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Insights on the impact of COVID-19 and the lockdown on amateur golfers

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Abstract

The aim of the research paper is to evaluate how golfers feel about the lockdown, what they did with regard to golf during the lockdown and to what extent they understand the closure of golf courses. A standardized online questionnaire was designed for the primary empirical investigation. In total, 139 respondents completely filled out the questionnaires and were considered in our analyses. The results show that the officially ordered lockdown did not have a large impact on golfers but had at least a medium-to-increased negative influence on their favourite sport of golf. The closure of the golf courses during the lockdown led to a moderate level of approval. The length of the closure tends to be viewed negatively. Despite the problems that golf can expect in the short term, golf as a health- and well-being-promoting sport and a sport that offers natural experiences could benefit from COVID-19 in the medium to long term.

Keywords: Corona, golf management, outdoor sport, nature, health, COVID-19

Introduction

COVID-19 turned the national and international sports world upside down almost overnight and probably caused the largest (market) shock that sports have had to deal with so far. After some sports leagues tried to exclude spectators, professional sports had to cancel or postpone all events to reduce transmission through close contact among spectators or athletes (Clarkson, Culvin, Pope, & Parry, 2020; Toresdahl & Asif, 2020). For example, the Olympic Games in Tokyo, the European Football Championships and the Ryder Cup in golf fell victim to COVID-19. All of these mega sport events have been postponed for a year. This was in response to mass gatherings, whether for music, religion or sport, contributing to the spread of the coronavirus (Memish et al., 2019). Additionally, nonprofit amateur sport clubs had to close immediately, in many cases mid-season, to comply with physical distancing and shelter-in-place restrictions due to the COVID-19 pandemic (Doherty, Millar, & Misener, 2020).

In addition to the sports associations and clubs, the athletes themselves are also suffering from the pandemic. In addition to professional athletes who, for example, trained for the Olympic Games for years, recreational athletes are also particularly affected by COVID-19. The immediate impact of cancelled training, practices, competitions and tournaments was felt by grassroots sport club participants as well as their families, who also lost a key part of their regular social networks (Strashin, 2020). In general, various health and well-being benefits exist resulting from the participation in physical activity and sports-related activities (Bo Andersen et al., 2000; Saxena et al., 2005; O'Donovan et al., 2010). There is a significant risk regarding the lockdown that concerns the potential

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decline in physical activity and sports-related activities. Pfefferbaum and North (2020) underline that the lockdown will contribute to widespread emotional distress and increased risk for psychiatric illness associated with Covid-19. Also, the COVID-19 pandemic could influence existing mental health problems and lead to more cases among children and adolescents (Golberstein, Wen, & Miller, 2020), for whom sport can otherwise be an important anchor. Torales et al. (2020) add that the emerging mental health issues related to this global event may evolve into long-lasting health problems, isolation and stigma. Consequently, the lockdown can have a detrimental effect on health and well-being such as coronary heart disease, obesity, stress, social isolation, negative emotions, and sleep quality (Ellingson et al., 2018; Lippi et al., 2020a, b; Ricci et al., 2020). Therefore, Torales et al. (2020) propose that global health measures should be employed to address other health-related factors among the general population. However, initial trends show that sports can also benefit from the current restrictions, at least in the medium to long term (Weed, 2020). As a result, recreational athletes have tried to spend even more time outdoors in nature and to be active there beyond their everyday movements, which have been far more curtailed than usual after people in many countries were barely allowed to leave their homes during the lockdown. Second, Weed (2020) identifies a growing understanding on the part of politics about the importance of sport and physical activity for the health and the well-being of athletes. The megatrend regarding health and well-being is likely to have been strengthened by COVID-19, so sports, as a key promoter of human health, could benefit from it as a result – at least in the long run.

