



Article How Much Are Fans Willing to Pay to Help "Their" Soccer Clubs to Overcome a Crisis? An Analysis of Central European Fans during the COVID-19 Pandemic

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Abstract: Through restrictions and people's behavioral changes with regard to public events, the COVID-19 pandemic has had a massive financial impact on professional team sports clubs. Particularly, many smaller clubs that are more dependent on match-day revenues were facing an existential struggle. In this study, we examined the willingness of fans to contribute financially to help their favorite teams to overcome financial difficulties caused by this unforeseen operational risk. Moreover, we investigated the significance of the level of team identification among fans as an antecedent for willingness to pay. Analyzing the data from an online survey with 178 respondents, we found that fans would be willing to participate in fundraising campaigns to support their favorite teams. Among the fans of small clubs, the level of identification drives the willingness to support. On the one hand, the findings are encouraging for clubs as they underscore the potential role fans could play in overcoming the current crisis while showing that including fans in future risk management strategies is a promising approach. On the other hand, for this to be successful, clubs need to unravel and invest in measures for nurturing the fans' identification with the team.

Keywords: team identification; professional team sports clubs; willingness to pay; risk management; crisis management; COVID-19; sports management

1. Introduction

On 11 March 2020, the World Health Organization (WHO) declared the coronavirus disease (COVID-19) a pandemic (World Health Organization 2020). As of 24 October 2022, over 623 million cases of COVID-19 and 6.5 million deaths had been confirmed globally (World Health Organization 2022). In an attempt to protect human lives and health, as well as the resilience of the public health care systems, governments around the world resorted to tough measures such as lockdowns, curfews, and travel restrictions; moreover, they set up policies and recommendations for social distancing. These preventive measures and consequent sudden changes in consumer behavior had a huge economic impact, which hit many fields of business exceptionally hard; tourism and event industries, for instance, were shut down completely, as were many services such as hairdressers and gyms (Donthu and Gustafsson 2020). As part of the event industry, the professional sports industry was immediately impacted by the COVID-19 pandemic (Bazzanella et al. 2021). At the beginning of 2020, several international sports events including the Olympic Games and the UEFA EURO 2020[®] were either canceled or postponed, and many professional leagues were either completely suspended (such as the majority of the European national soccer leagues) or completed under tight restrictions and without spectators (such as the North American NBA and NHL) (Drewes et al. 2021). As the initial standstill of professional sports came to an end, most of the events were organized and leagues started without spectators as "ghost games" (Drewes et al. 2021).



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Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). The financial and economic impacts of the COVID-19 crisis on sports teams, both directly through missing matchday revenues and indirectly through the financial problems of commercial partners and sponsors (Maguire 2021), are self-evidently huge. However, given that the professional team sports industry is characterized by deep identification with the team and loyal support from fans even during times of poor team performance (Wann and Branscombe 1990), we considered it possible that passionate fans could provide sports teams with additional means to cope with the financial consequences of the COVID-19 crisis.

This is the first study analyzing the impacts of team identification (TI) on fans' willingness to financially support their favorite teams in a crisis. We assessed soccer fans' (1) willingness to pay (WTP) to support their favorite teams by participating in crisisrelated fundraising campaigns and (2) willingness to accept (WTA) an increase in season ticket prices. We employed techniques of statistical modeling to test the impacts of TI on the WTP. From a managerial perspective, our results provide insights into the magnitude of the possible role of fans in current and future risk and crisis management strategies as defined by the clubs. From a theoretical perspective, the results of this study advance the knowledge of the consequences of fans' social identification with a sports team in a crisis. This paper is structured as follows: In the next section, we review key literature and propose a conceptual framework. We then go on to review the sampling process and report the results. Finally, we provide some managerial and theoretical implications, and propose directions for future research.

2. Literature Review

2.1. Impact of COVID-19 on Sports

When the WHO declared the COVID-19 outbreak a pandemic in spring 2020, the situation quickly moved far beyond what was chiefly a medical emergency to a crisis affecting society as a whole. Consequently, the pandemic rapidly caught the attention of researchers from virtually all fields, causing an influx of pandemic-related publications. This chapter provides an overview of the key research findings relating to the impacts of the pandemic on finances, economies, and management especially from the perspective of team sports.

Due to the unforeseen and shocking nature of the COVID-19 pandemic and the fact that recovery from the crisis is still ongoing, much of the pioneering research on the pandemic's economic impacts on sports is intrinsically exploratory in nature and focuses on mapping the impacts on different areas of the sports industry. First, many researchers have highlighted the indirect and rather long-term impact of matches without spectators. In one of the first published papers after the outbreak, Parnell et al. (2021) shed light on the complex and networked production structure of soccer and the importance of fans within that structure. The authors stressed the role of fans as simultaneous producers and consumers of the product and accentuated the importance of innovative strategies by clubs to involve fans and, hence, to generate income when stadia were closed. Grix et al. (2021) emphasized the likelihood of unpredictable impacts from the absence of the feelgood factor triggered by the social consumption of sport and the stadium atmosphere not only for live but also for TV audiences. The long-term impacts of these "ghost games" along with the role of spectators as co-producers of the sports product were brought up in the study by Drewes et al. (2021). The authors additionally proposed that one of the consequences of the COVID-19 crisis was that clubs have started to gain a stronger appreciation of the fans' role in the production process.

