize financial resources. All revenues, expenses, assets, and liabilities are summarized as financial resources (Hall et al., 2003).

Stable revenues and stable expenses pave the way for sustainable development. Although specifically non-profit organizations cannot accumulate reserves, various revenue sources result in a low dependence on one funding source (Doherty & Cuskelly, 2020; Doherty et al., 2013). Sports clubs are primarily financed by membership fees, which further contributes to a high dependence of sports clubs on members. This again points to the relevance of members or human resources.

The exclusive valuation of revenues and expenses, or even just the club breaking even, is problematic because it ignores the interdependency between monetary factors and the number of members. A bigger organization will most likely gain higher revenues but in turn, have higher expenses than smaller organizations (Hovemann et al., 2007). The consideration of monetary factors with regard to the number of members mitigates this problem but ignores the diversity of sports. In Germany, for example, members of tennis or sailing clubs are likely to pay higher membership fees because these sports incur higher costs due to limited resources such as tennis courts or boats. The strong link between human resource and financial capacity indicates the relationality of the framework (Kitchin & Crossin, 2018). Moreover, financial resources are influenced by structural data as, for example, the age of the sports club correlates positively with the accessibility of facilities and stable revenues (Doherty & Cuskelly, 2020).

Hall et al. (2003) state that simply possessing more money is no key success factor for organizations. Instead, NPOs need "better money" (p. 21), which involves flexible resource flows which do not develop organizational dependence on external funders and provide autonomy and long-term sustainability (Kitchin & Crossin, 2018). For NPOs operating outside the sports market, revenue is often generated through external funding in the form of donations or subsidies. Wicker and Breuer (2014a) analyze the diversity of revenues in sports clubs by capturing the concentration of revenues through the Herfindahl index. The Herfindahl index (also called Herfindahl-Hirschman or Hirschman index) is a statistical measure of concentration initially used to capture the market concentration of companies through considering their market shares (Calkins, 1983). The index has been proven to capture the diversity of revenues in non-profit organizations which is in turn tied to less instability in finances (Carroll & Stater, 2009; Chang & Tuckman, 1994). A diversification score ranging from 0.00 to 1.00 was developed based on the number of sources and the extent to which the revenues are dispersed across the sources (Chang & Tuckman, 1994, p. 276).

Because of the complexity of mapping financial resources, financial capacity is sometimes captured by financial problems within the organization (Swierzy et al., 2019). Although, this is highly dependent on the perception and assessment of the person who was asked to assess financial problems, it offers an insight into the organizations' finances. By using a subjective unit of measurement, the whole financial situation is regarded. Previous to the Covid-19 pandemic, the majority of sports clubs did not report fundamental financial problems, which leads to the assumption that the peculiarities of the financing do not result in higher financial problems in sports clubs (Balduck et al., 2015; Breuer & Feiler, 2019a; Ehnold et al., 2020; Nowy et al., 2015).

2.3.3 Structural Capacity

The resources captured in the three dimensions of structural capacity (infrastructure and process, network and relationship and planning and development capacity) are mostly intangible. Moreover, the dimensions comprise a set of internal and external variables that depend on existing human capacities resources (Hall et al., 2003, p. 37).

2.3.3.1 Infrastructure and Process Capacity

This dimension of capacity covers "the ability to deploy or rely on infrastructure, processes, and culture" (Hall et al., 2003, p. 6) and therefore, captures the maintenance of the daily operations of the organization (Balduck et al., 2015). Especially in sports clubs, the infrastructure and thus particularly the sports facilities are crucial for achieving the purpose and goals of the organization (Wicker, 2017b). In comparison to health care or cultural organizations, sports clubs need gyms and sports grounds. The high construction and maintenance costs implicate that these sites are often managed by the municipality. Process capacity refers to organizational practice and the culture within the organization (Kitchin & Crossin, 2018; Wicker & Breuer, 2014b).

The dimension includes various objective and subjective variables. When considering infrastructural resources, the availability, the accessibility by public transport or the condition of own or municipal facilities are used in previous studies (Wicker & Breuer, 2011, 2012, 2014b; Swierzy et al., 2018, 2019). Sports facilities represent the most important places for sports activities thus demonstrating the high relevance of infrastructural resources in sports clubs. In other NPOs focusing on cultural or social purposes, there is no need for these types of specialized facilities.

Process capacity includes variables about the efficiency and social aspects of the organization. Hall et al. (2003) emphasize relevance of information technology which is used to manage databases or communication. Moreover, in public health organizations the performance and success of implemented programs are analyzed (Meyer et al., 2012). Although these aspects are equally relevant in sports clubs, there might be a larger need in other NPOs, as sports clubs primarily focus on providing training. For considering sports clubs, the culture is captured through different target groups. Sports programs for older adults, low income people or other minorities show the relevance of social inclusion (Wicker & Breuer, 2014b). Moreover, the number of different divisions can reveal the alignment of organizations (Swierzy et al., 2019). In recent literature there has been a shift towards the process organization, including formalization, communication and strategic alignment on target groups (Doherty et al., 2013; Swierzy et al., 2019). Positive and encouraging communication was found to be important in sports clubs for their performance (Weinberg & McDermott, 2002).

2.3.3.2 Network and Relationship Capacity

Network and relationship capacity refer to the cooperation of organizations. Hall et al. (2003) note that relationships with members, funders, volunteers, as well as with the public, media and other organizations influence the considered organization. The capacity covers the ability to draw on relationships with clients, members, funding agencies, partners, government, media, corporations, and the public (Balduck et al., 2015).

There are different views on network resources. Literature provides evidence that the development of these resources is the result of a poorly functioning organization (Oliver, 1990). This underlines the autonomy claim of organizations by trying to remain the external influences and dependencies low, which is supported by the resource dependency theory. Regardless of the need for these resources, inter-organizational partnerships ensure and strengthen valuable competencies and resources for the organization (Thibault et al., 1999). The external network fulfils a special role, especially for organizations whose main source of income is not based on membership fees but on donations. Food pantries, that receive monetary or food donations from individuals, churches or whole communities strive for personal relationships to maintain sustainable funding and food donations (Paynter & Berner, 2014).

The application of OC goes along with capturing the quantity and quality of relationships. While some researchers focus only on the number of relationships (Swierzy et al., 2019;

Wicker & Breuer, 2014b), others analyze the fairness and equity of partnerships (Doherty & Cuskelly, 2020). In addition, a qualitative study looked at personal connection with partners, intensity of engagement and bureaucracy of relationships (Doherty et al., 2013).

2.3.3.3 Planning and Development Capacity

The last dimension represents the structural capacity which is exclusively internally shaped. It captures an organization's ability to evolve strategic development and long-term planning. Therefore, this capacity captures the relevance of long-term planning and programs within the organization and thus, the relevance of forward-looking thinking and the will to develop (Svensson et al., 2017). Hall et al. (2003) note that financial and human capacity contribute to the ability to plan and develop, especially with insufficient capacity.

Planning and development capacity can be measured through various variables. Svensson et al. (2017) indicate the formulization of a clear mission and vision statements and evaluation availability within the organization as purposeful. As specified in chapter 2.2.1, target goals and consequently the mission and vision are relevant to every type of organization (Fink, 2020; Meier et al., 2017). Wicker and Breuer (2014b) found that strategic planning is important for the sustainable development of an organization (supported through Wicker, 2017b), but also state that it is no priority for sports clubs (Wicker & Breuer, 2011). The lack of a written strategy can lead to deviating perceptions. Most studies focus on the existence of strategic planning (Hall et al., 2003; Swierzy et al., 2019; Wicker & Breuer, 2014b). Various specifications, for example, creative planning or plan implementation, expand this capacity dimension (Doherty et al., 2013).

2.4 Research Question

The OC framework focuses on the structure of sports clubs by dividing organizations into different capacities. In contrast to the multi-level analysis, there is no strict separation of the levels but all variables in the capacity dimension can be assigned to one of the three levels. While the human resource capacity focuses on the micro and meso level at the same time, network and relationship capacity captures cooperation with other organizations. Political decisions like subsidies and support programs are not covered by the approach, nonetheless municipal support such as the provision of sports facilities or subsidies are covered within the structural and financial capacities.

At first sight, OC appears to be a fixed system that divides an organization into five different parts, however, there are several relations between items and dimensions. As described above, human resources are most important for sports clubs, but also the other dependencies between the capacity dimensions critically influence the performance of the sports club. For instance, the number of volunteers and paid staff are relevant to establish relationship with other organizations, which in turn can increase the municipal support within the community. Moreover, a clear and non-conflicting mission is an indicator for more diverse revenue sources (Wicker et al., 2013).

The theoretical considerations highlight the particularities of non-profit organizations which operate in the market without following the market-equivalent rules of supply and demand. Chapter 2.1 shows that nearly every sports club is an NPO but not every non-profit organization is a sports club. The differences concerning sector, funding sources, structures and relevance of voluntary workers result in the need to adapt OC variables with regard to the type of organization and its scope of activity. Previous research already shows that the application of OC provides an added value to the understanding of sports clubs (Doherty et al., 2013).

With regard to success, there are several variables and capacity dimensions that have an influence on organizational success. Enthusiastic volunteers, volunteer training, strategic planning and human resources are, in general, good predictors for quality and goal achievement (Balduck et al., 2015; Doherty & Cuskelly, 2020, pp. 250–251; Misener & Doherty, 2009). In a study conducted by Doherty and Cuskelly (2020), club size and organizational capacity explained 67 percent of the variation in club operation which was captured by efficiency, positive environment and good organization (p. 244).

In summary, previous applications of the framework on sports clubs provide evidence which capacities and items might be relevant for the performance of organizations. Therefore, OC can be used to depict and compare the sports clubs from an internal or external perspective by including resources from all three levels. Wicker and Breuer (2014b) identified the framework of organizational capacities as a useful indicator of problems in sports clubs. Therefore, this study links OC with problems in order to derive recommendations for action by applying the adapted organizational capacity framework to sports clubs.

Since many of the interrogated problems build directly on the ability to draw on resources, this study applies the framework to sports clubs to identify a strategy to reduce

organizational problems. Here, the basic assumptions are that the absence of problems can be used to analyze the performance of organizations and that there are organizational aspects that are significantly influencing the severity of problems. This enables the identification of variables relevant for the fulfillment of the statutory purposes and thus, for the increase of effectiveness and respectively the success of the club (e.g. Doherty et al., 2013).

Combining the results related to success and organizational considerations, it is assumed that greater availability of resources reduces various problems. For example, more volunteers and sufficient board members enable a more appropriate distribution of tasks, which increases the satisfaction of the individual actors. Through the application of an adapted version of the OC framework, this study aims at answering the following two research questions: Is the organizational capacity framework suitable to identify critical variables or capacities in order to influence the severity of problems in sports clubs? And what resources are important to reduce the problems of sports clubs?

3 Methodology

To test the applicability of OC, a deductive approach is pursued. While the organizational capacity model has already been applied to a broad variety of organizations in various quantitative and qualitative studies, there is still no uniform determination of variables for the individual capacity dimensions. Hence, the state of prior theory with regard to the application is closest to mature according to Edmondson and Mcmanus (2007). Since this work focuses on the extent to which individual variables are able to explain organizational problems, the work is based entirely on a quantitative approach. This enables a systematic testing to specify the present theory and generalizations related to sports clubs. A disadvantage of quantitative methods is the possible lack of consideration of relevant aspects identified by expert interviews or other types of qualitative research (Flick, 2016). At this point, the selection of variables is based on various studies using OC to identify the most relevant variables. The following chapter is concerned with the description of the conducted survey and the explanation of the chosen quantitative method on the data.

Following the assumptions of Hall et al. (2003), the capacity items were adjusted with regard to the peculiarities of sports clubs. Moreover, the determination of capacity items was verified by applying them to organizational problems through a multiple regression. The multiple regression provides a statistical examination to identify relations between a

variety of explaining variables (also called X-variables, independent variables or predictors) and one explained variable (also called dependent variable and Y-variable). In order to run a multiple regression, quantitative data were collected through an online survey. In this chapter, the process of data requirements, data collection and the data processing conducted through the program Statistical Package for the Social Sciences (SPSS)[2] is described. Moreover, the chapter is concerned with the theoretical background of multivariate statistical methods and their application on the present data.

Before describing the procedure, the general quality criteria of scientific tests are examined. Accordingly, scientific studies have to meet the following criteria; objectivity, reliability and validity (Beller, 2016; Eckstein, 2016). Objectivity implies generality and non-prejudice, in other words there are no external conditions affecting the data collecting process and data evaluation (Eckstein, 2016, p. 310). In surveys, that are conducted online, the influence by questioners is excluded because completing a survey is independent from the researcher if the questions are posed without bias. In addition, the data evaluation is predetermined by the fixedness of a procedure, so that other researchers cannot obtain different results. The chosen method is based on quantitative data which is examined through calculations with SPSS leading to repeatability. Therefore, the reliability of the data is given, since a repeated study would most likely lead to the same results by excluding effects that bias the results (Eckstein, 2016, p. 311).