One sport that could benefit from these nascent developments is golf as the sport has major advantages in the current situation. First, golf is played outdoors in an area that measures several hectares. Second, it is also contactless. As social distancing is a current need until a drug or a vaccine becomes available (Ebrahim et al., 2020; Pandey et al., 2014), this is a great advantage for golf. Furthermore, a maximum of four people play together on a given golf hole that measures several hundred metres. This shows that a sport such as golf is favourable in times like these, when social distance is to be maintained as far as possible. Fourth, golf enables natural experiences. In this context, it is worth mentioning that the well-being impact of sports is greater in natural green spaces than in urban areas (Barton et al., 2016; Weed, 2020). However, outdoor sport is often criticized by the general public for misusing nature for its own purposes (Briassoulis, 2010; Hartmann, 1988). In the context of golf, the construction of facilities, surface transformations and different maintenance measures on a golf course have a significant impact on the ecological system (Rosenberg, 2018; Schemel & Erbgut, 2000). However, common prejudices that golf courses pollute the environment have also been reduced in recent years, as different studies demonstrate that golf courses offer several advantages to nature and the environment (Huth, 2017a). Additionally, a number of organizations have created initiatives to make golf eco-friendly (Rosenberg, 2018). In this line, environmental certificates have helped golf by changing its image as nature destroyer (Huth, 2017b).

In addition to the trend towards a stronger connection with nature and the increasing role of natural experiences, the trend of health and well-being has also played an increasingly important role for several years. The best available evidence suggests golf is associated with overall improved health, and has well-being benefits (Murray et al., 2017; 2018). As golf has, in contrast to most sports, higher participation among middle-aged and older adults, the possibility of playing golf across the lifespan is an important asset for this sport (Ainsworth et al., 2011; Murray et al., 2017). Therefore, golf is an excellent example of moderate intensity activity for older populations (Ainsworth et al., 2011). Additionally, golf requires social engagement—both on the course and off it—and,

consequently, increases well-being (Stenner, Mosewich, & Buckley, 2016; Wood & Danylchuk, 2011). In this context, Sorbie et al. (2020) show that golfers scored significantly higher on social trust and personal well-being compared with nongolfers. Overall, golf can provide moderate-intensity physical activity and is associated with longevity, physical health and wellness benefits (Murray et al., 2017). Prospective longitudinal studies report only low injury rates compared with other sports (Parkkari et al., 2000; 2004).

The different perspectives and explanations clearly show that golf can make an important contribution to encouraging people to be active and play sports even during a pandemic. However, the lockdown ordered by the authorities in spring 2020 also affected golf, so golf clubs were not allowed to let golfers on the golf course for several weeks. As a result, the economic situation in many golf clubs deteriorated further. Even before the COVID-19 pandemic, approximately 50% of commercially run golf courses were losing money (Billion, 2020a). According to initial estimates by Billion (2020b), the lockdown might have resulted in economic damage of approximately €1,000 per day. Golf courses are among the most expensive facilities for mass sports participation, with high fixed costs for maintenance that typically amounts to more than 50% of the total costs (Billion, 2019, Huth & Kurscheidt, 2019). For this reason, the golf clubs tried to generate at least a little income during the lockdown by selling various vouchers, such as green fees, training or catering to their club members and golfers in general (Huth & Billion, 2020). The clubs hoped for the solidarity of both groups. At the same time, golfers were forced to reschedule their sporting activities during the lockdown.

The aim of this article is to evaluate (1) how golfers feel about the lockdown, (2) what they did with regard to golf during the lockdown and (3) to what extent they understand the closure of golf courses. Additionally, the golfers are asked about the two outlined developments nature (experience) as well as health and well-being in the context of golf. We opted for the German golf market because it is one of the most important golf markets in Europe with the most golfers in absolute terms together with England. With the help of correlation analyses, it should also be shown to what extent sport-related and socio-demographic factors played a role in answering the three central questions. The results should help classify what the golfers did alternatively with regard to sporting activities during the lockdown. With the help of the results of this study, the golf clubs can also derive strategies as to how members and (potential) guest players can be treated now as well as possible in the future in similarly managed cases. Bearing in mind the economically tense situation of many golf clubs, knowledge about the behaviour of consumers can be of key importance.