In general, sports teams generate revenues mainly from three sources: (1) matchday sales, (2) commercial partnerships (i.e., sponsorships), and (3) broadcasting and media rights (Desbordes et al. 2019). Traditionally, matchday revenues and sponsorships have been the most important income sources. This still remains the case in most of the national soccer leagues, while in a few big European leagues, especially the English Premier League, the rapidly growing value of broadcasting rights has changed the revenue structure around

(Solberg et al. 2018). As far as gate receipts are concerned, the clubs in the English Premier League generated on average EUR 36.2 million in 2018, which accounted for 13% of total revenues, whereas in mid-sized European leagues, the absolute value was much lower, but the share of total revenues considerably higher (e.g., Scotland: EUR 1.9 million and 43%; Austria: EUR 1.5 million and 17%) (UEFA 2020). Similarly, clubs in the lower levels of the league pyramid in major soccer countries are also more dependent on gate receipts; the clubs in the bottom two leagues of the English system generate up to 40% of their income on match days (Maguire 2021).

Hence, it is clear that closed stadium gates had a tremendous impact on club and league finances. The North American professional leagues NFL, MLB, NBA, and NHL, for instance, suffered an immediate financial loss of almost USD 7 billion in gate receipts alone (Ehrlich et al. 2021). While lost matchday revenues hit the rich leagues and clubs hard, the impact was proportionally even greater for those leagues and clubs that are more dependent on gate receipts (Bond et al. 2020).

The immediate impact of the COVID-19 crisis on broadcasting revenues is more difficult to estimate and largely depends on the deals negotiated between the leagues and the broadcasters. In England, for example, domestic broadcasters granted subscription holidays for their customers and negotiated rebates with the leagues for matches not played (Bond et al. 2020). However, as most of the major leagues resumed operations quickly without spectators, the immediate impact on TV and new audiences was more positive than negative, as live attendance was not possible (Ehrlich et al. 2021). In fact, this may have even solidified the media's power in sports (Manoli 2020).

The outbreak of the COVID-19 pandemic not only exposed the professional sports clubs to a financial shock through reduced matchday revenues (spectator restrictions) and falling sponsorship revenues caused by liquidity problems and insolvencies among their partner organizations, but it also revealed notable weaknesses in their risk management capacities and fragilities in their crisis resilience. One of the most important—if not the most important—reasons for these industry-specific vulnerabilities is the balancing between profit maximization and on-field success maximization, which has led to negligible profit margins and consequently to low liquidity among many professional team sports (Hammerschmidt et al. 2021). Not focusing on team sports but cycling competitions and with a more generic view of sports events, Bazzanella et al. (2021) highlighted the kind of measures that had to be taken to organize these events and showed how different stakeholders evaluated new measures from their point of view. Furthermore, Bazzanella et al. (2021) suggested that an improved approach to risk management could also be a positive outcome of the COVID-19 crisis.

While all professional clubs and leagues suffered tremendous financial hardship because of governments' measures in fighting the pandemic, the evidence presented in this section indicates that the impact on small- and mid-sized professional clubs and leagues was even greater, as they are more dependent on gate receipts than their larger counterparts. Additionally, the findings described above suggest that there were serious shortcomings in the risk management and resilience of many sports organizations. In summary, there is an obvious need to study particularly the fans of small and mid-sized clubs' potential willingness to support their favorite teams in a crisis, and thus, the extent to which fans could be incorporated in clubs' risk management strategies.

2.2. Team Identification (TI)

The social identity theory (Tajfel and Turner 1979) defines social identity as the selfimage that people derive from the categories and groups to which they perceive themselves as belonging. According to the theory, people strive for a positive social identity by drawing favorable comparisons between their own group and relevant rival out-groups. An extension to the social identity theory—the self-categorization theory (Turner et al. 1987) posits that once group membership becomes salient, it generates a sense of belonging and strengthens group identification among its members, who adopt the group norm-conform behavior (Hogg and Reid 2006). When a group is exposed to an existential threat, its members are also willing to engage in in-group strengthening behavior (Wohl et al. 2010). Commercial brands can also offer meaningful social identities if they can satisfy consumers' needs for self-enhancement and self-differentiation. This social identification with a brand further leads to supportive behavior toward the brand such as loyal repurchases and positive word of mouth (Bhattacharya and Sen 2003). Brand researchers have also observed that a threat to a brand triggers a similar defensive response among brand fans than a threat to the self (Lisjak et al. 2012).

TI—i.e., a person's social identification with a sports team (Heere 2016; Lock and Heere 2017)—is a concept sports management and sport psychology scholars generated on the basis of the social identity theory. To date, several studies have investigated the outcomes and consequences of TI. It has been observed that TI has a number of positive consequences from the perspective of the sports club with which the fans identify. In a seminal study on the field, Wann and Branscombe (1990) demonstrated that highly identified "die-hard" fans tended to maintain their association with the team despite poor on-field performance. Since then, several scholars have corroborated the causal link between TI and fans' loyal consumer behavior toward the team (Gladden and Funk 2001; Karjaluoto et al. 2016; Laverie and Arnett 2000; Matsuoka et al. 2003; Stevens and Rosenberger 2012). In addition to direct impacts on consumer loyalty, TI benefits the team, for example, through its positive impacts on the fans' attitude toward the team's sponsors (Gwinner and Swanson 2003) and the fans' tendency to buy team merchandise (Kwon and Armstrong 2002). Wicker et al. (2016) found that identified fans are willing to pay more for fan bonds—i.e., credit instruments issued by professional team sports clubs.

Hence, based on the evidence of the positive impact of (team) identification on favorable consumer behavior and the willingness to defend the object of identification in case of a threat and considering the generally more severe impacts of the COVID-19 crisis on financially weaker sports clubs that are more dependent on match-day revenues, we propose the following formal hypotheses:

H₁. *Fans of small clubs are more willing to pay than fans of large clubs.*

H₂. A higher level of TI leads to a higher WTP for clubs.

These hypotheses have to be seen in the context of fans supporting their favorite team in overcoming the negative financial impacts caused by the COVID-19 pandemic.