Finally, validity implies whether the results of a study can be applied to the population (external validity) and whether the test answers the question previously asked with regard to whether the type of questioning is capable of abbreviating the chosen construct (internal validity; Eckstein, 2016, p. 311). In order to achieve and increase the significance of the statistical method, validity can be captured through the consideration of the two aspects: sample size and selection of respondents (Urban & Mayerl, 2018). There is no predetermined minimum number of cases required, as it depends on many factors, such as the complexity of established models, population and heterogeneity of population. Moreover, each sports clubs has an equal probability of being included (random sample) in order to reduce dependencies and bias (Urban & Mayerl, 2018, pp. 15–16). The description of the sample and its assessment can be found in chapter 3.4.

[2] Used version: IBM SPSS Statistics 27

3.1 Scale Level and Variables

Statistical methods are applied on data that consists of single variables or items. Variables are either nominal, ordinal or metric scaled which determines the selection of statistical analysis methods. The present survey includes all three scales to present relevant aspects in the best possible and yet most simple way. For single items belonging to human resource, infrastructure and process as well as network and relationship capacity, nominal scaled variables were used. The variables used in this study are originally dichotomous, since they only distinguish between agreement or disagreement, and therefore have the lowest least content. Nominal variables are also used as dummy variables in regression models, where dichotomous variables are derived from multilevel variables. This scale level only indicates whether a characteristic is equal or unequal to another characteristic (Eckstein, 2019, p. 27). For instance, the question used to capture the employment of paid staff included the answer options: “yes, also full-time”, “yes, but only part-time or marginally employed” and “no”. In order to calculate the variable paid staff (HR3), the first two answer categories were summarized to generate a dichotomous dummy variable.

The ordinal scale represents variables that can be analyzed in the same way as nominal scaled variables and can also be ordered in this way. However, the distances between the individual response options are not uniform (Eckstein, 2019, p. 29). As a result, there are usually more response options, which allows for comparability of the variables, since individual expressions can be larger or smaller than another one. Interval scales and ratio scales are combined as metric scales. The main difference between metric and ordinal scales is that metric scales can express measurable and countable differences. This enables the consideration of distance and multiples of the characteristic values. While interval scales hold no true zero and can represent values below zero, ratio scales possess a natural zero (Eckstein, 2019, pp. 30–31). For example, the proportion of central (HR1) and secondary (HR2) volunteers is ratio scaled, as it is not possible to have a proportion below zero percent. In SPSS, there is no distinction between ratio and interval scales, both scales are represented as interval scales so that parametric methods can be applied.

In many questionnaires, respondents' perceptions are recorded using Likert scales. This rating scale was initially used in psychology and represents, from a purely statistical point of view, an ordinal scale. Nominal and ordinal data are limited to the use of non-parametric statistics, which reduces the possibilities of statistical observation and, consequently, the explanatory power (Carifio & Perla, 2008). Because of the large

number of possibilities to analyze interval scaled data through parametric statistics, Likert scales have been treated as interval scales in several studies (Carifio & Perla, 2008; Norman, 2010). Consequently, especially in economic studies, a scientific discussion about the classification of Likert items has emerged.

Several papers are concerned with the correct handling of Likert scales, i.e. Carifio and Perla (2008) or Norman (2010). The starting point is a scale that normally contains a small number of options, usually four, five or seven options. One example is the measurement of consent with "strongly disagree", "disagree", "neither agree nor disagree", "agree" and "strongly agree". As stated above, from a purely statistical viewpoint, these scales are ordinal scales. Although analyzing a Likert scale with parametric methods contradicts statistics, it appears in rare cases (Carifio & Perla, 2008). One justification is made by Norman (2010) who investigated the robustness of Likert scaled data and concluded that "parametric statistics can be used with Likert data […], with no fear of ''coming to the wrong conclusion'"" (original emphasis, Norman, 2010, p. 632). Accordingly, the application of parametric methods on Likert scales will not result in erroneous or false conclusions. A variety of researchers who used parametric methods on Likert scale data specified the following requirements: the question has been covered by at least five possible answers, which have uniform distances between them and the ordinal scale is related to a continuously distributed latent background variable, so that the possible answers can be seen as ranges of values (Norman, 2010; Urban & Mayerl, 2018, p. 14).

Scientists, who handle the data more strictly, avoid the application of parametric methods on pseudo-interval scaled data. A more in-depth approach is established by Carifio and Perla (2008) who differentiate studies that did not focus on a single Likert scale (Likert item) but a sum of Likert scales. These studies revealed that this "format produces *empirically interval data*" (original emphasis, Carifio & Perla, 2008, p. 1150). Consequently, only the consideration of the sum of several Likert scaled questions enables the application of parametric methods. In accordance to previous research, the author distinguishes between Likert scales as explained variable and Likert items as predictors.

3.2 Multiple Regression

Multivariate statistics is used to map complex relationships that are as close as possible to reality. A multiple linear regression is used to investigate the simultaneous influence of different independent variables on one dependent variable at the same time (Eckstein,

2016; Urban & Mayerl, 2018; Wooldridge, 2009). In distinction to non-causal methods like bivariate correlations, the direction of the influence and therefore, the dependency is predetermined. Correlations, in turn, are used to identify a reciprocal relationship between two or more variables but do not indicate direction or causality. This work focuses on several resource capacities items and their influence on problems, thus multiple regression is considered suitable to test the assumed connection.

Applied to this study, the main interest is the influence of different capacity items on organizational problems. In order to quantify reality and thereby understand, researchers often simplify constructs and focus on specific aspects. Multiple regression analyses enable the quantification of complex constructs, nevertheless, it has to be put into a logical context and does not replace a causality analysis (Eckstein, 2016, p. 197). Regression analysis is a statistical modeling that estimates or calculates parameters according to a specific, usually mathematically formulated modeling technique (Urban & Mayerl, 2018, p. 4). Mathematically, multiple regression is based on ordinary least squares, a method based on minimizing the sum of squared residuals (Wooldridge, 2009, pp. 73–80).

There are different methods of regression models, such as the enter method, stepwise, backward and forward regression. In this study, only the enter method is applied to the present data, implicating that every capacity variable and respective item might have a relevant influence on the organizational problems. In contrast, stepwise regression is a method of identifying the best possible regression model by retaining only those variables that prove to be significant. In addition, forward and backward regression represent the inclusion or elimination of variables until a certain model quality is achieved or cannot be improved upon (Wooldridge, 2009, p. 678). The regression, including consideration of multicollinearity, is performed in chapter 4.2.

In regression models, the influence of one or more independent variable(s) is defined as linear, leading to the following formula (Urban & Mayerl, 2018, p. 30):

$$Y_i = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \ldots + \beta_k X_{ki} + \varepsilon_i$$

Whereby

- X represents the independent, explaining variable
- Y represents the dependent, explained variable
- X_k denotes the k-th variable in operationalizations with more than one independent variable

- X_{ik} denotes the variable value of the independent variable X_k at the i-th observation
- Y_i denotes the variable value that the dependent variable Y has at the i-th observation case (Urban & Mayerl, 2018, p. 22)
- α and β denote parameters that determine in what way Y depends on X
- ε_i denotes the error term, indicating that Y does not only depend on the influence of X-values (Urban & Mayerl, 2018, p. 31)

Therefore, the multiple regression is used to estimate each value Y_i by considering the influencing parameters β_i of the independent variables X_k, the parameter α and the error term ε_i (Urban & Mayerl, 2018, p. 75). For this study, multiple regression is used to estimate the sum of problems for each sports club considering the different influence of all capacity items and the size of the club. The x-intercept (α) denotes the presumed value if all other influence variables assume the value 0 and is also called constant.

The quality of the multiple regression is indicated by the coefficient of determination R^2. This goodness-of-fit measure is the proportion of the dependent variable explained though the predictors (Wooldridge, 2009, p. 104). In multivariate regression, including an (irrelevant) variable to an equation generally increases the explained proportion without increasing the explanatory power of the model (Wooldridge, 2009, p. 68). Therefore, in multiple regressions, the number of predictors is considered and thus, the adjusted R^2 is used. R^2 is between .00 and 1.00, with the estimation of a good value based on the specific application area.

To apply the multiple linear regression to the present data, several requirements have to be met. First, the multiple regression is a linear method leading to the requirement that the assumed connection between the independent and dependent variables is linear. Contrary to a widespread misconception, the values of the Y-variable do not have to be normally distributed or approximately normally distributed (Urban & Mayerl, 2018, p. 13). Second, the Y-variable should be metric (at least interval) scaled. Metrical scaled variables allow a variety of different values, which in turn increases the significance of the model (Urban & Mayerl, 2018). As written in chapter 3.1, some researchers use Likert scales (at least five possible answers, uniform distances, latent background variable (Urban & Mayerl, 2018) for parametric methods. Following the summary of Carifio and Perla (2008) and the mentioned higher explanatory power, the author decides to take the sum of organizational problems as the dependent variable.

Third, in contrast, the X-variables that are included in the multiple regression model can be either metrical scaled (or at least defined as metric like Likert-items) or binary or dummy variables (Urban & Mayerl, 2018, p. 15). Because multiple regression focuses on the dependence of one variable on a variety of different explaining variables, the inclusion of Likert-items as X-variables is less problematic and used within this multiple regression.

Fourth, it is important that there are no exact bivariate linear relationships among the independent variables, as the predictors should be independent to prevent altering the results of the analysis (Shrestha, 2020; Urban & Mayerl, 2018; Wooldridge, 2009). A dependency of the variables is called collinearity or multicollinearity. Multicollinearity arises either from the inclusion of variables that do not stand entirely on their own and thus partially describe the same effect, or from a very specific model that includes a large number of variables. Perfect collinearity is present if two or more independent variables have an exact linear relationship. The increasing number of X-variables increases the probability of multicollinearity (Urban & Mayerl, 2018, pp. 232–233). If multicollinearity is present, it is possible that correlated variables partially explain the same proportion of the variance, and therefore, the variance of the regression coefficient increases only by considering the same proportion twice. This affects the stability and sensitivity of the regression model, leading to biased results (Kim, 2019; Urban & Mayerl, 2018). Hence, the dependency of explaining variables can cause over- or underestimations of influence factors (Schneider, 2007).

Multicollinearity cannot be completely prevented, but it is important to control the extent of it. The examination of multicollinearity does not aim to reduce it but to identify critical variables that harm the quality of the regression model (Urban & Mayerl, 2018, p. 232). There are a variety of methods used to identify collinearity among the independent variables. One method is a correlation matrix with all X-variables that are included. In order to evaluate the correlation of interval scaled data, the Pearson correlation coefficient can be applied to the data. Bivariate correlation is used to analyze an undirected thus symmetrical relation between two variables (Eckstein, 2019, pp. 352–353). The concrete method depends on the scale level of the data whereas the Pearson correlation coefficient (r) is only used with metrical data. The calculated correlation coefficient can have a value between -1.00 and +1.00. A value around 0.00 indicates no linear relation between the two considered values, in contrast the values 1.00 and -1.00 indicate a strong (contrary) relation (Eckstein, 2019, p. 353).

There are different limit values that indicate when multicollinearity is present. Whereas Gujarati (2003) and Hanushek et al. (2013) argue that there is a severe problem and high bias in standard errors when the correlation coefficient is higher than 0.8 or 0.69, Cohen (1992) states that already a coefficient higher than 0.3 indicates multicollinearity between independent variables. In regression models, that include more than two predictors, the calculation of correlation matrices is no accurate indicator for multicollinearity due to the already described increasing chance of correlation with increasing number of variables. Furthermore, bivariate correlations capture the relation between two variables but in multivariate models, linear dependencies can become relevant if the influence of other variables is included.

Another approach to identify multicollinearity is performed by calculating linear regressions of each independent variable on the other X-variables, thereby identifying a causal influence between the variables (Urban & Mayerl, 2018, pp. 237–238). Using SPSS facilitates this option for identifying multicollinearity, as it is added directly when performing the regression analysis. The results are captured in the variance inflation factor (VIF) and in the tolerance (TOL). VIF is calculated $\text{VIF} = \frac{1}{TOL}$, therefore there is no need to consider both values (Urban & Mayerl, 2018, p. 238). As stated above, a relation between the independent variables is unavoidable. For the sake of completeness, it has to be said that multicollinearity can be avoided if the variable causing multicollinearity is excluded from the regression model (Kim, 2019). Furthermore, there is no statistical measure that addresses the problem completely (Gujarati, 2003).

The variance inflation factor contributes to the identification of possible problematic dependency. A high VIF value indicates a high correlation between the explanatory variables and therefore increases the instability of the regression model. Similar to the application of the correlation matrix, different limits can be derived from scientific literature. Whereas some authors specify that VIF > 4.00 is an indication of pronounced collinearity (Urban & Mayerl, 2018, p. 238), Schneider (2007) argues that VIF > 2.00 might already implicate possible problematic dependencies. Another reference value states that already a value of VIF > 5.00 can be considered as multicollinearity. Similarly, the value of tolerance should not be lower than 0.2 (Eckstein, 2016; Kim, 2019; Shrestha, 2020).