The initial sport management-related contributions addressed the topic of sports and COVID-19 from a commenting perspective and made a preliminary classification of the consequences (e.g., Clarkson et al., 2020; Doherty et al., 2020; Parnell, Widdop, Bond, & Wilson, 2020; Parnell, Bond, Widdop, & Cockayne, 2002). Our contribution approaches the topic empirically. Additionally, the first contributions focused exclusively on team sports, especially soccer. We dedicate ourselves, for the first time, to an individual sport in the context of COVID-19 in this article.

The article is structured as follows: First, we describe the methodology. Afterwards, the results are presented and discussed. Recommendations for action are also formulated within the discussion and the conclusion. Here, social developments are also considered, which could potentially boost golf despite COVID-19, provided that these are considered by various stakeholders in the golf business. Finally, we raise questions and topics for future research projects.

Methods

The study follows a primary empirical research design that focuses on active golfers in Germany. A standardized online questionnaire was designed for the primary empirical investigation, and for time and cost reasons, it was placed online via the Qualtrics survey tool (Fowler, 2014; Li, Pitts, & Quarterman, 2008; Wright, 2005). In line with the central research questions presented above, the questionnaire can be roughly divided into five parts:

- 1) Personal golf-specific questions about handicap, membership and game frequency
- 2) Personal golf-specific consequences of the COVID-19 lockdown
- 3) Questions about golf-related activities during the COVID-19 lockdown
- 4) General golf-specific questions about the COVID-19 lockdown and the positioning of golf in the future
- 5) Sociodemographic data of the participants

In the first part of the questionnaire, the participants answered (1) how many times per week they had played golf in 2019 [GPW], (2) whether [HCP] and, if so, what handicap they had [HCP_CUR] and (3) whether they were members of a golf club [MEMBER].

In the next section, participants indicated to what extent different statements about the COVID-19-related lockdown applied to them. First, it was asked to what extent the COVID-19 lockdown had a negative impact on their golfing [LOCKDOWN_NEGGOLF]. The second statement was as follows: *During the lockdown, I did other sports (e.g., cycling, jogging, hiking) more often* [LOCKDOWN_OTHERSPO]. This was followed by five statements: *Despite the lockdown, I felt physically fit* [LOCKDOWN_PHYFIT]; *Despite the lockdown, I felt mentally fit* [LOCKDOWN_MENTFIT]; *I gained weight during the lockdown* [LOCKDOWN_WEIGHT]; *The lockdown burdened me personally* [LOCKDOWN_BURDEN] and *The coronavirus worries me* [COVID_FEAR].

The third part of the questionnaire asked the participants how often they performed golf-related activities during the lockdown. In contrast to many other sports, golf provides opportunities to complete golf-related activities within the home environment. Additionally, a number of golf clubs have launched various campaigns to engage their members despite the quarantine. In addition, the golfers could of course be content with other golf activities. The following activities are considered in the questionnaire: Participated in golf training outside (e.g., golf swing in a net) [ACT_GOLFOUT], participated in indoor golf training (e.g., putting) [ACT_GOLFIND], engaged in golf-specific fitness training (e.g., conditioning or coordination exercises) [ACT_GOLFFIT], engaged in virtual golf training (e.g., Nintendo Wii, virtual reality golf games) [ACT_GOLFVIRTRAI], played golf-related video games (e.g., on PlayStation, Xbox, iPad) [ACT_GOLFVIDGAM], watched golf on TV (e.g., repetitions of tournaments, golf films) [ACT_GOLFTELE], watched online golf training (e.g., training videos on YouTube, Facebook) [ACT_GOLFONLTRAI], listened to golf-related audiobooks or podcasts [ACT_GOLFPOD], read golf-related magazines [ACT_GOLFMAG], visited the home page of their golf club [ACT_GOLFHOME], engaged with golf-related content in social media (e.g., Facebook, Instagram) [ACT_GOLFSOCMEDIA] as well as was involved in actions of the home club (e.g., #HomeChallenge) [ACT_HOMECHALL]. In the questionnaire, the frequencies of the activities were graded as follows: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = daily.