3. Methodology

3.1. Setting and Measures

An online survey was distributed to several selected soccer fan groups on Facebook: the Tottenham Hotspur supporters' clubs in Austria and Germany, two Wacker Innsbruck fan groups, an FC Bayern Munich fan group from Austria, and one FC Chelsea supporters' club. The several Facebook groups were chosen in order to secure varied levels of identification amongst the participants. The survey was online from 6 April until 15 June 2020. After agreeing to fill in the survey, the participants were first presented with demographic items (gender, age, nationality, country of residence, and level of education) as well as an item on income for measuring the potential interaction effect. In order to categorize the participants based on the size of their supported club, the respondents were asked to name their favorite team. Moreover, they indicated their level of TI using a 3-item 8-point Likert scale previously validated by, e.g., Collins et al. (2016). To measure whether the respondents were local or distant fans, they were asked to state whether they lived within 50 km of their favorite team's home stadium.

The next part of the questionnaire included items measuring the outcome—the willingness to support the team to compensate for financial losses caused by the COVID-19 pandemic. For this, we utilized a contingent valuation method—a survey-based technique to elicit the respondents' WTP for hypothetical projects (Portney 1994). As there was no real product to be evaluated, we included a scenario describing the potential financial consequences of COVID-19 for teams and potential fundraising actions taken by teams. After describing the scenario, two WTP items were presented: first, we asked for the respondents' WTP for a fundraising campaign with no actual counter value ("Game against COVID", in which the team sells tickets to a fictitious game). Second, we asked respondents' WTP for specific merchandising products offered within a merchandising campaign including scarves, shirts, caps, and mugs (WTP was asked for each of the products separately). Finally, we also included an item measuring the season ticket holders' WTA season ticket price increases for the next season. An open-ended approach was utilized for eliciting the WTP for the fictitious game and for the merchandise campaign. The WTA season ticket price increases were examined with the payment card method, from which the respondents selected the maximum tolerable increase in season ticket price measured in percent.

3.2. Sample and Procedure

A total of 178 fans provided usable responses to the survey questionnaire. The vast majority (92%, n = 163) of the respondents were male, and only slightly above 7% were female. The participants' ages ranged from 13 to 77 years old; the average was 32.6 years (Mdn = 29.5 years). The clear majority of the survey participants were Austrian (88.8%, n = 158). Of the respondents, 32% had a university or college degree, 37.1% had completed upper secondary school, and 19.2% had completed an apprenticeship or vocational education. In total, 12 out of 178 respondents opted not to respond to the item on personal income. Following the suggestion of Whitehead (Whitehead 1994), we imputed these missing responses as it improves the performance of the contingent valuation model. For the imputation, we used the median of income for the specific age group, as the median is more robust to outliers, which are typical for income distributions (Punzo et al. 2018). The average monthly net income of the respondents was EUR 1868.60 (Mdn = EUR 2000). Finally, by using a squad market value threshold of EUR 20 million (2019–2020 season market values extracted from the online platform "transfermarkt.de"), we divided the respondents into small-club and large-club fans: 71.3% (n = 127) of the respondents were categorized as small-club fans and 28.7% (n = 51) as large-club fans. Table 1 shows the descriptive statistics of the variables used in the hypotheses testing by fan group.

Variable	Small-Club Fans				Large-Club Fans			
variable	М	Mdn	SD	n	М	Mdn	SD	n
WTP (Fictitious Game)	67.26	50.00	96.77	127	52.73	20.00	152.65	51
WTP (Merchandise)	54.86	56.00	41.40	127	44.45	40.00	37.47	51
Identification	7.14	7.67	1.23	127	7.01	7.33	1.19	51
Income	1877.20	2000.00	1139.10	127	1847.20	2000.00	1161.70	51

Table 1. Descriptive Statistics for Variables Used in Hypotheses Testing.

Note. M = Mean, Mdn = Median, SD = Standard Deviation, n = Sample Size. All monetary values in EUR.

4. Results

4.1. WTP for Fictitious Game and Special Merchandise

We analyzed the fans' WTP for supporting their favorite team by participating in a campaign without any material counter value (Figure 1). Altogether, 88.2% (n = 157) of the respondents indicated that they would be willing to pay for a ticket to a fictitious game against COVID-19 if their favorite team organized such a fundraising campaign. Only 7% of small-club fans would not be willing to pay; this share was higher among large-club fans (23.5%). There was also an apparent between-groups difference at the higher end of the WTP: 32% of small-club fans would be willing to pay more than EUR 50, compared with only 8% of large-club fans. Overall, the respondents' median (mean) WTP for a fictitious "game against COVID-19" was EUR 30 (EUR 63.10); the median (mean) WTP of small-club fans was EUR 50 (EUR 67.26), whereas the WTP of large-club fans was lower with a median (mean) of EUR 20 (EUR 52.73). Due to the non-symmetric WTP distributions, we used

Kruskal–Wallis H tests to test our formal hypothesis H_1 and compare the WTP of two fan groups (van Hecke 2012). The test confirmed that the difference between the WTP of small-club fans and large-club fans was statistically significant (Kruskal–Wallis H = 7.687, p = 0.006), which allows us to conclude that small-club fans are generally willing to pay more for a fundraising campaign with no material counter value.

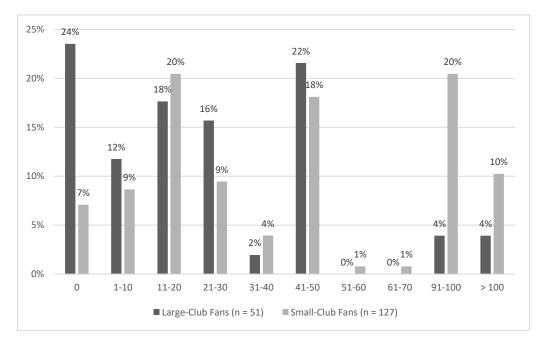


Figure 1. Share of Respondents/WTP (Fictitious Game) in EUR.