The problem of statistical models lies in the modeling of reality. Observable phenomena can rarely be represented in models due to high complexity and interdependencies. The

multiple regression represents a complex approach because a variety of variables can be included (Urban & Mayerl, 2018; Wooldridge, 2009). In multiple regression, it is assumed that the predictors influence one dependent variable to varying degrees. In fact, however, the dependent variable may be influenced by effects or variables that are not part of the model (moderator effects). Moreover, the assumed direct influence of one explaining variable can be interrupted by a mediator variable (Urban & Mayerl, 2018, pp. 325–326). Both variables would provide a more accurate approximation of reality, but since correct identification and inclusion in the model is the responsibility of the researcher, the effect of other variables is frequently overlooked. In this way, to a certain extent, the quality and meaningfulness of a regression model depend on the researcher.

The most common errors occur through endogeneity problems and other biases that are based on the selection of variables and in data collection (Wooldridge, 2009, p. 546). As previous findings have already shown, the complexity of reality results in a large number of possible influencing variables, however, it is impossible to include all these variables (Clarke, 2005, p. 349). The exclusion of variables that would have influenced the dependent variable or other predictors may result in an omitted variable bias. The multiple regression might uncover significant relations between variables that are revealed only by omitting the variable that is actually relevant. Since the omitted variable might influence both the dependent and one or more independent variables, the multiple regression identifies a significant relation between those variables, which actually does not exist. In that way, an omitted variable might lead to biases in the influence of several variables and thus lead to erroneous results (Clarke, 2005; Wooldridge, 2009). Following this, the inclusion of a variety of variables does not necessarily improve the regression model since omitted variables still might lead to biases.

3.3 Data Requirement and Collection

In order to examine the expressiveness of OC applied to sports clubs, structural data of a variety of sports clubs is required. Hence, this study is based on a quantitative approach, that focuses on measurable and countable characteristics, that can be analyzed through statistical methods.

For this study, primary data were collected through an online survey. Primary data includes the data collected directly from the main source i.e. from the officials of sports clubs. In most cases, the survey was conducted by a member of the board (95.2 percent). Although this could affect the accuracy of the data and thus the quality of the study, since

the data depend solely on one person's perception, it is assumed that board members can be expected to have an accurate understanding of the activities in their club. Online surveys facilitate the collection of primary data because the link to the survey can be sent directly to the potential responder (Evans & Mathur, 2005). Moreover, online surveys cause low administrative costs and provide a fast and (mostly) unlimited possibility of data collection. The survey used here was designed with LimeSurvey, a free and open source web app for surveys provided by the Koblenz University of Applied Science. Thus, the software and the collected data are located on the servers of the university[3].

The survey was commissioned by the umbrella organization of sports clubs in the Rhineland, the SBR (Sportbund Rheinland). Since 2001, the organization has faced a decline in membership, due in particular to a decline in membership among people under 60 years of age. Between 2009 and 2019, the number of members aged between 15 and 18 decreased by a quarter (Sportbund Rheinland e.V., 2019a). As a result, the survey was commissioned, which now leads to the availability of comprehensive structural data on the sports clubs in the SBR.

The tasks of the SBR can be derived from the general tasks of umbrella organizations described in chapter 2.1. At the time of the survey, the association united 618,432 members in 3,083 sports clubs (Sportbund Rheinland e.V., 2019b). The SBR is divided into sixteen different districts, similar to the political districts. Founded in 1949 in the City Theater of Koblenz, the SBR is one of the sports associations forming the state sports association of Rhineland-Palatinate alongside the associations in Rhine-Hesse and Palatinate. Rhineland-Palatinate is located in the southwest of Germany and one of few German states that divided their sports association into smaller organizations. The Rhineland is the norther part of the state and mostly rural. Only two cities have more than 100,000 inhabitants: Koblenz and Trier (113,879 and 111,138 inhabitants, Koblenzer Statistisches Informations-System, 2020; Stadtverwaltung Trier, 2020). This is also reflected in the membership strengths of the clubs. Small clubs with 0 – 500 members are the sporting home for more than 60 percent of all members (386,784 members). While 138,799 athletes practice sports in clubs with 501 – 1,000 members, only 92,849 people (15.01 percent) are members in sports clubs with more than 1,001 members (Sportbund Rheinland e.V., 2019b).

[3] More information can be found here: https://www.hs-koblenz.de/hochschule/organisation/zentrale-einrichtungen/rechenzentrum/anleitung/limesurvey-umfrage-erstellen [15.04.2021]

Data collection took place between October and November 2019. Although the data were not primarily collected to answer whether OC can be applied to sports clubs, data, that can be used to capture OC, were included. Initially, the survey was designed in order to identify possible predictors of membership numbers in sports club that are members of the umbrella organization of organized sports in Rhineland. Therefore, the survey primarily focused on structural data. The content of the survey builds on the SEB and a work of Thieme et al. (2017) who examine the problems of acquiring and retaining board members and identify possible causes for the problems. Their theoretical explanation model for board members is based on three categorial sections: environment, structure and the people themselves. Accordingly, the sports club itself as well as the environmental situation and the personality of the potential official influence the willingness to accept a voluntary (board) position (Thieme et al., 2017). The proposed model was obtained to achieve good variance resolution in acquisition and retention, but not if positions within the board are vacant. However, the present survey is based on the categories that were found to be relevant in the mentioned study and on identified organizational problems as well as key figures on volunteering derived from different SEB.

The survey is divided into five parts: resources, the club, environment, board work and voluntary personal data. The 52 questions of the survey cover data related to the sports club itself (resources, problems, self-conception, development, public relations and membership fees), the macro level (data about the community, support from other organizations and government institutions) and the micro level (cooperation among board members, socio-economic data, volunteering and personality). The survey predominantly consists of closed-ended questions to facilitate data evaluation through statistical methods. Data from the survey were supplemented by membership figures collected for the SBR dataset.

All 3,083 sports clubs, that are members of the SBR, were asked to complete the survey. After the closure of the survey, records that were incomplete were removed from the data set. In total, 1,003 sports clubs participated in the survey and contributed sufficient data that corresponds to a response rate of 32.5 percent.

3.4 Data Processing

In order to apply the multiple regression, processing of the data is necessary. The survey was used to get a deeper insight into the general situation of sports clubs and their board members. This study puts emphasis on a small area of interests: organizational capacities

and problems that were both part of the survey. The data from LimeSurvey and the SBR were transferred to SPSS. The program can be used as a tool to manage a large amount of data and apply statistical methods (Eckstein, 2016). SPSS records all answers to closed-ended questions with numbers, these numbers can in turn be assigned to certain characteristics. Furthermore, missing data can also be identified by assigning a specific number, which leads to the exclusion of these cases in calculations. The numerical recording of the data records is a basic prerequisite for statistical evaluation (Eckstein, 2016). Therefore, the first step in examining the applicability of OC through multiple regression was the accounting for missing data.

In a second step, outliers, i.e. data points that deviate (impossibly) far from the rest, were removed. The survey previously consisted of 1,003 records representing the broad variety of different organizations concerning age and size. Three sports clubs were excluded from the survey due to contradictory statements. For instance, one sports club, founded in 2019, stated that 50 people work as central volunteers within the club. However, the SBR recorded only the minimum required number of members (seven) for this club. Moreover, the number of board members is higher than the given number of total members leading to the conclusion that at least one statement is wrong. After adjusting for anomalies, the data included in the multiple regression analysis comprised 1,000 data sets or sports clubs.

With regard to size, the sports clubs that participated in the survey are representative of all sports clubs in Rhineland. Descriptive statistics show that an organization has an average of 266 members, while half of the clubs have less than 155 members. In contrast, the maximum number of memberships is 5,728. Meanwhile, the standard deviation SD = 354.1, reveals that there is a high dispersion of the club size.

Table 1: Size of the Club, SPSS

Statistics

Club size

N	Valid	997
	Missing	3
Mean		266.24
Median		155.00
Mode		23
Std. Deviation		354.101
Variance		125,387.34
Minimum		5
Maximum		5,782

If the proportions of clubs are considered in size categories, they roughly correspond to the actual proportion of clubs belonging to the SBR and all sports clubs in Germany, as shown in the following table 2.

Table 2: Size of the Club in Categories (Sample, Rhineland and Germany), own presentation[4]

Size of the sports clubs in categories (Number of memberships)

		Sample		SBR		DOSB
		Frequency	Percent	Frequency	Percent	Percent
Valid	Less than 100	353	35.4	1,379	44.7	46.6
	101 to 300	374	37.5	1,117	36.2	29.3
	301 to 1,000	234	23.5	523	17.0	19.8
	1,001 to 2,500	33	3.3	60	2.0	3.7
	More than 2,501	3	.3	4	.1	0.6
	Total	997	100.0	3,083	100.0	100.0
Missing		3				
Total		1,000	100.0	3,083	100.0	

[4] Data source: Sportbund Rheinland e.V.: Statistische Auswertungen, 2019 and Breuer, Feiler & Rossi, 2021

The data show that smaller clubs, especially sports clubs with less than 100 members, are relatively underrepresented compared to the population. In turn, sports clubs with more than 300 members are overrepresented. Nevertheless, the deviations are not that substantial and the proportions of club sizes are approximately equal. Furthermore, due to the high response rate, it can be indicated that conclusions derived from the given data provide an insight into the entire set of sports clubs in Rhineland which ultimately suggests good validity.

3.5 Operationalization

Although the survey was originally conducted for a different purpose, summarizing and recalculating the variables and items allows the research question to be answered. The items included in the multiple regression are explained and illustrated in the following chapter.

3.5.1 Organizational Capacity

In this paper, OC is applied to sports clubs from an external perspective, which provides a basic understanding of the organizations. The variables chosen to capture the capacity dimensions are derived from the theoretical foundations. An overview of the variables that were used and the operationalization can be found in table 5.

Six different objective variables, including the drawing on internal and external resources, are used to capture human resource capacity. Sufficient individuals who support the organization through voluntary or paid work were captured through the proportion of central (HR1) and secondary (HR2) volunteers in relation to the total number of members, presence of paid employees (HR3) and sufficient number of active board members (HR4). Furthermore, the diversity within the board is depicted by the proportion of women on board (HR5) including board members (authorized to represent) and the extended board (e.g. advisory board). Finally, the relevance of social events that go beyond the traditional sports program was considered. This was captured by asking whether the organization organizes social events (HR6) for volunteers and members.

Because of the complexity of capturing financial capacity, described in chapter 2.3, the author chose the perception of financial problems within the sports club (F1). The extent of the problem is represented by a single Likert item ranging from “big problem” to “no problem”.

Moreover, three variables were used to capture infrastructural capacity; usage of own (I1) and municipal facilities (I2) and their accessibility (I3). Again, the accessibility was captured in a five-point Likert item ranging from “very good” to “deficient”. For process capacity, the sports clubs were asked to specify the number of divisions within the sports club (I4). Furthermore, respondents were asked to evaluate the communication within the board (I5) through a five-point Likert item to get an insight into the process and cooperation of the organization.

With regard to network and relationship capacity, this study focuses on the diversity of external relationships. Before the sports club should specify the cooperation partner, the sports clubs were asked to indicate whether the organization has a cooperation or not. Only if the sports club has a cooperation, was it asked what type of organization is part of the cooperation. The joint consideration of both questions leads to five different cooperation depicting the network and relationship capacity: another sports club (N1), a school (N2), a kindergarten (N3), a commercial sport provider (N4) or a youth organization (N5).

In order to capture planning and development capacity, a score was calculated to represent the basic attitude of the organization by adding the average rating of the strategic planning and future development (S1). The questionnaire included questions about the (dis)agreement to the following statements; “Our club has a strategic concept” (1), “Our club pursues long-term planning” (2) and “Our club is optimistic about the future” (3). The agreement to all three statements was assessed with a five-point Likert scale from 1 = “fully agree” to 5 = “do not agree at all”. The answers to each question were inverted and added up if all of the three questions were answered in the survey. Therefore, scoring high on S1 indicates a high agreement and relevance of planning and development capacity.

The reliability of the created score is statistically evaluated by Cronbach’s alpha (α) which specifies the internal consistency of the score. In terms of content, Cronbach's alpha thus indicates the agreement between the individual items (Eckstein, 2019). The calculated Cronbach's alpha can possess values between 0 and 1, where $\alpha > 0.6$ is acceptable, $\alpha > 0.7$ is acceptable and $\alpha > 0.8$ is good with regard to the consistency of the score. Cronbach’s alpha $\alpha > 0.9$ might indicate redundancy of the chosen items (Streiner, 2003). The three items are intended to represent the whole capacity, which is why homogeneity with respect to a high internal consistency is important.