In the third section, the participants first evaluated three questions concerning the COVID-19 lockdown and to what extent they agreed with the statements. The statements are as follows: *The official measure to temporarily close the golf courses was correct* [TEMP_CLOSE_GC]; *The length of the government action to close the golf courses was correct* [LENGTH_CLOSE_GC]; and *It was right that golf showed solidarity with other sports* [SOLIDARITY_GOLF]. In line with the two identified trends or developments that could also have an impact on golf, we considered five statements on this topic: *Golf can be seen as a health sport* [GOLF_HEALTHSPO]; *Golf is good for my health* [GOLF_HEALTHGOOD]; *Golf can be seen as a nature sport* [GOLF_NATURE]; *Golf makes unique nature experiences possible* [GOLF_NATUREEXP]; and *The items "health" and "nature" are a perfect match for golf* [GOLF_NATUREHEALTH].

Finally, the age [AGE], sex [SEX], highest educational level [EDU] and net income [INCOME] of the participants were the sociodemographic data collected in the questionnaire.

To ensure consistent operationalization, 5-point Likert scales were applied throughout the self-perception measurement questions in the survey (Dawes, 2008; Li et al., 2008; Revilla, Saris & Krosnick, 2014).

Focusing on the empirical evaluation of the selected data, descriptive statistics and bivariate results are presented. Values such as the mean, standard deviation, minimum and maximum were calculated for the descriptive statistics. Additionally, we show the results of a pairwise correlation between the presented variables in sections two, three and four of the questionnaires and the golf-related variables GPW and HCP_CUR, as well as the sociodemographic variables AGE, SEX, EDU and INCOME.

The questionnaire tool Qualtrics was used for online sampling. The link was posted to two social media channels, Instagram and Twitter. The questionnaire was administered online for three weeks after the end of the COVID-19 lockdown and the re-opening of golf courses. In total, 139 respondents completely filled out the questionnaires during the survey phase and were considered in our analyses. The average participant played golf 2.63 times per week and had an average current handicap of 23. A total of 98.56% of the participants had a handicap, and 95% were active golf club members. The average participant was nearly 50 years old ($\bar{x} = 49.94$; $s = 14.25$), had completed a university degree and received a net salary between € 2,500 and € 3,500. Finally, 62% of the participants were male.

Results and discussion

The descriptive and bivariate statistics in Table 1 indicate that the lockdown had a medium impact on the active golf of participants ($\bar{x} = 3.57$; $s = 1.46$), whereby frequent golfers were particularly affected, as shown by the significant correlation coefficient. The other variables also show that the lockdown had a medium influence on various factors. While LOCKDOWN_OTHERSPO, LOCKDOWN_PHYFIT, and LOCKDOWN_MENTFIT are slightly above the average value of 3 on the Likert scale, the variables LOCKDOWN_WEIGHT and LOCKDOWN_BURDEN are slightly below 3. The pairwise correlation shows occasionally significant correlation coefficients, which, however, show a rather weak relationship. Finally, this also applies to concerns about the coronavirus.

The results show that the officially ordered lockdown did not have a large impact on golfers but had at least a medium-to-increased negative influence on their favourite

sport of golf. Since the golf courses were closed, the golf game of golfers had to suffer as a result. Thus, not only the golf clubs suffered during the lockdown from an economic point of view (Billion, 2020b) but the golfers who could not practice their sport without restrictions suffered as well. In line with the explanations of Weed (2020), it can be seen that a number of golfers have turned to sports that do not require special sports venues during lockdown. These could be, for example, sporting activities that can be practised directly in nature, such as cycling or running. This could also have contributed to the fact that the majority of the athletes did not experience any physical or mental impairments. The lockdown most likely has had an impact on golfers who regularly play golf. Here, the alternative activities do not seem to have been enough for this group of golfers to offset the lockdown of the golf course.