Examining the respondents' WTP for a merchandise fundraising campaign (Figure 2), we found that 82% of the respondents (n = 146) would be willing to pay for at least one of the special merchandise items. Of the small-club fans, 15% had no WTP for special merchandise whereas 55.8% would be willing to pay more than EUR 50 altogether. Regarding merchandise, we also observed a tendency toward a lower WTP among large-club fans: 25.5% of them would not be willing to pay at all, whereas 43.1% would be prepared to pay more than EUR 50. The overall median (mean) WTP for merchandise was EUR 55 (EUR 51.88). The central tendency of small-club fans was higher (Mdn = EUR 56, M = EUR 54.86) than that of large-club fans (Mdn = EUR 40, M = EUR 44.45). However, the Kruskal–Wallis H test indicated that the difference in the WTP for a merchandise fundraising campaign between groups was not statistically significant (Kruskal–Wallis H = 2.734, p = 0.098). Hence, despite the higher central tendency values among the fans of small clubs, we cannot conclude that the groups differ from each other in terms of their WTP for a merchandise fundraising campaign. However, based on these two WTP comparisons, we can partly confirm H₁.

Finally, we investigated the season ticket holders' WTA an increase in season ticket prices to offset financial hardship caused by the COVID-19 pandemic (Figure 3). Only six of the season ticket holders in the sample were large-club fans, which is due to the fact that most of them were distant fans—i.e., fans supporting foreign teams (Lianopoulos et al. 2020) or teams from a city in which they have never lived (Lintumäki and Koll 2022). Hence, regarding the WTA season ticket price increases, we looked only at the fans of small clubs and did not include the analysis in formal hypotheses testing. From the data, we observed that 85.9% of the (small-club) fans would be willing to accept an increase in season-ticket prices; 41.2% of respondents would be willing to accept a price increase of up to 10%, 15.3% of up to 20%, and 29.4% of more than 20%.

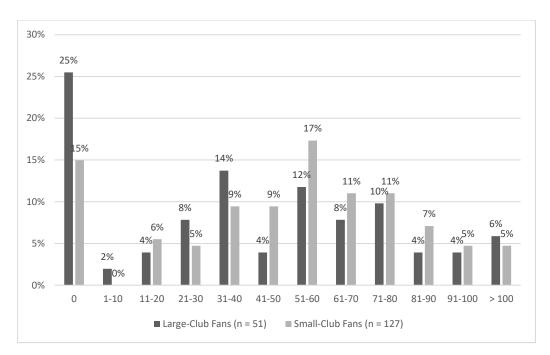


Figure 2. Share of Respondents/WTP (Merchandise) in EUR.

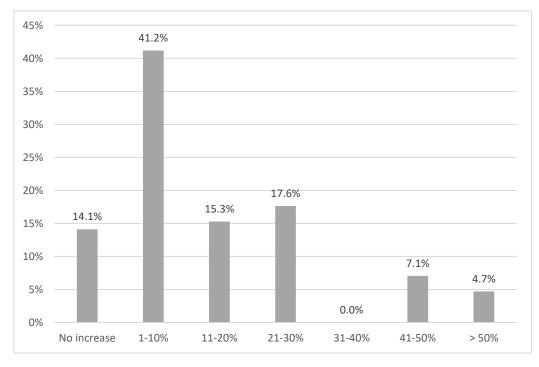
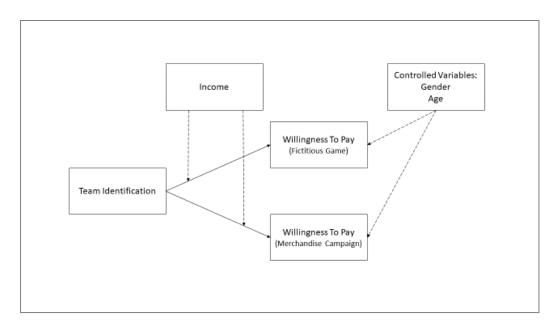


Figure 3. Share of Small-Club Fans/WTA (Season Ticket Price Increase) Category (%).

4.2. Determinants of WTP

To test our formal hypothesis H_2 and measure the impact of TI on fans' WTP for (a) fictitious game and (b) merchandise campaign as well as the moderating role of income between TI and both WTP measures, we conducted stepwise hierarchical regression analyses. As gender (Wicker et al. 2016) and age (Castellanos Garcia et al. 2014) were shown to have an impact on financial support to a sports team, we also controlled for these two variables in our tests. The regression models (Figure 4) were run separately for the fans of small and large clubs. In the first step, we tested the impact of the control variables on the WTP. We added the explanatory variable TI in the second step and income in the third



step. In the final step, an interaction term (standardized value of TI x standardized value of income) was added to the model.

Figure 4. Research Model.

The results of the stepwise regression models (Table 2) indicated that the impact of TI on the WTP for a fictitious game is positive and that income strengthens the positive impact among the fans of small clubs (Model A I). However, no causal relationship between TI and WTP was identified among the sample of large-club fans (Model A II). Measuring the impact of TI on the WTP for a special merchandise campaign, we found that the impact among the fans of the large clubs is non-significant (Model B II) whereas the impact among the small-club fans is negligible at most (Model B I). Income does not moderate the impact of TI on the WTP for merchandise in either of the groups. An impact of the control variables (gender and age) on the WTP was found in none of the models. Hence, as TI increased the WTP for a fundraising campaign with no material counter value, we can partly confirm H₂. However, although the relationship is positive and significant, the total explanatory power of the specific model remains rather weak ($R^2 = 0.141$). Therefore, we acknowledge the positive relationship while advising to avoid exact monetary predictions based on the model.