The results from Cronbach's alpha are shown in the following tables. The achieved Cronbach's alpha value $\alpha = .738$ indicates a good consistency of the three items.

Table 3: Reliability Statistics Score of Planning and Development, SPSS

Reliability Statistics

Cronbach's Alpha	N of Items
.738	3

Furthermore, table 4 shows that the consistency would not be higher if one of the items was deleted. Therefore, S1 is a consistent indicator to capture planning and development capacity.

Table 4: Item-related Statistics, SPSS

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The club has a strategic concept	6.67	3.123	.578	.633
The club is optimistic about the future	6.43	3.596	.490	.731
The club pursues long-term planning	6.64	3.055	.622	.578

3.5.2 Organizational Problems

In this study, the author puts emphasis on organizational problems in order to represent performance or success of a sports club. Because of the higher significance of metric data, a sum score of problems was used, as this can be treated as an interval-scaled variable. For the score, the individual ratings of the separate problems were added together (average method). Therefore, the variable prob_score covers the evaluation of the following problems, which can be derived from previous research: recruiting (P1) and retaining (P2) of members, recruiting and retaining of voluntary officials (P3), recruiting and retaining of trainers and instructors (P4), availability of sports facilities (P5), competition from other recreational and commercial sports providers (P6) and restriction due to all-day schools (P7). The addition was only performed if all seven single values

were available. Since each problem is depicted through a five-point Likert item from 1 = no problem to 5 = big problem, the sum score of problems comprises a possible span of 7 to 35 (the results from the survey go from 7 to 33). Accordingly, scoring high on prob_score indicates major organizational problems in various areas.

This score does not require the calculation of Cronbach's alpha because the seven problems are not chosen to have a high internal consistency but to depict a diversity of organizational problems.

Table 5: Operationalization of Capacities and Items, own presentation

Dimension and Variable	Item	Operationalization
Human Resources		
Proportion of central volunteers	HR1	Proportion of members who volunteer regularly; specified as decimal number
Proportion of secondary volunteers	HR2	Proportion of members who volunteer infrequently; specified as decimal number
Paid staff	HR3	Dummy; 1 = yes
Sufficient Board members	HR4	1 = yes
Proportion of women on board	HR5	Proportion of women on board and advisory board; specified as decimal number
Social events	HR6	1 = yes
Finances		
Financial problems	F1	Assessment of financial problems; Likert 1 = very big problem to 5 = no problem
Structure		
Infrastructure and Process		
Own facilities	I1	1 = yes
Municipal facilities	I2	1 = yes
Accessibility of facilities	I3	Evaluation of accessibility of used facilities; Likert 1 = deficient to 5 = very good
Multisport (divisions)	I4	Number of divisions within the club; 0 to 30
Communication within board	I5	Evaluation of communication within the board; Likert 1 = deficient to 5 = very good
Network and Relationship		
Cooperation another sports club	N1	1 = yes
Cooperation school	N2	1 = yes
Cooperation commercial sport provider	N3	1 = yes
Cooperation kindergarten	N4	1 = yes

Cooperation youth organization	N5	1 = yes
Planning and Development		
Relevance of strategic development	S1	Sum of assessment of strategy, planning and optimistic view of the future; 3 = Disagreement / Not existent to 15 = Agreement / Existent, Cronbach's Alpha = .738
Structural Variables		
Size of the club	club size	Number of members in total
Problems		
Member recruitment	P1	Likert, 1 = no problem to 5 = very big problem
Retention of members	P2	Likert, 1 = no problem to 5 = very big problem
Retention/recruitment of voluntary officials	P3	Likert, 1 = no problem to 5 = very big problem
Retention/recruitment of trainers and instructors	P4	Likert, 1 = no problem to 5 = very big problem
Availability of sports facilities	P5	Likert, 1 = no problem to 5 = very big problem
Competition from other recreational and commercial sports providers	P6	Likert, 1 = no problem to 5 = very big problem
Restrictions due to all-day schools	P7	Likert, 1 = no problem to 5 = very big problem
Score	prob_ score	Total Score of problems P1 - P7; 7 = no problems to 35 = very big problems

4 Results

The following chapter is concerned with the descriptive statistics used to describe the fundamental features of the survey data and the results from the multiple regression. The descriptive results are presented to provide a deeper insight into the variables included in the multiple regression. Furthermore, these data provide an approach to examine the resource capacities within the sports clubs. Next, the results from the multiple regression and the consideration of multicollinearity are considered.

4.1 Descriptive Results

The descriptive data were calculated in SPSS and divided into the five dimensions of OC. The structural data represented by club size in this study has already been mentioned in chapter 3.4, therefore they will not be further discussed here. In addition to the validity, club size also shows that the majority of sports clubs in the Rhineland are small clubs with less than 300 members. Only 36 sports clubs consist of more than 1,000 members.

4.1.1 Human Resource Capacity

In the following, the items used to capture human resource capacity are explained. Additional statistical data, such as numbers for the nominal dummy variable, can be found in the appendix. The importance of volunteerism is illustrated by the fact that an average of 11.05 percent of members hold office. Accordingly, every tenth member is part of the central volunteers and thus contributes to the success of the sports club. In addition, the mean percentage of secondary volunteers is almost twice as high at 20.70 percent. Nevertheless, the median of 14.85 percent shows that the high average largely results from outliers. This is also reflected in the mode (zero percent), since the most common statement is that no member is secondarily volunteering in the association. The high maximum value of 204 percent is a further indicator of this. Accordingly, there are certainly organizations in which, in addition to the members, people from outside the sports club are also committed to the sports club. For example, this might be parents or other people outside the organization who support their children by driving them to competitions or washing their team uniform.

In summary, the club board members, or those responsible for completing the survey, consider an average of one in ten to one in five members to be volunteering for the club. With regard to the composition of the board, the survey results indicate that the majority of organizations (82.5 percent) have enough people holding an office on the board of

directors. Nevertheless, 160 sports clubs state that not every position is occupied which demonstrates that acquisition and retention of officials sometimes poses a big problem. In contrast, the representation of women on board reveals a potential problem area. Whereas the mean percentage of female board members is 33.19 percent, indicating that every third board member is female, the statement is partially revised by the further statistical information. First, half of the sports clubs have less than 28.57 percent of female board members and second, the modal value indicates that in most cases, no women work on the board of directors. Both values highlight that only upward outliers lead to the high mean proportion. Furthermore, the proportion of female board members is captured by short free text that might lead respondents to enter nothing instead of "0". Nearly 20 percent (194 sports clubs) did not specify the number of women on board. Therefore, it is assumed that women are underrepresented in the boards of sports clubs.

The data imply that the majority of sports clubs (79.8 percent) are exclusively voluntarily organized and do not employ paid staff. The last item, related to social events, shows that 729 sports clubs organize events to attract and retain volunteers, which highlights the importance of social gatherings and relationships among members.

Table 6: Descriptive Statistics Human Resource Capacity, SPSS

Statistics

		Proportion of Central Volunteers	Proportion of Secondary Volunteers	Paid Staff	Sufficient Board members	Proportion of Women on Board	Social Events
N	Valid	961	975	991	985	806	1,000
	Missing	39	25	9	15	194	0
Mean		.1105	.2070			.3319	
Median		.0836	.1485			.2857	
Mode		.09	.00	0	1	.00	1
Std. Deviation		.09588	.20097			.25586	
Variance		.009	.040			.065	
Minimum		.00	.00	0	0	.00	0
Maximum		.80	2.04	1	1	1.00	1

Note: Coding for dummy variables is the following: 0 = no paid staff / 1 = paid staff; 0 = no sufficient board members / 1 = sufficient Board members; 0 = no social events / 1 = social events

4.1.2 Financial Capacity

The financial problems used to capture financial capacity indicate that half of the sports clubs have no or only small problems with their financial situation which emphasizes the results from previous studies (Balduck et al., 2015; Breuer & Feiler, 2019b; Ehnold et al., 2020; Nowy et al., 2015). Only 86 sports clubs have a large or a very large problem with their financial situation. In contrast, 476 sport clubs stated that finances are no problem.

Table 7: Descriptive Statistics Financial Capacity, SPSS

Statistics

Financial problems

N	Valid	976
	Missing	24
Median		4.00
Mode		5
Minimum		1
Maximum		5

Note: Coding for variable is: 1 = very big problem / 5 = no problem

4.1.3 Structural Capacity

With regard to the infrastructure, the data indicate that the majority of sports clubs use public facilities (see table 8). In contrast, less than half of the sports clubs use or own facilities. The frequency tables in the appendix show that only 469 sports clubs have their own sports facilities, while 659 clubs use municipal facilities. This demonstrates the dependency of NPOs on the municipality. The accessibility of the used facilities is mostly rated poorly. Most sports clubs rate the accessibility with deficient and sufficient (332 respectively 139) while only 56 sports clubs specify that accessibility is very good. According to this, the sports clubs have the possibility to use their own and municipal sports facilities, but in some cases, these might be connected with long travel times or other disadvantages.

The process capacity is captured through the number of divisions and the evaluation of communication within the board. The number of divisions within a club varies from 0 to 30. The frequency table shows that 46.2 percent of the sports clubs have only one division or sport (see appendix). In addition, 29 sports clubs indicated that they do not have a

division, which presumably results from the fact these clubs are single-discipline clubs and therefore no division was established. For the multiple regression, it is therefore assumed that these clubs have one division. In contrast, only 7.0 percent of the sports clubs have more than eight different divisions leading to a mean average of about three divisions. The communication among the board members is evaluated with "good" (4/5), only 3.2 percent of the responders indicate that the communication is deficient or sufficient.

Table 8: Descriptive Statistics Infrastructure and Process Capacity, SPSS

Statistics

		Own facilities	Municipal facilities	Accessibility of facilities	Multisport (divisions)	Communication within board
N	Valid	992	992	970	954	970
	Missing	8	8	30	46	30
Mean					3.02	4.00
Median				3.00	2.00	4.00
Mode		0	1	1	1	4
Std. Deviation					3.432	
Variance					11.778	
Minimum		0	0	1	0	1
Maximum		1	1	5	30	5

Note: Coding for variables is the following: 0 = no own facilities / 1 = own facilities; 0 = no municipal facilities / 1 = municipal facilities; 0 = no social events / 5 = social events (Accessibility of facilities, Communication within board)

Altogether, the survey showed that more than half of the sports clubs have no cooperation with any type of organization. If there is a cooperation, most sports clubs collaborate with other sports clubs or schools (322 and 219, respectively). Only a small proportion of the organizations have a cooperation with a commercial sports provider, a kindergarten or a youth organization. However, the low proportion of collaborations suggests that either the perceived advantage of cooperation is not high or the difficulty in establishing relationships with other organizations is higher than the benefit.

Table 9: Descriptive Statistics Network and Relationship Capacity, SPSS

Statistics

		Another sports club	School	Commercial sport provider	Kindergarten	Youth organization
N	Valid	1,000	1,000	1,000	1,000	1,000
	Missing	0	0	0	0	0
Yes		322	219	40	68	48
Not selected		678	781	960	932	952

Note: Coding for dummy variables is the following: 0 = not selected / 1 = one or more cooperation

The score to capture planning and development capacity, which involves a strategic concept, a long-term planning and an optimistic view of the future, reveals that strategic planning is evaluated on average with 9.87/15. An examination of the three separate items does not show any major differences in terms of responses. Overall, the result shows that strategic planning is relevant for sports clubs, but does not have a high priority within the sports clubs.