Table 1: Golf-related activities during the COVID-19 lockdown

	Descriptive results				Pairwise correlation					
	Mean	Stand. Dev.	Min	Max	GPW	HCP_CUR	AGE	SEX	EDU	INC
LOCKDOWN_NEGGOLF	3.57	1.46	1	5	0.2554***	-0.0181	0.0094	-0.0464	0.0150	-0.0089
LOCKDOWN_OTHERSPO	3.48	1.35	1	5	0.0209	0.0237	-0.0676	0.0224	0.0678	-0.0380
LOCKDOWN_PHYFIT	3.53	1.14	1	5	-0.1216	0.1173	.1363	0.0377	0.1235	-0.0142
LOCKDOWN_MENTFIT	3.45	1.12	1	5	-0.1614*	0.0068	0.1290	0.1655*	0.2099**	0.1285
LOCKDOWN_WEIGHT	2.69	1.47	1	5	0.0679	-0.1148	-0.0464	-0.1126	-0.1443*	-0.0934
LOCKDOWN_BURDEN	2.95	1.25	1	5	0.2063**	-0.0488	-0.1450*	-0.1501*	-0.0750	-0.0912
COVID_FEAR	3.08	1.25	1	5	0.1701**	0.0947	0.1596*	-0.0896	0.0483	-0.0377

*p < 0.10, **p < 0.05, ***p < 0.01.

The results of the golf-specific activities that were done during lockdown show that most activities were never or rarely done by the golfers (Table 2). A regular look at the golf club homepage as well as social media were the activities that were done quite regularly. On the other hand, there was almost no virtual training or golf video games played. The only exceptions are for younger golfers, as the pairwise correlation shows. Active golf training—outside or inside—was carried out at least occasionally. Younger male golfers with a low (good) handicap were particularly hard-working on their personal golf game, as the significant coefficients of the pairwise correlation show.

Table 2: Frequency of golf-related activities during the COVID-19 lockdown

	Descriptive results				Pairwise correlation					
	Mean	Stand.Dev.	Min	Max	GPW	HCP_CUR	AGE	SEX	EDU	INC
ACT_GOLFOUT	1.95	1.27	1	5	0.0754	-0.1461*	-0.1994**	0.1471*	-0.1248	-0.1060
ACT_GOLFIND	2.03	1.26	1	5	0.0578	-0.2520***	-0.2276***	0.2243***	0.0087	-0.0757
ACT_GOLFFIT	1.91	1.03	1	5	-0.0335	-0.2133**	-0.0598	0.1761**	-0.0504	-0.0565
ACT_GOLFVIRTRAI	1.19	0.65	1	5	0.0889	-0.0958	-0.2056**	0.1325	-0.1411*	-0.0265
ACT_GOLFVIDGAM	1.19	0.68	1	5	-0.0411	-0.0299	-0.2550***	0.2019**	-0.1956**	-0.0363
ACT_GOLFTELE	1.93	1.08	1	5	0.1101	-0.0906	-0.1733**	0.0862	-0.0537	-0.0312
ACT_GOLFONLTRAI	2.04	1.18	1	5	0.1562*	-0.0691	-0.2896***	0.2614***	-0.1241	-0.1098
ACT_GOLFPODC	1.32	0.67	1	4	-0.0578	-0.0607	-0.1204	0.2215***	-0.0912	-0.1138
ACT_GOLF MAG	2.06	1.13	1	5	0.2138**	-0.1787**	0.0511	0.1429*	0.1422*	0.0944
ACT_GOLFHOME P	3.04	1.11	1	5	0.2072**	0.0156	0.0679	0.0388	-0.0226	0.0944
ACT_GOLFSOC MEDIA	2.93	1.37	1	5	0.1734**	-0.2344***	-0.4750***	0.0573	-0.1175	-0.0732
ACT_HOME CHALL	1.58	1.07	1	5	0.1315	-0.0731	-0.1329	0.0429	-0.1492*	-0.1244

*p < 0.10, **p < 0.05, ***p < 0.01.

The results largely support the results from the above question block. A majority of golfers have come to terms with the lockdown and have—with the exception of younger, male

golfers with an above-average handicap—more or less stopped their active golf. However, this does not mean that the further development of the lockdown did not matter to the players. Regular use of the club's homepage and the golf club's social media channels shows that golfers have informed themselves about the current situation in golf in general and in their golf club in particular.

