# PERCEPTION OF SUSTAINABLE SPORT SPONSORSHIP IN TERMS OF SUSTAINABLE DEVELOPMENT AND CORPORATE SOCIAL RESPONSIBILITY IN THE ERA OF THE COVID-19 PANDEMIC

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**Purpose:** The purpose of the research presented in this paper was to identify the factors that determine the perception of sport sponsorship in terms of sustainability development and CSR activities in the era of Covid-19.

**Design/methodology/approach**: The goal was achieved by literature review and presentation of the results of relevant pilot research. The research sample (random) consisted of questionnaires returned by 203 respondents via the Internet. In the empirical analysis workshops, binomial models in the form of logit models were used, due to which the estimation of 8 logit models (4 full and 4 reduced) was carried out, while considering their determinants in 5 categories.

**Findings:** The results show that despite the Covid-19 pandemic, participants in sports events pay attention to the sponsor's activities in terms of sustainable development and CSR. This is evidenced by various perceptions of his activity. These results confirm that combining sponsorship with sustainable development and CSR help to create a positive image of the company, especially in the times of crisis.

**Research limitations/implications**: In the period of many restrictions related to the Covid-19 pandemic, sports sponsors have limited opportunities to display their brand, thus creating their image. Additionally, the lack of sports gatherings limited the interactions occurring on the plane of the sports event – sponsor-beneficiaries of the event. Covid-19, in a way, forced brands to act in a sustainable manner and CSR. The commercialization of sport introduced sustainable development and CSR as means to achieve organizational goals and the Covid-19 pandemic has become a period of adjusting activities in the area of sustainable development and CSR to new conditions and social expectations. The obtained test results confirm this.

**Social implications:** The coronavirus pandemic and government-imposed social distancing measures have had a strong impact on the sports sponsorship rights market, thereby impacting sustainability and CSR activities. Therefore, the article answered the question whether the Covid-19 era is a place to combine sports sponsorship with sustainable development and CSR?

**Originality/value:** The discussed issue is in line with the current concept of sustainable development and CSR. Sustainable sports sponsorship allows you to build a positive image of the company and maintain a long-term competitive advantage, even in such difficult times related to the Covid-19 pandemic. The article is intended for both managers and researchers dealing with the subject of sustainable development and CSR.

**Keywords:** sport sponsorship, sustainable development, CSR, Covid-19 pandemic.

**Category of the paper:** Research paper.

## 1. Introduction

The Covid-19 pandemic had and still has a profound impact on the world, the economy, including sport, and government-imposed social distancing rules had a fundamental impact on the sports sponsorship rights market (Mastromartino et al., 2020). As a result of a series of Covid-19 restrictions, sports events have been restricted by postponing the event date or even canceling them. It has influenced and will continue to affect any sponsor rights related to these events. In addition, depending on the long-term economic impact of Covid-19, sponsors may face serious financial liquidity problems, which can make very difficult or impossible to meet current obligations. In such a scenario, sponsorship companies have significantly reduced their sponsorship budgets to increase their cash flow (Muñoz, Meyer, 2020; Dašić et al., 2020). As a result, the typical "partnership" between rights holders and sponsoring corporations changes. The crisis has highlighted the problems that arise in applying the current agreements. While one side struggles with the suspension of matches and sporting events, the other is hit by a lack of brand exposure (Hammerschmidt et al., 2021). According to Dastisheh and Raju (2020) many sponsorship activities have been suspended in the current situation. This is because Covid-19 changes the market dynamics and this activity would help sponsors gain greater awareness, image and customer loyalty (Khuong, Chau, 2017). These presumptions lead sponsors to become more involved in sustainable development and socially responsible activities. This is because the long-term nature of sponsorship makes it possible to build a brand permanently. And what is equally important, through sponsorship, sponsors shape a positive image of the brand in the minds of consumers (Chien et al., 2011; Pope, Voges, 2002). Thus, the purpose of the research presented in this paper was to identify the factors that determine the perception of sport sponsorship in terms of sustainability development and CSR activities in the era of Covid-19.

## 2. Literature review

In the contemporary conditions of market saturation and fragmentation, combined with accelerated technology and innovation progress, abundance of competitive information, consumers may feel disoriented and advertising may be ineffective (Melovic et al., 2019). Thus, contemporary enterprises look for new methods of promotion, including communication with their neighborhoods. According to Knecht (2002), one of the most refined advertising techniques, elaborately linked with other elements of promotion mix, is sponsorship. This is confirmed by Black (2003), who claims that sponsorship enables companies to communicate with their target groups that are hard to contact through standard marketing methods. From the commercial point of view, sponsorship constitutes strategic relationship between the sponsor and a sport entity for mutual, usually financial benefit (Farrelly, Quester, 2005; Pons et al., 2016; Næss, 2020). Parkes (2015) notes that sponsorship may also be used to support social initiatives and projects benefiting the society in general. In this context, sponsorship, because of its pro-social character, is naturally embedded in the sustainable development and corporate social responsibility activity of enterprises. Therefore, the research so far, among others, has focused on socially responsible activities in sport (Walker, Parent, 2010; Kang, Hur, 2012), reasons for getting involved in CSR practices by professional sports teams (Babiak, Wolfe, 2009), social commitment as an element of CSR in sport management, impact of sponsorship activities on stakeholders (Inoue, Kent, 2012; Lacey, Kennett-Hensel, 2016; Hu et al., 2016; Kolk, 2004).