Table 10: Descriptive Statistics Planning and Development Capacity, SPSS

Statistics

Score Planning & Development

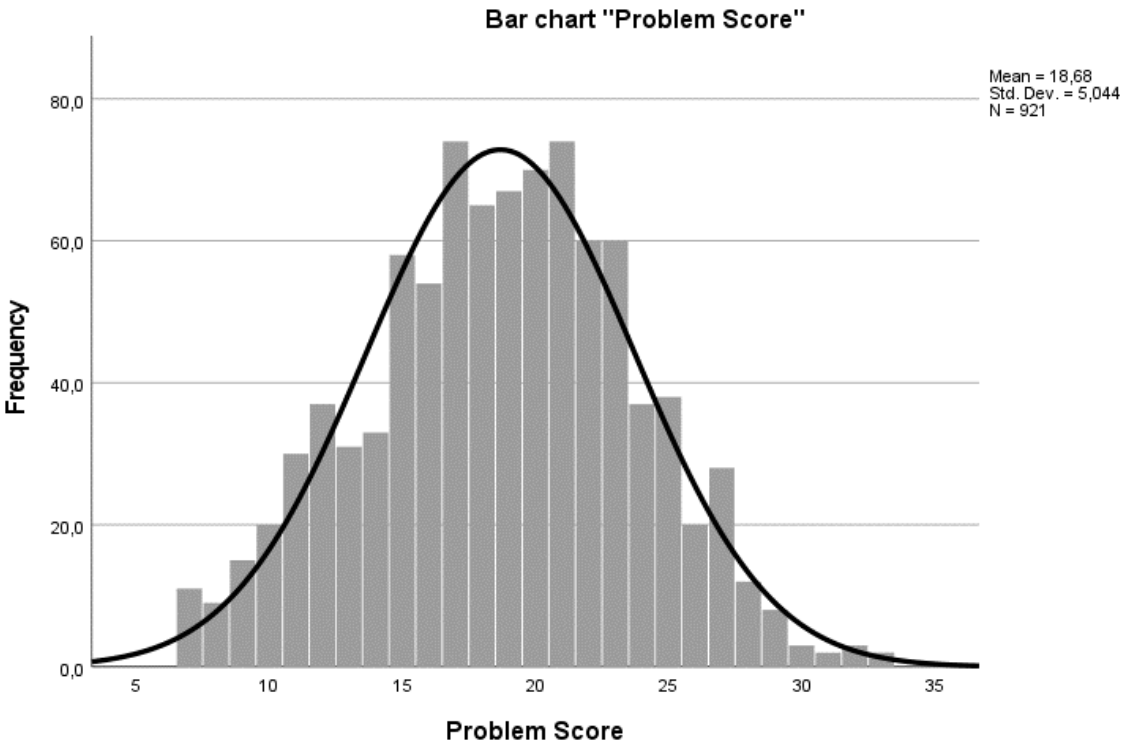
N	Valid	944
	Missing	56
Mean		9.87
Median		10.00
Mode		11
Std. Deviation		2.546
Variance		6.481
Minimum		3
Maximum		15

Note: Coding for variable is: 3 = low emphasis on strategic development / 15 = high emphasis on strategic development

4.1.4 Organizational Problems

The calculated score, capturing organizational problems, shows that clubs in the Rhineland perceive the present problems to different degrees. The frequency table demonstrates that eleven sports clubs do not encounter any problems at all (value = 7), whereas seven sports clubs evaluate their problems between 31 and 33, where 35 is the highest value to be obtained. Although the maximum and minimum values occur only rarely, the broad range of problems is shown. The following figure 2 shows that most of the clubs perceive the sum of the problems as moderate, therefore the distribution approaches the Gaussian normal distribution.

Figure 2: Distribution of Problems Score and Normal Distribution, SPSS



This specific distribution results from the fact that the three measures of central tendency are close to each other (mean = 18.68, median = 19.00 and mode = 17 and 21), thus indicating that problems are neither particularly large nor particularly small.

Table 11: Descriptive Statistics Problem Score, SPSS

Statistics

Score problems

N	Valid	921
	Missing	79
Mean		18,68
Median		19,00
Mode		17[a]
Std. Deviation		5,044
Variance		25,438
Minimum		7
Maximum		33

a. Multiple modes exist. The smallest value is shown

Note: Coding for variable is: 7 = small problems / 35 = large problems

Considering the individual problems[5], it is revealed that especially acquiring and retaining officials and trainers are major problems for sports clubs with a mean value of 3.65 and 3.16. In contrast, less relevance was attached to availability of sports facilities, restrictions imposed by all-day schools and competition from other sports and leisure providers (1.95/5, 2.01/5 and 2.46/5).

In summary, sports clubs perceive internal problems regarding volunteers and members as more serious than external influences on the club. The perception of the sum of problems varies in the individual organizations. The descriptive results match the findings from previous research. An interpretation of the results can be found in chapter 5.

4.2 Multiple Regression

In order to identify significant items and resource capacity dimensions, the following section is concerned with the results derived from the multiple regression calculated in SPSS. Prior to explaining the results, the multicollinearity consideration is made in order to clarify whether the results are utilizable to answer the research questions. As indicated

[5] Statistical measures can be found in the appendix.

in chapter 3, the explanatory variables should not be highly correlated with each other in order to prevent an overlap of individual items. Therefore, the VIF and TOL values are considered. Based on Shrestha (2020) and Kim (2019), the VIF is supposed to not be higher than 5.00 (or the TOL must not be less than 0.2).

The following table 12 shows that all the VIF values are between 1.045 and 2.888 and therefore within the specified limits. The highest variance inflation factor is recorded at club_size (number of members in the sports club) showing that the size of the club is the most colinear variable. Nevertheless, the VIF value of 2.888 is below the defined limit and thus, the collinearity is still low. Accordingly, all TOL values are higher than 0.25. Therefore, the predictors cannot be used to reasonably explain the other predictors, there is no multicollinearity, and the multiple regression can be conducted and interpreted.

Table 12: Coefficients Multiple Regression and Multicollinearity, SPSS

Coefficients[a]

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
Model	B	Std. Error	Beta			Tolerance	VIF
(Constant)	32.360	1.269		25.499	.000		
Club_size	-0.000051	.001	-.004	-.062	.951	.346	2.888
HR1	-.215	2.094	-.004	-.102	.918	.722	1,384
HR2	.461	.887	.020	.520	.603	.785	1.273
HR3	1.433	.453	.122	3.162	.002	.766	1.306
HR4	-1.405	.471	-.103	-2.982	.003	.957	1.045
HR5	.401	.703	.020	.571	.568	.903	1.107
HR6	.119	.404	.010	.294	.769	.937	1.067
F1	-1.371	.166	-.299	-8.253	.000	.871	1.149
I1	.306	.393	.031	.778	.437	.718	1.393
I2	1.294	.427	.121	3.035	.003	.716	1.397
I3	-.385	.131	-.104	-2.944	.003	.924	1.082
I4	.011	.066	.009	.173	.863	.452	2.211

I5	-.444	.231	-.071	-1.921	.055	.839	1.192
N1	-.460	.389	-.045	-1.185	.237	.794	1.259
N2	.858	.468	.076	1.833	.067	.665	1.504
N3	.416	.896	.016	.465	.642	.913	1.095
N4	-.259	.681	-.014	-.380	.704	.824	1.214
N5	-.590	.744	-.028	-.794	.428	.890	1.123
S1	-.572	.075	-.288	-7.623	.000	.805	1.242

a. Dependent Variable: Score problems

After it has been determined that all requested variables can be included in the regression model, SPSS is used to calculate the multiple regression that yields the R^2 value (coefficient of determination). The R^2 value indicates that all predictor variables combined account for 29.6 percent of the variance in the evaluation of the problems. The adjusted R^2 (.274) is used to evaluate the model quality of the chosen regression model. The differences between R and R^2 are derived from the significant number of X-variables included into the calculation. Although most regressions aim to include X-variables that explain the Y-value as fully as possible, and thus, also a high proportion of the variance, the rather small R^2 value does not imply that the regression model cannot be used for the relationship between OC and problems. Rather, this is another indicator that the items chosen to capture the capacity dimensions are not sufficient to reflect the diversity of sports clubs, which is due to the complex reality. This can be explained since a large number of internal and external factors influencing the sports clubs, identified by previous studies, are not included into the present multiple regression. Furthermore, the practical relevance of a multiple regression can be described by its effect size Cohen's f^2. Accordingly, the adjusted R^2 values are converted:

$$f^2 = \frac{R^2}{1 - R^2}$$

Measures for f^2 are 0.02, 0.15, and 0.35, indicating small, medium, and large effects, respectively (Cohen, 1992). In this case f^2 is .377, indicating a large effect and therefore, a high practical relevance.

Table 13: Model Summary Multiple Regression, SPSS

Model Summary

Model	R	R Square	Adjusted R Square (R^2)	Std. Error of the Estimate
1	.544[a]	.296	.274	4.194

a. Predictors: (Constant), all requested variables

In addition, the general significance (p), which is evaluated through calculating an F-Test, is considered. The test verifies whether the addition of predictors improves the prediction of the dependent variable. Two norms have become established among scientists, $\alpha = .05$ and $\alpha = .01$, indicating that the probability of obtaining an incorrect result is 5 percent and 1 percent (Urban & Mayerl, 2018, pp. 125–126). Statistical significance is based on the possibility of drawing a false conclusion. Related to this calculation, the value $p < .000$ indicates that the value of R^2 is significantly greater than 0. This indicates that the chosen predictors are able to account for a significant amount of variance in the score of problems. Hence, the overall regression model is significant, $F(19, 614) = 13.59$, $p < .001$, $R^2 = .30$. The multiple regression analysis provides initial insights into the factors that cause and influence problems in sports organizations. Subsequently, chapter 5 provides an interpretation of the results.

Table 14: ANOVA Multiple Regression, SPSS

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4540.678	19	238.983	13.590	.000[b]
	Residual	10,797.677	614	17.586		
	Total	15,338.355	633			

a. Dependent Variable: Score problems

b. Predictors: (Constant), all requested variables

In conclusion, the coefficients of the predictors are examined. SPSS offers the results from the multicollinearity consideration simultaneously with the results from the multiple regression which can be found in table 12. Besides the specification of the VIF and TOL values, the table covers the unstandardized and standardized coefficients that are interpreted in terms of influence on the explained variable. While the unstandardized coefficients can be used to set up an equation, the standardized coefficients enable a

comparison with the effect size. The standardized coefficients are adjusted with respect to the standard deviation. Moreover, the significance for each item is given which indicates whether the amount of unique variance the predictor accounts for is statistically significant. Again, the limit for significance is .05. In order to examine the connection between various items, various other measurements can be taken into consideration. Most common is the addition of 95 percent confidence intervals for the standardized coefficient values. These values provide upper and lower limits for the variables, which means that the actual value lies between the specified limits with a probability of 95 percent (the values can be found in the appendix).

If the significance level of $\alpha = .05$ is applied to the regression model, six variables account for a statistically significant amount of variance in the score of problems: paid staff (HR3), sufficient board members (HR4), financial problems (F1), municipal facilities (I2), accessibility of facilities (I3) and relevance of strategic development (S1). The unstandardized coefficients show that paid staff (1.433) and municipal facilities (1.294) have a positive influence on the dependent variable, i.e. if a predictor is high, the dependent variable increases. Applied to the present study, if a sports club uses municipal facilities and paid staff are employed, the problems in the sports club increase. In contrast, sufficient board members (-1.405), financial problems (-1.371), accessibility of facilities (-.385) and relevance of strategic development (-.572) have a negative impact on the perceived sum of problems. Therefore, no serious financial problems, a high relevance of strategic planning, good accessibility of sports facilities and enough people to take over board positions contribute to the reduction of problems. The other variables did not prove to be significant predictors of problems in the sports club. This partially contradicts previous findings and will be examined in the following chapter.

Although the unstandardized coefficients allow interpretation of the individual variables, the standardized coefficients should be used to examine the effect size of each predictor and compare them. The calculated data show that financial problems and strategic planning have the most considerable influence on organizational problems, as shown by the t-values and standardized coefficients (-.299 and -.288, respectively). In contrast, the influence of the human and infrastructural resource items is lower, with values ranging from .122 to -.103. The direction of the influence, represented by the algebraic sign, is not relevant when examining the size of the effect. Accordingly, strategic planning and financial problems are the best predictors for problems in sports clubs.

5 Discussion

The following chapter is concerned with the interpretation and discussion of the descriptive results and the results from the multiple regression. In a first step, the descriptive data are compared to previous studies in order to identify their expressiveness and significance. Thereafter, the framework of OC is examined with regard to its applicability on sports clubs. In a final step, the predictors or causes that have been found to be significant for the problems in sports clubs are considered.

5.1 Matching the Data with Previous Studies

The examination of human resource capacity in this study is based on quantitative data including numbers and shares of the individuals working for the sports club and social events. Although this allows a comparability of sports clubs, the approach focuses on the quantity rather than the quality of volunteers. Previous studies based on qualitative methods examined the quality of volunteers through capturing their qualification, enthusiasm, motivation and experience (Balduck et al., 2015; Doherty & Cuskelly, 2020; Doherty et al., 2013).

The proportion of members who contribute to the success of the sports club by volunteering regularly or sporadically corresponds to previous findings. The first wave of the SEB in 2005/2006 revealed that 27 percent of the members of German sports clubs work voluntarily within the organization (Schubert et al., 2007, p. 9). The consistent relevance of sports in terms of honorary commitment is confirmed through the fifth implementation of the German Volunteer Survey examining the volunteer involvement of all German citizens. However, a comparison between the people volunteering in the sports sector between 2014 and 2019 indicates that the proportion has decreased from 16.3 percent to 13.5 percent (Simonson et al., 2021; Vogel et al., 2016). In contrast, this study revealed that the percentage of members working (regularly and sporadically) for the sports clubs is 31.75 percent, which is higher than in previous research. However, in the given study, secondary volunteers are included who were not part of previous research. Since the percentage of secondary volunteers is twice the percentage of central volunteers, the data reflect a trend of less interest in assuming long-term (elective) positions.