The ordinal logistic regression model (Table 3) was applied to determine the impacts of TI, respondents' income, and interaction of TI and income on the fans' WTA season ticket price increases. Only those participants who indicated the intention to purchase a season ticket for their favorite team if the upcoming season were unaffected by COVID-19 were selected to the model. This resulted in the subsample of 78 small-club fans. Here too, the regression model was conducted only with a subsample consisting of small-club fans, and the analysis did not include testing of the research hypotheses. First, the X² test results ($\chi 2$ (3) = 7.935; p < 0.05) confirmed that the selected predictor variables significantly contribute to the model. TI (β = 0.551; SE = 0.236; OR = 1.735; p < 0.05) significantly predicts the WTA season ticket price increases; the odds ratio (exp[B]) of 1.735 indicates that one point increase in identification is associated with a 73.5% increase in the odds of the respondent belonging to a higher WTA price increases category. Respondents' income and interaction (TI x Income) were not associated with the WTA price increases level. Overall, with Nagelkerke Pseudo-R² being 0.106, the model accounted for 10.6% of the overall variance in the respondents' WTA season ticket price increases.

Model	IV	IV DV		β p		Adj. R ²	
	Model A	I Small-Club Fans:	$TI \rightarrow WTP (FG) (N$	Moderating Role of	Income)		
1	TI	WTP (FG)	0.211	0.017	0.045	0.037	
2	TI	WTP (FG)	0.194	0.024	0.110	0.096	
	Income		0.257	0.003			
3	TI	WTP (FG)	0.268	0.004	0.141	0.120	
	Income		0.216	0.013			
	TI x Income		0.194	0.038			
	Model A	II Large-Club Fans:	$TI \rightarrow WTP (FG) (I$	Moderating Role o	f Income)		
1	TI	WTP (FG)	-0.035	0.807	0.001	-0.019	
2	TI	WTP (FG)	-0.034	0.816	0.001	-0.040	
	Income		-0.004	0.977			
3	TI	WTP (FG)	-0.034	0.821	0.001	-0.062	
	Income		-0.005	0.975			
	TI x Income		0.012	0.935			
	Model B	I Small-Club Fans: T	$I \rightarrow WTP (Merc) ($	Moderating Role of	of Income)		
1	TI	WTP (Merc)	0.166	0.062	0.028	0.020	
2	TI	WTP (Merc)	0.164	0.067	0.028	0.013	
	Income		0.030	0.733			
3	TI	WTP (Merc)	0.160	0.100	0.029	0.005	
	Income		0.032	0.725			
	TI x Income		-0.01	0.923			
	Model B I	I Large-Club Fans: 7	$I \rightarrow WTP (Merc)$	(Moderating Role of	of Income)		
1	TI	WTP (Merc)	0.004	0.976	0.000	-0.020	
2	TI	WTP (Merc)	-0.190	0.894	0.016	-0.025	
	Income		0.128	0.385			
3	TI	WTP (Merc)	-0.020	0.893	0.016	-0.047	
	Income		0.128	0.389			
	TI x Income		-0.009	0.948			

Table 2. Hierarchical Regression Analyses.

Note. IV = Independent Variable, DV = Dependent Variable, Adj. R^2 = Adjusted R^2 .

Table 3. Ordinal Logistic Regression Model.

			Mean (Median) for WTA Season Ticket Price Increase Categories						
IV	β	Exp(B)	р	0%	1–19%	20–39%	>40%		
	Мо	del C Smal	l-Club Fai	ns: TI \rightarrow WTA (ST Ir	ncrease) (Moderating	; Role of Income)			
TI	0.551	1.735	0.021	6.58 (6.67)	7.44 (7.83)	7.41 (7.83)	7.83 (8.00)		
Income	0.000	1.000	0.622	1642.00 (1900.00)	1906.00 (1800.00)	2087.00 (2125.00)	2010.00 (1950.00)		
TI x Income	0.206	1.228	0.638						
Nagelkerk	ke R ²	0.106							
Likelihood R	latio X ²	7.935 * (df = 3)						

Note. IV = Independent Variable, Exp(B) = Odds Ratio, * = Significant at 95% (p < 0.05).

5. Discussion and Conclusions

The purpose of this research was to investigate soccer fans' willingness to support their favorite teams through the financial challenges because of the COVID-19 pandemic and related mitigation measures, in particular league suspensions and ghost games. As a primary finding, we highlight the considerable potential of a base of highly identified fans as a risk and crisis management resource, particularly for small clubs. Given the median WTP of EUR 50, a club in a mid-sized European soccer league could realistically raise tens of thousands of euros alone through a counter-value-free fundraising campaign. The results of our causal analyses also revealed that the higher the respondents' identification with the team, the higher the tendency and willingness to support the team at the cost of personal finances. This finding supports the earlier findings on the positive financial and marketing impacts of TI such as its impact on attendance (Katz et al. 2018) and on spreading positive word-of-mouth about the team (Gwinner and Swanson 2003). From the perspective of risk

and crisis management, Chien et al. (2016) highlighted the fans' enduring support and favorable attitude toward a team embroiled in a sports scandal. Findings of this research reinforce the significance of fans' identification with the team as a potential asset in the risk and crisis management of professional sports clubs.

Although we used the WTP for fundraising campaigns (with and without direct counter value) as outcome variables, the results of this study should be considered as an indication of fans' general willingness to support their favorite club in a crisis. Hence, professional team sports clubs could profit by organizing other kinds of fundraising activities such as a voluntary ticket price premium. Going beyond direct fundraising, clubs could also launch other marketing campaigns, for example to encourage fans to bring their friends and family members to games to support the club in trouble. Moreover, highly identified fans could powerfully transmit a message and build awareness of the club's situation among the local community, for example through a well-organized social media campaign, which could lead to supportive actions also by non-fan residents of the club's home region if they perceive the club generally beneficial to the community.