Finally, Table 3 shows that the closure of the golf courses during the lockdown led to a moderate level of approval. The length of the closure tends to be viewed negatively, with a medium, slightly increased agreement that golf showed solidarity with other sports. Thus, the solidarity with other sports should diminish with the length of the closure of the golf courses. Considering the calculated loss per day for many golf clubs (Billion, 2020b), the German Golf Association—the governing body of golf in Germany—has tried to convince local and national politicians that golf courses—with an appropriate hygiene focus—may open earlier (Golf1.de, 2020). However, this initiative has had little success.

Table 3: COVID-19 lockdown and the positioning of golf in the future

	Descriptive results				Pairwise correlation					
	Mean	Stand.Dev.	Min	Max	GPW	HCP_CUR	AGE	SEX	EDU	INC
TEMP_CLOSE_GC	2.97	1.44	1	5	-0.0842	0.0315	-0.0170	0.0026	0.1566*	0.0110
LENGTH_CLOSE_GC	2.37	1.35	1	5	-0.0825	0.0476	-0.0118	-0.0336	0.1145	-0.0453
SOLIDARITY_GOLF	3.57	1.44	1	5	0.0488	0.0081	0.0712	-0.0438	-0.0026	-0.0916
GOLF_HEALTHSPO	4.41	0.79	1	5	0.1181	-0.1963**	0.2148**	0.0210	0.0614	0.1959**
GOLF_HEALTHGOOD	4.54	0.70	1	5	0.0584	-0.1970**	0.1965**	0.1463*	-0.0207	0.0889
GOLF_NATURE	4.59	0.71	1	5	0.1972**	-0.2035**	0.0385	0.1164	0.0221	0.0256
GOLF_NATUREEXP	4.17	0.91	1	5	-0.01353	-0.0072	-0.0143	-0.0118	0.0322	0.0783
GOLF_NATUREHEALTH	4.42	0.82	1	5	0.1016	-0.1727**	0.1898**	0.0269	0.2660***	0.1864**

*p < 0.10, **p < 0.05, ***p < 0.01.

The two statements that golf can be seen as a health sport and is consequently good for your own health received a high level of approval, especially for older golfers with a good current handicap. Similar high approval ratings can be seen for the two nature variables. Thus, the statement that the two items are a perfect match for golf also received a very high level of approval. A look at the significant values of the correlation analysis shows that this statement is particularly supported by older, higher educated, high-income golfers with a good current handicap.

Focusing on golf's health aspect first, the results show that golfers know and agree that golf is suitable for their health and can be seen as a healthy sport. They thus confirm numerous academic studies that have also come to this conclusion that golf has different health and well-being benefits (e.g., Broman et al., 2004; Grov & Dahl, 2019). As already mentioned at the beginning, golf is a sport that can have a positive influence on personal health and well-being. On the other hand, golf clubs regard golf as a health sport, although this recognition has not been accompanied by action (Huth, 2019). However, at this point, it is extremely important for associations and clubs to focus even more on this forward-looking topic. This also applies to the second item, nature and nature experience. As already mentioned in the introduction, golf has long been regarded as a destroyer of nature, so the image is slowly changing through various initiatives such as cooperation with environmental associations, collaborations with political institutions and the establishment of environmental certificates (Huth, 2017a). Based on the results and in line with Weed (2020), it would now be logical to focus more strongly on the topic of nature (experience). This would be an opportunity to take golf beyond its current image as a sport for old and

rich people (Huth & Breitbarth, 2020) and to reposition it in the direction of a sport that is close to nature, enables nature experiences and at the same time a promoter of health and well-being.