The previous survey examining the sports clubs of the SBR, that was conducted between November and December 2015, indicated that 70 percent of the sports clubs have no vacant board positions (Thieme et al., 2017). Therefore, the proportion increased by about

12 percent within two years, indicating that the problem of finding adequate board members has been reduced. At first sight, a higher willingness of individuals taking over a board position might be a possible explanation of this reduction. Due to the overall decline in individuals volunteering in sports and the decline in volunteers in sports holding a leadership or board position between 2017 and 2019, the data used here support the trend away from elected positions toward project-based volunteerism (Breuer et al., 2021, p. 9; Simonson et al., 2021). Accordingly, it is assumed that the number of board positions under the articles of association has been reduced in order to maintain the ability to act. The ongoing trend toward association mergers (Meier et al., 2017) might be a further indicator of this assumption.

The German Volunteer Survey further reveals that men are more likely to volunteer than women. At 15.2 percent, the proportion of men volunteering in the sports sector is more than three percentage points higher than the proportion of women (11.9 percent, Simonson et al., 2021). Focusing on sports clubs, Breuer et al. (2021) identified that the ratio of male to female volunteers is 2:1, with 1.1 million men and 500,000 women are holding official positions or working as trainers and coaches. In terms of board positions, the authors state the ratio between men and women is 3:1 (Breuer et al., 2021, p. 40). The present survey indicates an even higher proportion, as 33.19 percent of board members are female, which corresponds to a ratio of 2:1. However, because of the large amount of missing data, the actual proportion of women on board is likely to be smaller. Nevertheless, data reveal the underrepresentation of women on the board since women account for 40 percent of memberships in German sports clubs (Breuer et al., 2021, p. 11; DOSB, 2020).

For the SBR, the present survey revealed that 21.2 percent of the sports clubs employs full or part-time paid staff. The SEB 2017/2018 resumed that 6.3 percent of the sports clubs equaling 5,700 organizations employ paid staff in leaderships positions (Breuer & Feiler, 2019b, p. 23). The clubs in the SBR are not significantly larger than the clubs considered in the SEB. Therefore, it is assumed that paid staff surveyed here is largely composed of positions outside the management level (i.e. administrative staff working in the office of organizations).

The organization of social gatherings highlights the relevance of the togetherness encouraged by sports clubs (72.9 percent). While this capacity item refers to those events aiming to strengthen the retention of officials, the SEB 2017/2018 revealed that the

relevance of social activities without specific goals is even greater since 93.3 percent of the surveyed organizations organize parties or social celebrations (Breuer & Feiler, 2019b, p. 23).

In summary, the present survey joins existing research since the data concerning human resources corresponds to the previous results. Nearly every research examining sports clubs identifies the relevance of individuals who are members and officials of the organization.

Regarding the general situation of NPOs, many studies report a high significance of the financial situation which is underlined by a variety of reasons. These organizations are bound by law to the reinvestment of earnings and operate independently of market laws by offering low-priced sports offers that are far below the cost of commercial providers (§55 sentence 1, no. 1 AO). Therefore, the general financial situation of sports clubs in different countries was identified as a cause for the severity of problems. Between 11 and 41 percent reported the financial situation to generate difficulties and problems in Switzerland and Canada (Lamprecht et al., 2011; Lasby & Sperling, 2007).

In comparison, 26.9 percent of the sports clubs considered here evaluate their financial situation at least as a medium sized problem. The results of this study support those of Wicker and Breuer (2012, p. 477), who also reported that the financial situation is perceived as moderately problematic for German sports clubs. Moreover, both studies display a high variance regarding the perception of this problem. All things considered, the financial situation is perceived to be less serious, which is emphasized by the most recent SEB, which summarizes that three quarters of the clubs had a positive cash flow statement in 2016 (Breuer et al., 2021). Moreover, the problems resulting from finances were rated with an average of 2.13/5 (where 5 equals a very big problem). The subjective perception of the moderate financial problems indicates that no severe financial problems arise despite the lack of market orientation.

The infrastructural data show that the majority of sports clubs depend on the availability of municipal sports facilities in order to offer sports. The data from this present survey matches the data from the last SEB (Breuer et al., 2021, p. 57) where 63.5 percent of the sports clubs specified that they use municipal facilities. In addition, 40 percent own facilities. While the proportion of sports clubs using municipal facilities (65.9 percent) corresponds to the SEB, more sports clubs in the Rhineland own facilities (46.9 percent). Although all sports clubs have the opportunity to use sports facilities, availability is rated

poorly, leading to the assumption that there are few facilities that are overcrowded or can only be reached with long travel distances. Besides the availability, the condition of sports facilities might influence the evaluation of sports facilities. The renovation of sports facilities is a highly discussed issue in Germany since the DOSB evaluated the required renovation funds with 31 million Euro (No identified author, 2018). The poor condition of sport facilities can lead to the fact that some of the sports facilities are unusable. However, this finding contradicts the current SEB, which states that the availability of sports facilities in Germany was rated with an average of 2.02/5 (5 corresponds to a major problem, Breuer & Feiler, 2019b, p. 27).

Regarding the process capacity, the present survey overrepresents clubs with more than one division (53.51 percent) since data for Germany specify that only 38 percent unite more than one division (Breuer et al., 2021, p. 25). Thereafter, it is assumed that the rural character of the Rhineland leads to increased mergers in order to find enough people that want to assume board positions or work as trainers or referees. Breuer and Feiler (2021, p. 61) state that the cooperation of the board members is evaluated on average with 7.32/10 (10 equals extremely satisfied), which corresponds to the present study.

In summary, infrastructure and process capacity is captured through items that match previous findings. The number of division as well as the perceived availability of sports facilities deviates from research that examined the whole of Germany. Nevertheless, these deviations can be explained by the characteristics of the region, the formulation of the questions or the structure of the questionnaire.

The relevance of cooperation found in previous studies is not represented. While the sixth wave of the SEB highlights the presence and the advantages of cooperation of sports clubs with various organizations, here only 46.9 percent established a cooperation (Breuer, 2017). Going back in time, the second SEB resumed that 70 percent of the sports clubs work together with other sports clubs. Moreover, 62 percent cooperate with schools (Rittner & Keiner, 2007). The available data show a drastic decline in cooperation regardless of the type of partner, which should be included in future research.

Strategic planning was found to be important to the sports clubs of the SBR although not every organization has a set strategy. The mean relevance of 9.87/15 equals the existence of a strategic concept that was evaluated with 3.58/5 in a previous SEB (Breuer, 2011, p. 18). Wicker and Breuer (2012) connected individual organizational problems to strategic

planning and identified the strategy as an important predictor, which is supported by further research (Fink, 2020; Mwai et al., 2018).

The Rhineland is predominantly rural, with the largest cities having no more than 115,000 inhabitants, which leads to a comparability of the average club size with the German population. While the most recent inventory of the DOSB (2020) states that the sports clubs in the federal state of Rhineland-Palatinate have an average of 234 members, this survey is conducted by organizations that have a mean average of 266 members. In contrast, the medium average of 155 shows that most of the clubs have only a small number of members.

The problems used in this survey were derived from various SEB. The studies addressing problems in sports clubs agree that human resources are the biggest problem. Here, the results from this study and the SEB 2017/2018 are almost identical in the relevance of the problem of acquisition and retention of officials (SB: 3.56/5 and SEB: 3.51/5) and trainers (SB: 3.16/5 and SEB 3.09/5) which corresponds to the findings from previous research (Breuer & Feiler, 2019b; Wicker & Breuer, 2012). Furthermore, the relevance of members is reflected in the problem of member retention, rated 2.95/5 in Breuer and Feiler (2019b, p. 27), 2.69/5 in Wicker and Breuer (2012), and 2.65/5 in the present study. While the seventh wave of the SEB focuses on a variety of individual problems within sports clubs, this study examines the sum of problems. All things considered, the research on sports clubs represents a variety of organizations that perceive problems in different ways. The standard deviation of the problems included in the score of problems is between 1.113 and 1.647, indicating that the problems are of different magnitudes.

While Breuer (2013) determines an increase in the competition from sports clubs and commercial sports providers, the present study captures the relevance of the competition at medium level (2.46/5). In addition, the problems caused by all-day schools is at a rather low level (2.01/5) which was also stated by Breuer and Feiler (2013). The chosen problems strengthen the finding that the organizational problems within sports clubs are varying to different extents. In summary, the conducted data correspond to previous findings especially in highlighting the relevance of human resources.

The organizational capacity framework has been applied qualitatively and quantitively in the past mainly to sports clubs (for example Balduck et al., 2015; Clutterbuck & Doherty, 2019; Doherty et al., 2013; Svensson et al., 2020). This study is subject to the assumption that the characteristics of sports clubs are suitable to apply OC. The advantage of the

usage of this framework is the adaptability that arises from the lack of predetermined variables to capture the capacities. Although the legal consideration of NPOs are similar regarding legal definitions and funding (Carroll & Stater, 2009), there are differences in the relevance of members and their contribution to the organization (Simonson et al., 2021). For example, many NPOs provide services to people outside the organization, while sports clubs are largely focused on their own members. Accordingly, the primary funding source are membership fees whereas other NPOs are funded primarily by donations (Carroll & Stater, 2009). With regard to the infrastructural capacity, sports facilities play an important role. The distinctive features, the size and thus the high maintenance costs of sports facilities such as gymnasiums, stadiums or public swimming pools lead to the need for public subsidies for the construction and maintenance of sports facilities. Therefore, many facilities are owned by the municipality or the county and rented by local sports clubs which is another distinctive feature between sports and other non-profit organizations that lead to different adaptions of OC.

5.2 Multiple Regression

The multiple regression is conducted to examine the causes of problems through OC. Here, OC explains 29.6 percent of the variance in organizational problems. Although the intended explained variance proportion should be as high as possible (Urban & Mayerl, 2018), the given R^2 enables broad statements about the emergence and relevance of problems in organizations. The literature review offers an insight into the variety of different predictors that may influence the development within sports clubs. Because the present regression model is only an approximate representation of reality, many predictors that were found to be important in other studies were excluded. The literature review already mentions several aspects such as community size, enthusiastic volunteers, and diversity of revenue sources that could also have a significant impact on the sum of the problems (Doherty et al., 2013; Misener & Doherty, 2009; Wicker & Breuer, 2012). Nevertheless, the chosen items account for nearly a third of the variance indicating that OC might be useful to depict the problems in sports clubs.

Surprisingly, the interdependency between human resources and other organizational aspects, mentioned in chapter 2.3, does not lead to critical multicollinearity among the explaining variables. Accordingly, although the number of members is dependent on a number of other variables and the board members are considered to have influence on other variables, the multicollinearity consideration reveals no significant relation between club size on the one side and structural variables on the other side.

The multiple regression shows that there is no entire capacity dimension that can be used as predictor for organizational problems. Therefore, the following chapter is concerned with single items that were found to be relevant.

A study by Wicker and Breuer (2012) examines the relationship between OC and separate organizational problems, providing initial evidence that the framework is appropriate for looking at sports clubs in more detail. The difference with the present study is that the authors of the mentioned study conduct the multiple regression on four different problems individually (retention of members, recruitment and retention of volunteers, recruitment and retention of trainers and coaches, and finances) rather than on the sum of the problems. The multiple regression models identify various variables that significantly affect each problem, but the amount of variance measured is lower (between .049 finances and .108 member retention). Although the authors chose a different approach to examine the relationship between OC and organizational problems, the results are reasonably consistent. This correspondence can be seen in the descriptive data and the quality of the multiple regression shown by the significance and the explained variance. However, the different interpretations of the capacity dimensions and the deviating variables chosen to capture each dimension reduce the comparability of studies using OC.

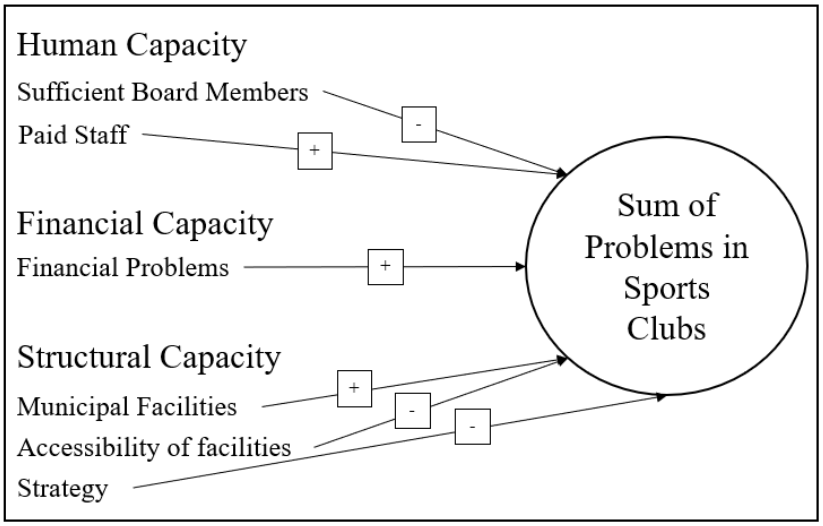
To identify causes for the problems faced by the organizations, six items were found to have a significant impact. Thereby, strategic planning and financial stability or financial problems have the most considerable influence on problems within sports clubs. This corresponds to previous research stating that strategic planning is closely associated with successful development and future orientation and the reduction of organizational problems (Fink, 2020; Flatau & Fuchs, 2017; Svensson et al., 2017; Wicker & Breuer, 2012). The strategy of a sports club is based on its characteristics, its environment and interests of its members and requires extensive knowledge on the part of those in charge (Fink, 2020). The strategic orientation capitalizes on strengths in order to increase strategic competitiveness and contribute to the reduction of organizational problems), explaining the link between low problems and strategy (Fink, 2020, p. 101).