We recommend that sports team managers acknowledge that a base of highly identified fans not only offers a tool for safeguarding sufficient matchday revenues during seasons when performance is poor (Laverie and Arnett 2000; Matsuoka et al. 2003), but also can be a remarkable contribution to the financial survival of a team in a crisis. Hence, managers should consider nurturing fans' identification with a team as an objective not only from a marketing perspective, but also from a risk management perspective. Extant research has offered recommendations on how managers can address fans' identification with the team: Lintumäki and Koll (2022), for instance, underscored the importance of focusing on distinctive aspects of a team brand and desired aspects of team brand personality in strengthening the points of identification, which requires a clear picture of the fans' perceptions of a team brand. We also consider it essential to note that management should not take fans' identification with a team for granted, but should see it as "a two-way street": For instance, if fans feel that their favorite team is contributing positively to the community, their TI is likely to deepen (Kim and Manoli 2022; Ullah et al. 2021). During the acute phase of the COVID-19 crisis, several professional team sports clubs engaged in corporate social responsibility (CSR) actions to support the groups heavily affected by the crisis (López-Carril and Anagnostopoulos 2020). Based on our findings, we encourage managers of sports clubs to plan and undertake CSR actions, as they not only strengthen the clubs' role as a facilitator of societal wellbeing and cohesion, but also have a positive impact on inducing identification. Furthermore, especially in a crisis affecting society broadly (such as the COVID-19 pandemic), clubs should recognize their roles as impactful organizations: By contributing to the community through CSR actions, clubs could not only fulfill their role as responsible organizations, but also improve and strengthen their broader societal image (Blumrodt et al. 2012).

The results also showed that there is an apparent conditionality of financial support for the team. As the fans of large clubs are less willing to participate in counter-value-free fundraising campaigns than fans of small clubs, there is an indication that regardless of a very high level of identification, fans do consider the actual state of their club's finances in a crisis when making decisions about participating in fundraising campaigns. This leads us to recommend that club managers give careful consideration to potential means of fundraising. In case of a large club struggling with weak liquidity, fundraising options with a counter value might be more recommendable; besides special merchandise campaigns, crowd investments or fan bonds could offer more appropriate options. The results of our study support the findings of Weimar and Fox (2021) and Wicker et al. (2016) about the positive impact of fans' involvement in and identification with their favorite club on investing in it in the form of a bond. Fan bonds, albeit being credit funding, could be an attractive option for clubs, because fans may accept below-market interest rates due to emotional reasons (Weimar and Fox 2012). There are several limitations in this study, which researchers and practitioners alike should observe when interpreting the results. First, although we consider our sample size sufficient for simply analyzing fans' WTP for supporting their favorite team in a crisis, we suggest future researchers aim for a larger sample size so that they can run causal analyses with greater comparative power between the fans of large and small teams. Second, our sample consists mainly of highly identified fans. Hence, the results in this study are more representative for a population of "die-hard" fans. Given that a significant share of people supporting sports teams are more casual followers than fans, we advise that caution be exercised when interpreting the actual WTP—especially since our results suggest that decreasing identification is likely to lead to a lower WTP. Third, as we collected the sample from German-speaking countries (mainly Austria), the generalizability and transferability (to, e.g., Latin American or Asian fans) of our findings are limited.

Managers should be particularly careful when reflecting upon increasing single and season ticket prices: Although the results of this study suggest a rather high WTA increased ticket prices, they offer limited evidence on the attitudes of less identified fans. Finally, as we employed contingent valuation in eliciting the WTP, we need to point out the possibility of biased responses (Venkatachalam 2004); most importantly, the hypothetical nature of the "fundraising campaigns" might have led some respondents to state a higher WTP than would be the case in a real-life situation.

Considering that some leagues and teams have recently reported lower average attendance figures in comparison with the pre-pandemic era (Davidi 2021), we would like to bring up a specific suggestion for future research. Social identification with a group is a dynamic construct, which requires accessibility to the group to render it meaningful to an individual (Oakes 1987; Trepte and Loy 2017). As this has been tested also in the context of team sports fans and the involvement with a club has been confirmed to be driven by its visibility and exposure to publicity (Laverie and Arnett 2000), we would consider it important to study whether seasonal interruptions and "ghost games" have caused a decrease in identification among some spectators and fans. Given that fans are co-creators of the team sports product and the stadium atmosphere is an essential part of the matchday experience (Bond et al. 2020; Drewes et al. 2021), we consider it possible that the lockouts and consequent absence of a stadium atmosphere have caused some fans and spectators to distance themselves from the team. If measures combatting the pandemic have jeopardized some fans' identification with their team, this would, in the worst case, have severe and long-lasting financial impacts on teams. Hence, a study on the impacts of the pandemic on TI would be important also from a managerial perspective.