Conclusion

COVID-19 and the associated lockdown in the spring of 2020 had a significant impact not only on society and the general economy but also on sports. Even golf, despite its attribute as an outdoor sport, was unable to avoid the lockdown and had to close its golf courses for a couple of weeks. As a number of studies and commentaries for professional sports have shown (e.g., Clarkson et al., 2020; Parnell, et al., 2020), the lockdown has had a major impact on a number of stakeholders, such as associations, clubs and top athletes. However, the negative effects of COVID-19 can also be felt one sporting level below. This study showed that even amateur athletes are affected by the lockdown and have had to look for other activities to stay active. At least the majority of golfers seem to have done this quite successfully during this time by switching to other sports. It is exciting to see that the golfers were ready to switch to other forms of (sporting) exercise. This makes it clear why golf associations and golf clubs have tried to open golf courses as quickly as possible. At the same time, the results also show that good and regular information management by golf clubs was the central element for golfers during the lockdown. As in other industries or in professional sports, COVID-19 has given greater importance to the role of social media in sports to stay “in touch” with their customers, members and fans (López-Carril & Anagnostopoulos, 2020). Therefore, the golf clubs had to significantly increase—or create—their online presence to communicate with their members and guests in a contemporary way. In this context, it should be noted that other online offers from golf clubs, such as online training, have been less noticed by the general golf public. However, hardly any golf clubs have offered such offers (Huth & Billion, 2020), so that there has been a lack of adequate offers in many golf clubs. An improvement of the offer would certainly make sense for a future (possible) lockdown. Digital offerings would also be an asset for the winter season, in which playing golf is often not possible.

Despite the problems that golf can expect in the short term, as well as in the medium to long term, golf as a health- and well-being-promoting sport and a sport that offers natural experiences could benefit from COVID-19 in the medium to long term with the right strategy. The results impressively highlight the importance of the two topics from the golfer's point of view. For this, however, it is of central importance that national and international golf associations, golf clubs, golf media and golfers themselves position their sport even more in the direction of these social developments. Due to the current situation concerning COVID-19, it can be assumed that people will pay more attention to their health and well-being as well as to outdoor sports activities in the future. Therefore, in line with Fischer and Kaiser-Jovy (2018), the health and well-being benefits of golf—as well as the natural experience that golf offers—need to be used as a central argument to attract people to play golf. Health and well-being are and will be a central determinant in regard to the demand of sport, reinforced, as mentioned above, by the circumstances related to the COVID-19 pandemic. Additionally, in line with Weed (2020), it would be logical to also focus more strongly on the topic of nature (experience). Consequently, local sports clubs and providers such as golf clubs will continue to be a central pillar in their communities—even after the COVID-19 pandemic—and can recover, rebuild and even transform to move forward and continue to advance sports participation. For this, it is

important for the stakeholders involved to develop future-oriented concepts that meet the post-COVID-19 zeitgeist of people. With the two trends presented, golf would have ideal prerequisites for gaining new members—including more younger people and women, a central aim of golf associations (Fischer & Kaiser-Jovy, 2018; Stadder & Dixon, 2018)—in the future.

The present study was able to provide initial insights into the effects of COVID-19 and the lockdown on golf. However, it should be noted critically that the survey participation rate of golfers fell short of the authors' expectations. Nevertheless, the results can provide a good first quantitative insight into the effects of COVID-19, and these effects are overall comparable with previous theoretical, conceptual or commentary studies on the subject of COVID-19 in sports (e.g., Clarkson et al., 2020; Duarte Munoz & Meyer, 2020; Parnell et al., 2020).

Regarding future research projects, it would be interesting to see to what extent golfers' golf behaviour changes from the short term—during the lockdown—to the medium to long term after the lockdown timespan. In this context, it is also interesting to see whether golf can even win over new golfers due to the consequences of COVID-19 and the lockdown. From such research, golf associations and golf clubs could derive further strategies for the future development of golf. Additionally, golf clubs—as well as professional and grassroots clubs in other sports—should be asked at regular intervals about the medium- to long-term positive and negative effects of the pandemic. Based on the results, strategies should be developed that ensure the financial and overall survival of sports clubs. Moreover, the topics of nature (experience), health and well-being or digital issues should be placed even more at the centre of research work in sports in general and golf in particular.

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