In addition, financial resources are described as a secondary condition for the functioning of the sports club highlighting their relevance (Wicker, 2017a). Since, for example, volunteers receive an expense allowance, sports facilities cause maintenance and operating costs or require user fees, and new sports equipment can only be purchased if sufficient financial resources are available, there are various links between finances and

problems (Breuer & Feiler, 2019b). Although this study uses only one subjective factor to measure financial capability, it is assumed that the person responsible for completing the survey has the necessary knowledge to obtain an overview of the financial situation.

The regression results show that different capacities or variables represent causes for the problems in sports clubs. With respect to the multi-level analysis, it is demonstrated that predictors of the problems can be found at all three levels. While human resources represent the link between the micro and meso levels, financial resources and strategy primarily impact or are derived from the meso level. In conclusion, the provision and the accessibility of (municipal) facilities represent the macro level, in particular, the community. The variables or factors that have a significant impact on the problems are shown in figure 3. In the following, the influence of the individual items and subsequently the influence of the capacities are discussed.

Figure 3: Significant Predictors of Problems in Sports Clubs[6], own presentation



Initially, a sufficient number of board members have been shown to be a significant predictor of success, as evidenced in previous studies. Thieme et al. (2017) examined the necessity of sufficient board members to ensure that all tasks are covered and work can be divided. The key position of board members is explained by their broad area of responsibilities since they not only represent the organization but operate as managers of the sports club (§27 BGB). In summary, board members bear great responsibility and accordingly, have a significant influence on problems (Thieme et al., 2017). Nonetheless, the result indicates that the presence of paid staff increases the sum of problems, which

[6] The indicated direction of the influence is not based on the calculated coefficient from the multiple regression, but on the causal interpretation of the values.

contradicts previous findings, as Wicker and Breuer (2012) suggest sports clubs create paid positions to relieve the burden on board members. Although paid staff has been shown to be a result of growing organizations and professionalization, and thus could be interpreted as an indicator of success (Heinemann & Horch, 1981), this can also be a sign of volunteers being overworked (Cuskelly, 2004). Increasing membership leads to different heterogeneous interests that increase complexity, which can be an explanation for the positive correlation between problems and paid employees.

Regarding the dimension of infrastructure and process capacity, it was shown that the use of municipal facilities increases the problems of the considered organizations. Again, the first thought could be that the provision of municipal facilities is positive for sports clubs, since own facilities cause high construction and maintenance costs. On the other hand, the provision of facilities can also lead to problems, as these facilities are often not used exclusively by one organization, but are used (in parallel) by several local sports clubs through the allocation of times by the municipality. All-day schools reduce the available time slots since (public) schools assert a privileged right to use the facilities (Wicker & Breuer, 2012). This assumption is supported by the availability of facilities negatively influencing problems. Moreover, Wicker and Breuer (2012) consider the location of municipal facilities to be problematic since they are typically located next to a school which might lead to long travel times for elder club members.

Surprisingly, the proportion of secondary volunteers standardized coefficient (Beta) = .020, p = .603) and the proportion of central volunteers (Beta = -.004, p = .918) does not have a significant impact on the severity of problems in sports clubs. Furthermore, neither club size nor variables capturing process, network and relationship capacity appear to have a significant impact on the problems. The low focus on networking, which is already shown by the high proportion of sports clubs without cooperation, is also reflected in the low and non-significant values in the multiple regression. The complexity created by increasing memberships, which was hypothesized to explain the relationship between paid staff and the dependent variable, is not further supported because the size of the club (Beta = -.004, p = .951) and the number of divisions (Beta = .009, p = .863) do not significantly influence problems. Possibly, the monetary benefits and support services from umbrella organizations and professional associations as well as from the municipalities are large enough to compensate for the disadvantages resulting from the complexity. This is supported by previous studies since bigger sports clubs are more likely to receive support services (Hovemann et al., 2007).

Therefore, the negative influence of paid employees on club problems is attributable to other causes. The first wave of the SEB examined paid staff in sports clubs and identified multiple problems related to paid staff (Horch et al., 2007). There, difficulties in financing the positions as well as staff shortage and lack of qualifications are mentioned above all. There are also legal and insurance-related problems as well as conflicts between paid and volunteer staff. In contrast, the evaluation of the communication within boards, which is only marginally higher than the selected alpha error, further indicates the relationship between a well-cooperating board and the perceived relevance of the problems (Beta = - .071, p = .055).

In summary, the multiple regression shows that sports clubs' problems are significantly influenced by the organization's board of directors, financial stability, definition of a long-term plan, and infrastructural conditions. This partially highlights the primary assumption of the OC framework, which identifies human resources as central to the performance of sports clubs.

6 Conclusion

This work aims to bridge the gap between the development of Hall et al.'s (2003) organizational capacity framework and its application to organizations. It also intends identifying causes that influence the severity of problems in sports clubs. This chapter is concerned with a concluding review on the results that can be taken from the multiple regression and its implications. Besides the differences of NPOs that can be seen in regard to relevance of members and financial sources, the user's focus leads to the customization of the framework. While this study examines the organizations from an external point of view and thus focuses on comparability, an internal application might put the focus on different factors. In summary, a targeted adaption of the framework is necessary to include the distinctive features of the considered type of organization and to set and individual focus.

The multiple regression model achieves moderate variance resolution in the sum of problems in sports clubs (R^2 = .296), possibly resulting from the exclusion of factors that influence an organization's performance in order to maintain clarity. Moreover, it is assumed that individual items have influence on some sports clubs while other sports clubs are not affected by them. For example, organizations that use their own sports facilities are likely to be less influenced by other local sports clubs than organizations that

rely on the provision of municipal facilities and thus compete with other sports clubs. Since the variance resolution is only moderate, further research is needed to determine a more comparable version of the organizational capacity framework.

Several researchers used OC to identify key performance indicators for the sports clubs themselves, the integration in disability clubs and voluntary engagement (Doherty & Cuskelly, 2020; Kitchin & Crossin, 2018; Swierzy et al., 2019). This work provides further evidence that categorizing the organization into different capacity dimensions can be purposeful in examining the causes or predictors of problems. While Wicker and Breuer (2012) apply the approach by focusing on cultural resources or the values and goals of sports clubs, the present regression analysis refers to the original five dimensions of capacity (Hall et al., 2003) and examines the relationship between problems and network and process capacity. Although no complete dimension proved significant in explaining the sum of problems in sports clubs, the relevance of items capturing human resources and, in particular, the board of directors is confirmed even when process and network capacity variables, which have not been shown to have a significant influence, are included.

The continued importance of the board of directors is emphasized by the essential contribution of financial stability and strategy setting, which are primarily maintained or created by the members of the board. Consistent with previous literature, number of members has no significant impact on problems in sports clubs. The complexity, because of the increasingly heterogeneous interests of growing membership and the number of divisions (Flatau & Fuchs, 2017) are not found to be important drivers for organizational problems.

Since the significant contribution of infrastructural aspects is partly due to environmental conditions, this regression provides further evidence of the relevance of the use of external resources for sports clubs. As written in chapter 2.2.2, the environment is supposed to have significant influence on decisions of individuals which in turn affect the organization (Nagel, 2007). In summary, the most effective strategy to reduce problems in sports clubs is to have a sufficient number of board members who cooperate well, value financial security, strategic direction and access to sports facilities.

6.1 Limitations

The following chapter is concerned with outlining the weaknesses of this study that limit the expressiveness and practical implications. These result from missing predictors,

weaknesses of the theory, and possible survey bias. The first limitation is based on the heuristic framework of OC that was derived from a model to examine intellectual capital (Hall et al., 2003). Although the framework builds on the resource-based view, it has not yet gained widespread acceptance in the scientific community that examines non-profit organizations. The aspect of applicability to the researcher's preference, which might represent an advantage, can also be seen as a disadvantage due to the lack of comparability, since no standardized definition of variables has yet been established. Furthermore, the more or less subjective determination of the considered variables can lead to the possibility that significant predictors were omitted from the survey.

With regard to the variables applied here, it should be noted that financial capacity is captured exclusively through the subjective perception by board members of financial problems in their clubs. Although, there are various difficulties in using objective measures, using only financial problems cannot capture the wide extent of financial capability. However, the survey was originally conducted for a different purpose, so no other predictors could be included and the work therefore has limited explanatory power at this point.

In addition, it is reported that the structures of sports clubs are complex and interdependent. While financial problems are used here as an independent variable to predict problems in sports clubs, in previous research it was used as a dependent variable (Wicker & Breuer, 2012). In addition, it was found that vacant board positions in turn depend on a variety of different factors (Thieme et al., 2017). Although there is no multicollinearity, several variables or entire capacity dimension are dependent on human resources. The multiple regression results support this assumption, as board members in particular were found to be important drivers of organizational problems. This finding could be caused by the lack of consideration of mediator variables.

Previous multi-level analyses highlight the influences that environmental aspects and members have on sports clubs (Nagel, 2007). The survey data used for this work did not include data collected directly from members, such as satisfaction with various aspects or willingness to volunteer. The available data thus reflect the perceptions of the person responsible for providing the data and can therefore only be understood as a general insight into the organization in the area of members. Since municipality size data were not available and a subsequent regional assignment of the clubs was not possible because of the lack of information about which municipality or city is responsible for the sports

clubs, data on the municipality such as population size and development, settlement patterns, or financial situation were not included in the multiple regression model.

Another limitation to the validity of the data results from the method of data collection. In order to reflect the resources and the problems of the sports clubs, survey results are used, where the ratings are based on the subjective perception of the responsible person. This self-reporting may lead to biases in the responses, which could be amplified by the fact that SBR was the client of the initial study. Accordingly, it is possible for the sports clubs to portray themselves more favorably than is in fact the case, to try to demonstrate strength. On the other hand, they might overstate the seriousness of an issue in order to draw the attention of the umbrella organization to a particular aspect or to emphasize the importance of funding programs (Thieme et al., 2017).

Since data collection was limited to sports clubs in the Rhineland, implications on other organizations have to be drawn with caution. Although, number of memberships do not deviate compared to German sports clubs, other structural data such as the number of inhabitants or settlement structures is not considered here.

In terms of methodological considerations, the use of Likert items as predictors may reduce validity because of the limited choices available. However, individual Likert items have become established in social research, so this limitation has no further consequences for the comparison with previous studies. Nevertheless, the multiple regression results show that the selected variables explain only slightly more than a quarter of the variance in the problems. The modest explanatory power of the model is an indicator of the complexity in sports clubs and the need for further research. This is again supported by the small number of predictors that have a significant impact on organizational problems.

In summary, the survey provides information about the status quo in the sports clubs of the Rhineland, so that the development of resources and problems cannot be recorded. Although longitudinal data, that allow examination of trends is available here, it was not possible to look at sports clubs over time because the previous surveys did not include the same questions. In addition, the results of a recent survey are not yet available. Given the current situation around the Covid 19 pandemic, it is also likely that several aspects have changed, so the practical implications should be considered with caution.

6.2 Practical Implications

Several practical implications can be derived from the results of this multiple regression. While the focus is on sports clubs, the results also showed practical implications relevant outside of the organizations. Altogether, the organizational capacity framework proved to be an appropriate approach to identify critical resources. The possibility of customization leads to the recommendation that the framework can be applied by sports clubs themselves to identify strengths and weaknesses. As written earlier, the framework can be used to set priorities for the development of the organization and thus determine a long-term strategy.

In addition, the regression model reveals that several resources significantly contribute to the severity of problems. This implies that focusing these aspects can significantly contribute to the reduction of general problems in the organization, thereby increasing performance. However, this implication is under the assumption that organizations with less severe problems will perform more effectively and thus be more successful (Geisinger & Hoepfner, 2008).

First, sports clubs should be aware of the relevance of the executive board (Wadsack, 2017), as the results imply that board members do more than solely represent the club as assigned by law (§27 BGB). It is therefore advisable to seek (junior) board members at an early stage. Since the boards of sports clubs are usually recruited from the ranks of existing members (Thieme et al., 2017), the current board should introduce potential candidates to the position as soon as one board member is about to leave. The results of the regression model indicate that well-cooperating board members may be an indicator of reduced problems, which reinforces the need to determine a suitable successor, since communication within board members is a critical aspect of an efficiently functioning board.