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References

Bazzanella, Filippo, Nunzio Muratore, Philipp Alexander Schlemmer, and Elisabeth Happ. 2021. How the COVID-19 Pandemic Influenced the Approach to Risk Management in Cycling Events. *Journal of Risk and Financial Management* 14: 296. [CrossRef]

Bhattacharya, Chitrabhan B., and Sankar Sen. 2003. Consumer–Company Identification: A Framework for Understanding Consumers' Relationships with Companies. *Journal of Marketing* 67: 76–88. [CrossRef]

Blumrodt, Jens, Douglas Bryson, and John Flanagan. 2012. European football teams' CSR engagement impacts on customer-based brand equity. *Journal of Consumer Marketing* 29: 482–93. [CrossRef]

Bond, Alexander John, David Cockayne, Jan Andre Lee Ludvigsen, Kieran Maguire, Daniel Parnell, Daniel Plumley, Paul Widdop, and Rob Wilson. 2020. COVID-19: The return of football fans. *Managing Sport and Leisure* 27: 108–18. [CrossRef]

- Chien, P. Monica, Sarah J. Kelly, and Clinton S. Weeks. 2016. Sport Scandal and Sponsorship Decisions: Team Identification Matters. *Journal of Sport Management* 30: 490–505. [CrossRef]
- Collins, Dorothy R., Bob Heere, Stephen Shapiro, Lynn Ridinger, and Henry Wear. 2016. The displaced fan: The importance of new media and community identification for maintaining team identity with your hometown team. *European Sport Management Quarterly* 16: 655–74. [CrossRef]
- Davidi, Shi. 2021. Variety of Factors Contributing to Lower Canadian NHL Attendance. Available online: https://www.sportsnet.ca/ nhl/article/variety-factors-contributing-lower-canadian-nhl-attendance/ (accessed on 24 October 2022).
- Desbordes, Michel, Pascal Aymar, and Christopher Hautbois, eds. 2019. *The Global Sport Economy: Contemporary Issues*. London: Routledge.
- Donthu, Naveen, and Anders Gustafsson. 2020. Effects of COVID-19 on business and research. *Journal of Business Research* 117: 284–89. [CrossRef]
- Drewes, Michael, Frank Daumann, and Florian Follert. 2021. Exploring the sports economic impact of COVID-19 on professional soccer. *Soccer & Society* 22: 125–37. [CrossRef]
- Ehrlich, Justin Andrew, Shankar Ghimire, Maroula Khraiche, and Mian Farrukh Raza. 2021. COVID-19 countermeasures, sporting events, and the financial impacts to the North American leagues. *Managerial Finance* 47: 887–95. [CrossRef]
- Garcia, Pablo Castellanos, Jaume García Villar, and José Manuel Sánchez Santos. 2014. Economic crisis, sport success and willingness to pay: The case of a football club. *Sport, Business and Management: An International Journal* 4: 237–49. [CrossRef]
- Gladden, James M., and Daniel C. Funk. 2001. Understanding Brand Loyalty in Professional Sport: Examining the Link Between Brand Associations and Brand Loyalty. *International Journal of Sports Marketing and Sponsorship* 3: 54–81. [CrossRef]
- Grix, Jonathan, Paul Michael Brannagan, Holly Grimes, and Ross Neville. 2021. The impact of COVID-19 on sport. *International Journal of Sport Policy and Politics* 13: 1–12. [CrossRef]
- Gwinner, Kevin, and Scott R. Swanson. 2003. A model of fan identification: Antecedents and sponsorship outcomes. *Journal of Services Marketing* 17: 275–94. [CrossRef]
- Hammerschmidt, Jonas, Susanne Durst, Sascha Kraus, and Kaisu Puumalainen. 2021. Professional football clubs and empirical evidence from the COVID-19 crisis: Time for sport entrepreneurship? *Technological Forecasting and Social Change* 165: 120572. [CrossRef]
- Heere, Bob. 2016. Team Identity Theory. In *Routledge Handbook of Theory in Sport Management*. Edited by George B. Cunningham, Janet S. Fink and Alison Doherty. London: Routledge, pp. 213–22.
- Hogg, Michael A., and Scott A. Reid. 2006. Social Identity, Self-Categorization, and the Communication of Group Norms. *Communication Theory* 16: 7–30. [CrossRef]
- Karjaluoto, Heikki, Juha Munnukka, and Milja Salmi. 2016. How do brand personality, identification, and relationship length drive loyalty in sports? *Journal of Service Theory and Practice* 26: 50–71. [CrossRef]
- Katz, Matthew, Rose Marie Ward, and Bob Heere. 2018. Explaining attendance through the brand community triad: Integrating network theory and team identification. *Sport Management Review* 21: 176–88. [CrossRef]
- Kim, Sungkyung, and Argyro Elisavet Manoli. 2022. Building team brand equity through perceived CSR: The mediating role of dual identification. *Journal of Strategic Marketing* 30: 281–95. [CrossRef]
- Kwon, Hyungil H., and Ketra L. Armstrong. 2002. Factors Influencing Impulse Buying of Sport Team Licensed Merchandise. Sport Marketing Quarterly 11: 151–63.
- Laverie, Debra A., and Dennis B. Arnett. 2000. Factors Affecting Fan Attendance: The Influence of Identity Salience and Satisfaction. Journal of Leisure Research 32: 225–46. [CrossRef]
- Lianopoulos, Yannis, Nicholas D. Theodorakis, Nikolaos Tsigilis, Antonis Gardikiotis, and Athanasios Koustelios. 2020. Elevating self-esteem through sport team identification: A study about local and distant sport fans. *International Journal of Sports Marketing and Sponsorship* 21: 695–718. [CrossRef]
- Lintumäki, Petri, and Oliver Koll. 2022. Sport Team Identification: A Social Identity Perspective Comparing Local and Distant Fans. Manuscript submitted for publication.
- Lisjak, Monika, Angela Y. Lee, and Wendi L. Gardner. 2012. When a threat to the brand is a threat to the self: The importance of brand identification and implicit self-esteem in predicting defensiveness. *Personality & Social Psychology Bulletin* 38: 1120–32. [CrossRef]
- Lock, Daniel, and Bob Heere. 2017. Identity crisis: A theoretical analysis of 'team identification' research. *European Sport Management Quarterly* 17: 413–35. [CrossRef]
- López-Carril, Samuel, and Christos Anagnostopoulos. 2020. COVID-19 and Soccer Teams on Instagram: The Case of Corporate Social Responsibility. *International Journal of Sport Communication* 13: 447–57. [CrossRef]
- Maguire, Kieran. 2021. COVID-19 and Football: Crisis Creates Opportunity. The Political Quarterly 92: 132–38. [CrossRef]
- Manoli, Argyro Elisavet. 2020. COVID-19 and the solidification of media's power in football. *Managing Sport and Leisure*, 1–5. [CrossRef]
- Matsuoka, Hirotaka, Packianathan Chelladurai, and Munehiko Harada. 2003. Direct and Interaction Effects of Team Identification and Satisfaction on Intention to Attend Games. *Sport Marketing Quarterly* 12: 244–53.
- Oakes, Penelope J. 1987. The salience of social categories. In *Rediscovering the Social Group: A Self-Categorization Theory*. Edited by John C. Turner. Oxford: Blackwell, pp. 117–41.
- Parnell, Daniel, Alexander John Bond, Paul Widdop, and David Cockayne. 2021. Football Worlds: Business and networks during COVID-19. *Soccer & Society* 22: 19–26. [CrossRef]