Second, sports clubs should implement long-term strategies that act as guidelines for strategic and executive officers, as well as for all members. Small sports clubs in particular may fear the workload that comes with setting a strategy, as these clubs tend to unite a homogeneous group of members. Nonetheless, long-term planning can guide any club, as it has been shown to reduce problems as they arise. The third recommendation, which is particularly relevant for larger sports clubs, ties in with this. Since the presence of paid staff is associated with severer problems that do not arise from the complexity of increasing heterogeneity, sports clubs should take care of the financing of the positions

and invest time in the training of paid staff, as these have been identified as significant problems. In addition, involving all members in the process and clearly separating the duties of full-time and volunteer staff can prevent disagreements and discussions and increase acceptance.

Fourth, organizations are encouraged to gain a differentiated view of their finances, as financial stability maintains organizational performance. Financial problems can be prevented by diversifying different sources or identifying core revenues. In order to evaluate the diversification of financing, which turns out to be stabilized finances, the Herfindahl index can be used (Carroll & Stater, 2009; Wicker & Breuer, 2012). This also enables the sports club to think about other sources of income at an early stage, if necessary.

Since sports facilities are another critical resource for the performance of sports clubs, a focus should be placed here. The construction of new sports facilities can rarely be financed solely by an organization, as clubs are usually barely able to cover the maintenance costs and therefore rely on municipal provision. Therefore, it is advisable that board members seek to engage with their local communities, for example, to identify municipal facilities they can use or to reduce conflict arising from shared facilities. Although municipalities equally rely on financial subsidies to strengthen sports infrastructure, problems with the availability of a sports facility could be reduced through agreements or occupancy analyses.

Subsequently, this work provides implications for municipalities. As the multiple regression shows, infrastructural conditions contribute to the severity of problems for sports clubs. Accordingly, the need for municipal support of sports clubs through conversations and monetary support services, and thus ultimately further state support for sports, is emphasized.

The final addressee of the implications is the SBR as the representative body and contact partner for the clubs in the Rhineland. As part of the offered services, support for (potential) board members and information about monetary support offers for sports facilities should be offered in particular. In addition, because the organizational capacity framework has been shown to identify critical resources in sports clubs, the SBR is encouraged to foster its sports clubs to apply the framework internally or to use it as part of consulting services.

6.3 Future Research

Because of the previously described limitations of this study, further research is needed to understand the structural characteristics and their influence on organizational problems or performance of sports clubs. Briefly, scientific studies of sports clubs agree on the complex interdependence of various resources. Therefore, further research should focus on determining a unified framework of OC that allows for comparison of studies in order to further develop the approach. Nevertheless, the heuristic based on the five dimensions can be useful for considerations that have a focal point. In addition, the applicability could be further explored through qualitative methods, such as expert interviews, or hybrid methods to evaluate the internal use within sports clubs (Edmondson & Mcmanus, 2007).

Furthermore, researchers should include predictors from various levels, as shown in the multilevel analysis. The consideration of organizations outside of sports clubs or the non-profit sector can broaden the view of possible additional predictors. Moreover, environmental aspects as well as data from independent members might increase the understanding of sports clubs. This captures the multidimensionality of membership-based organizations and the interdependence of different variables, which is important for organizational effectiveness (Chelladurai, 1987). In most cases, longitudinal studies would provide more meaningful data on the emergence of problems and club structures, leading to the identification of individual predictors responsible for the reduction or increase in problems. To date, there is no approach, heuristic, or model universally accepted to capture sports clubs and their performance. Because this study delivers only a minor contribution to the understanding organizations, future research should examine performance, operations and logics of decisions in sports clubs.

With regard to the results provided here, further research could investigate the lack of cooperation among sports clubs in the Rhineland, as a significant discrepancy with sports clubs throughout Germany was evident here. Moreover, this study contradicts previous findings about paid staff that were taken from survey depicting the German club landscape. Based on the demonstrated deviations, upcoming research with a focus on the Rhineland should investigate the relevance of paid employees. Furthermore, the factors that lead to the presence of paid employees being perceived as positive should be identified.

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Appendix

Appendix 1 - Human Resource Capacity

HR3 - Paid Staff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	789	78.9	79.6	79.6
	Yes (full or part time)	202	20.2	20.4	100.0
	Total	991	99.1	100.0	
Missing	999	9	.9		
Total		1000	100.0		

HR4 - Sufficient Board members

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No, not all required positions are occupied.	160	16.0	16.2	16.2
	Yes, all required positions are occupied	825	82.5	83.8	100.0
	Total	985	98.5	100.0	
Missing	999	15	1.5		
Total		1000	100.0		

HR6 - Social event

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not chosen	271	27.1	27.1	27.1
	Yes	729	72.9	72.9	100.0
	Total	1000	100.0	100.0	

Appendix 2 - Financial Capacity

F1 - Financial problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A very big problem	31	3.1	3.2	3.2
	A big problem	53	5.3	5.4	8.6
	A medium problem	179	17.9	18.3	26.9
	A small problem	237	23.7	24.3	51.2
	No problem	476	47.6	48.8	100.0
	Total	976	97.6	100.0	
Missing	999	24	2.4		
Total		1000	100.0		

Appendix 3 - Infrastructure and Process Capacity

I1 - Own facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	523	52.3	52.7	52.7
	Yes	469	46.9	47.3	100.0
	Total	992	99.2	100.0	
Missing	999	8	.8		
Total		1000	100.0		

I2 - Municipal facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	333	33.3	33.6	33.6
	Yes	659	65.9	66.4	100.0
	Total	992	99.2	100.0	
Missing	999	8	.8		
Total		1000	100.0		

I3 - Accessibility of facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Deficient	332	33.2	34.2	34.2
	Sufficient	139	13.9	14.3	48.6
	Satisfactory	221	22.1	22.8	71.3
	Good	222	22.2	22.9	94.2
	Very good	56	5.6	5.8	100.0
	Total	970	97.0	100.0	
Missing	999	30	3.0		
Total		1000	100.0		

I4 - Multisport (Number of different divisions within the club)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	29	2.9	3.0	3.0
	1	412	41.2	43.2	46.2
	2	142	14.2	14.9	61.1
	3	116	11.6	12.2	73.3
	4	75	7.5	7.9	81.1
	5	48	4.8	5.0	86.2
	6	35	3.5	3.7	89.8
	7	18	1.8	1.9	91.7
	8	12	1.2	1.3	93.0
	9	10	1.0	1.0	94.0
	10	17	1.7	1.8	95.8
	11	7	.7	.7	96.5
	12	10	1.0	1.0	97.6
	13	3	.3	.3	97.9
	14	3	.3	.3	98.2
	15	4	.4	.4	98.6
	16	3	.3	.3	99.0
	17	2	.2	.2	99.2
	18	1	.1	.1	99.3
	21	2	.2	.2	99.5
	23	2	.2	.2	99.7
	25	1	.1	.1	99.8
	26	1	.1	.1	99.9
	30	1	.1	.1	100.0
	Total	954	95.4	100.0	
Missing	999	46	4.6		
Total		1000	100.0		

I5 - Communication within board

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Deficient	11	1.1	1.1	1.1
	Sufficient	20	2.0	2.1	3.2
	Satisfactory	148	14.8	15.3	18.5
	Good	492	49.2	50.7	69.2
	Very good	299	29.9	30.8	100.0
	Total	970	97.0	100.0	
Missing	999	30	3.0		
Total		1000	100.0		

Appendix 4 - Network and Relationship Capacity

Does the club have cooperation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	531	53.1	54.1	54.1
	yes	450	45.0	45.9	100.0
	Total	981	98.1	100.0	
Missing	999	19	1.9		
Total		1000	100.0		

N1 - Cooperation with another sports club

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not chosen	678	67.8	67.8	67.8
	Yes	322	32.2	32.2	100.0
	Total	1000	100.0	100.0	

N2 - Cooperation with school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not chosen	781	78.1	78.1	78.1
	Yes	219	21.9	21.9	100.0
	Total	1000	100.0	100.0	

N3 - Cooperation with commercial sport provider

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not chosen	960	96.0	96.0	96.0
	Yes	40	4.0	4.0	100.0
	Total	1000	100.0	100.0	

N4 - Cooperation with kindergarten

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not chosen	932	93.2	93.2	93.2
	Yes	68	6.8	6.8	100.0
	Total	1000	100.0	100.0	

N5 - Cooperation with youth organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not chosen	952	95.2	95.2	95.2
	Yes	48	4.8	4.8	100.0
	Total	1000	100.0	100.0	

Appendix 5 - Planning & Development Capacity

S1 - Score Planning & Development - Relevance of strategic development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	6	.6	.6	.6
	4	11	1.1	1.2	1.8
	5	24	2.4	2.5	4.3
	6	46	4.6	4.9	9.2
	7	92	9.2	9.7	19.0
	8	111	11.1	11.8	30.7
	9	126	12.6	13.3	44.1
	10	124	12.4	13.1	57.2
	11	139	13.9	14.7	71.9
	12	121	12.1	12.8	84.7
	13	77	7.7	8.2	92.9
	14	32	3.2	3.4	96.3
	15	35	3.5	3.7	100.0
	Total	944	94.4	100.0	
Missing	999	56	5.6		
Total		1000	100.0		

Appendix 6 - Score Problems

Prob_Score - Score Problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	11	1.1	1.2	1.2
	8	9	.9	1.0	2.2
	9	15	1.5	1.6	3.8
	10	20	2.0	2.2	6.0
	11	30	3.0	3.3	9.2
	12	37	3.7	4.0	13.2
	13	31	3.1	3.4	16.6
	14	33	3.3	3.6	20.2
	15	58	5.8	6.3	26.5
	16	54	5.4	5.9	32.4
	17	74	7.4	8.0	40.4
	18	65	6.5	7.1	47.4
	19	67	6.7	7.3	54.7
	20	70	7.0	7.6	62.3
	21	74	7.4	8.0	70.4
	22	60	6.0	6.5	76.9
	23	60	6.0	6.5	83.4
	24	37	3.7	4.0	87.4
	25	38	3.8	4.1	91.5
	26	20	2.0	2.2	93.7
	27	28	2.8	3.0	96.7
	28	12	1.2	1.3	98.0
	29	8	.8	.9	98.9
	30	3	.3	.3	99.2
	31	2	.2	.2	99.5
	32	3	.3	.3	99.8
	33	2	.2	.2	100.0
	Total	921	92.1	100.0	
Missing	999	79	7.9		
Total		1000	100.0		

Appendix 7 - Individual Problems

Statistics

		P1 – Recruitment of Members	P2 – Retention of Members	P3 - Retention/ Recruitment of Voluntary Officials	P4 - Retention/ Recruitment of Trainers and Instructors	P5 - Availability of Sports Facilities	P6 - Competition from other Recreational and Commercial Sports Providers	P7 - Restrictions due to All-Day Schools
N	Valid	982	973	974	960	976	973	964
	Missing	18	27	26	40	24	27	36
Mean		2.91	2.65	3.56	3.16	1.95	2.46	2.01
Median		3.00	3.00	4.00	3.00	2.00	2.00	2.00
Mode		3	3	4	4	1	1	1
Std. Deviation		1.309	1.113	1.203	1.283	1.179	1.211	1.210
Variance		1.713	1.239	1.447	1.647	1.389	1.467	1.464
Minimum		1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5

Appendix 8 - Multiple Regression Coefficients Confidence Interval

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	32.360	1.269		25.499	.000	29.868	34.852		
	Club_size	-0.000051	.001	-.004	-.062	.951	-.002	.002	.346	2.888
	HR1	-.215	2.094	-.004	-.102	.918	-4.326	3.897	.722	1.384
	HR2	.461	.887	.020	.520	.603	-1.280	2.202	.785	1.273
	HR3	1.433	.453	.122	3.162	.002	.543	2.323	.766	1.306
	HR4	-1.405	.471	-.103	-2.982	.003	-2.329	-.480	.957	1.045
	HR5	.401	.703	.020	.571	.568	-.978	1.781	.903	1.107
	HR6	.119	.404	.010	.294	.769	-.674	.912	.937	1.067
	F1	-1.371	.166	-.299	-8.253	.000	-1.697	-1.045	.871	1.149
	I1	.306	.393	.031	.778	.437	-.466	1.078	.718	1.393
	I2	1.294	.427	.121	3.035	.003	.457	2.132	.716	1.397
	I3	-.385	.131	-.104	-2.944	.003	-.643	-.128	.924	1.082
	I4	.011	.066	.009	.173	.863	-.118	.140	.452	2.211
	I5	-.444	.231	-.071	-1.921	.055	-.897	.010	.839	1.192
	N1	-.460	.389	-.045	-1.185	.237	-1.224	.303	.794	1.259
	N2	.858	.468	.076	1.833	.067	-.061	1.778	.665	1.504
	N3	.416	.896	.016	.465	.642	-1.342	2.175	.913	1.095
	N4	-.259	.681	-.014	-.380	.704	-1.595	1.078	.824	1.214
	N5	-.590	.744	-.028	-.794	.428	-2.051	.870	.890	1.123
	S1	-.572	.075	-.288	-7.623	.000	-.719	-.424	.805	1.242

a. Dependent Variable: Score problems