- Portney, Paul R. 1994. The Contingent Valuation Debate: Why Economists Should Care. *Journal of Economic Perspectives* 8: 3–17. [CrossRef]
- Punzo, Antonio, Angelo Mazza, and Antonello Maruotti. 2018. Fitting insurance and economic data with outliers: A flexible approach based on finite mixtures of contaminated gamma distributions. *Journal of Applied Statistics* 45: 2563–84. [CrossRef]
- Solberg, Harry Arne, Åse Jacobsen, and Tor Georg Jakobsen. 2018. Media rights in professional club football. In *Managing Sport Business*. Edited by David Hassan. London: Routledge.
- Stevens, Shawn, and Philip J. Rosenberger. 2012. The influence of involvement, following sport and fan identification on fan loyalty: An Australian perspective. *International Journal of Sports Marketing and Sponsorship* 13: 57–71. [CrossRef]
- Tajfel, Henri, and John C. Turner. 1979. An integrative theory of intergroup conflict. In *The Social Psychology of Intergroup Relations*. Edited by William G. Austin and Stephen Worchel. Monterey: Brooks/Cole Publisher, pp. 33–47.
- Trepte, Sabine, and Laura S. Loy. 2017. Social Identity Theory and Self-Categorization Theory. In *The International Encyclopedia of Media Effects*. Edited by Patrick Rössler, Cynthia A. Hoffner and Liesbet van Zoonen. Chichester: Wiley, pp. 1–13. [CrossRef]
- Turner, John C., Michael A. Hogg, Penelope J. Oakes, Stephen D. Reicher, and Margaret S. Wetherell. 1987. *Rediscovering the Social Group: A Self-Categorization Theory*. Oxford: Blackwell.
- UEFA. 2020. The European Club Footballing Landscape: Club Licensing Benchmarking Report—Financial Year 2018. Available online: https://www.footballbenchmark.com/library/2020_uefa_club_licensing_benchmarking_report (accessed on 30 November 2022).
- Ullah, Farman, Yigang Wu, Khalid Mehmood, Fauzia Jabeen, Yaser Iftikhar, Ángel Acevedo-Duque, and Ho Kwong Kwan. 2021. Impact of Spectators' Perceptions of Corporate Social Responsibility on Regional Attachment in Sports: Three-Wave Indirect Effects of Spectators' Pride and Team Identification. *Sustainability* 13: 597. [CrossRef]
- van Hecke, Tanja. 2012. Power study of anova versus Kruskal-Wallis test. *Journal of Statistics and Management Systems* 15: 241–47. [CrossRef]
- Venkatachalam, Lingappan. 2004. The contingent valuation method: A review. *Environmental Impact Assessment Review* 24: 89–124. [CrossRef]
- Wann, Daniel L., and Nyla R. Branscombe. 1990. Die-Hard and Fair-Weather Fans: Effects of Identification on BIRGing and CORFing Tendencies. Journal of Sport and Social Issues 14: 103–17. [CrossRef]
- Weimar, Daniel, and Alexander Fox. 2012. Fan-Anleihen als Finanzierungsmöglichkeit von Sportclubs? Eine Bestandsaufnahme am Beispiel der Fußballbundesliga. *Corporate Finance Biz* 4: 181–87.
- Weimar, Daniel, and Alexander Fox. 2021. Fan Involvement and Unusual Investor Behavior: Evidence from a Football Fan Bond. International Journal of Sport Finance 16: 16–32. [CrossRef]
- Whitehead, John C. 1994. Item Nonresponse in Contingent Valuation: Should CV Researchers Impute Values for Missing Independent Variables? *Journal of Leisure Research* 26: 296–303. [CrossRef]
- Wicker, Pamela, John C. Whitehead, Bruce K. Johnson, and Daniel S. Mason. 2016. Willingness-to-Pay for Sporting Success of Football Bundesliga Teams. *Contemporary Economic Policy* 34: 446–62. [CrossRef]
- Wohl, Michael J. A., Nyla R. Branscombe, and Stephen Reysen. 2010. Perceiving your group's future to be in jeopardy: Extinction threat induces collective angst and the desire to strengthen the ingroup. Personality & Social Psychology Bulletin 36: 898–910. [CrossRef]
- World Health Organization. 2020. WHO Announces COVID-19 Outbreak a Pandemic. World Health Organization. Available online: https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/whoannounces-covid-19-outbreak-a-pandemic (accessed on 24 October 2022).
- World Health Organization. 2022. WHO Coronavirus (COVID-19) Dashboard. World Health Organization. Available online: https://covid19.who.int/ (accessed on 24 October 2022).