Recently sustainable development and CSR have gained companies' attention due to their strategic importance. The sustainability and CSR activities are based on the understanding of interrelationships between organizations, the society and the environment, as it has been already recognized that they interrelate rather than operate as discrete entities (Sudolska, Łapińska, 2020; Hu et al., 2016; Pinelli, Maiolini, 2017). Sustainability and social responsibility are also definitely one of the top priorities that brands have when thinking about a new sponsorship activation or activating an existing one (Melovic et al., 2019; Mamo et al., 2019). Whereas the World Business Council for Sustainable Development gives an explanation of CSR pointing out the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life (World…, 1999). On the other hand, Andersen and Høvring (Andersen, Høvring, 2020) claim that there is a lot of hypocrisy in sustainable development and CSR activities, which is why the dialogue of a company with a broad group of its stakeholders is so important. In many companies, sustainable development and social responsibility is communicated to stakeholders partly as the sponsoring of athletes, social events and entertainment (Scheinbaum, Lace, 2015). What is important, the UN's include sport in the sustainable development goals, through Article 37 of the SDGs, the UN identified sport as an "important enabler of sustainable development"

(UN, 2015, para. 37). As claimed by Flöter et al. (2016) and other scientists (Babiak, Wolfe, 2009; Bason, Anagnostopoulos, 2015), linking sports sponsorship with sustainability and CSR activities allows sponsors to demonstrate the value of the company and to strengthen its reflection through image transfer from the positive image of a sports facility to its own. The positive effect is that an event is transferred to the consumer's sustainable development and CSR scheme, resulting in a better perception of the sponsoring brand as a socially responsible brand (Uhrich et al., 2014; Christensen, 2006; Kim et al., 2020). As claimed by Djaballah et al. (2017), sports sponsorship covers the strategic relationship between the sponsor and the sports facility for mutual benefit, and one of its main objectives is to achieve a positive image. Smitha and Westerbeek (2007) reckon that this is related to the characteristic features of sport, e.g., attractiveness for young people, positive effects on health, social interactions, which can be effectively used in sustainable and CSR activities. This connection, as claimed by Lacey and Kennett-Hensel (2016), activates the association triangle between the brand, the sponsored event (person) and sustainable and CSR activities. This has also become the basis for a range of studies in this area (Plewa et al., 2016; Rahman et al., 2017; Scheinbaum et al., 2017; Sung, Lee, 2016).

As stated by Flöter et al. (2016), most of the research relates to CSR activities in sports organizations, such as teams, leagues or management bodies. This creates a gap and results in looking at sports sponsorship from the point of view of the beneficiaries of sports events. The study makes a contribution to the literature in the following manner. First of all, the perception of sponsorship activities in terms of sustainable development and CSR in the era of coronavirus by the participants of sports events has been indicated in the study. The research reveals the groups of viewers for whom sponsorship activities, combined with sustainable development and CSR, are the most significant. The study also confirms the importance of sustainable development and CSR activities in creating the responsible image of the sponsor. This fills the research gap in terms of the perception of sustainable development and CSR activities in sponsorship by viewers in the era of coronavirus. Secondly, the need for further research into the perception of sponsorship among the group under research is indicated. This will allow for better development of the sustainable development issues and CSR strategy in sponsorship activities, raising the sponsor's awareness in this respect. This is reflected in sponsorship objectives which are vague and thus difficult to measure.

In many companies, sustainable development and social responsibility is communicated to stakeholders partly as the sponsoring of athletes, social events and entertainment. The research conducted by Preuss (2015) revealed that significant sustainable development effects can be achieved through organizing mega sport events by investing obtained funds in buildings and adapting the infrastructure for the event using renewable resources. Nowadays, companies focus on persuading consumers of their sustainability efforts through new CSR tactics (Vollero et al., 2016; Millington et al., 2021; Szaruga, Załoga, 2022). It is also essential that The UN's call to consider the fundamental societal changes required to stem the tide of climate change,

and the importance of the environment in matters of development should resonate with critical scholars of sport. Indeed, in recent years, sport has already been cast as an engine of sustainable development (Millington et al., 2021).

Uhrich et al. (2014) believe that enterprises, by implementing sponsoring projects, combine the CSR with sponsorship. In their opinion, sponsors who opt for sponsorship linked with the CSR must decide on the main goal of sponsorship communication associated with social responsibility. In this context, sponsors make a two-level decision, i.e. they focus either on CSR information (activities involving the economic, social and environmental aspect) or on information about sponsors (e.g. events, athletes) within the framework of a combines strategy. This translates into whether or not an enterprise – sponsor does the right things to satisfy the needs of a society (Ellen et al., 2006; de Castro Sobrosa Neto et al., 2020). As claimed by Weeks et al. (2008), linking socially responsible activities with sponsorship and vice versa can be classified as leveraging, i.e., applying such tools or marketing strategies that make it possible to generate profits. This is somehow related to the value of the sports industry itself. According to The Business Research Company, the global value of the sports market is over USD 488.5 billion, and more than PLN 10 million in Poland. As a whole, it covers activities based on financial, human and social capital. In practice, these operations are performed, as claimed by Walker and Parent (2010), at three levels. The first level includes activities related to the creation of a sports product providing entertainment for viewers by sports teams or a single sportsperson. At the second level, there are activities by municipalities or local authorities that are involved in the construction of sports facilities. This, in turn, translates into building social ties. The third level is the so-called media level. At this level, "the power of the sports stars" influences the purchase of exclusive rights to broadcast sports events. All of this makes that many corporations use sponsorship to increase their profits as well as for positive associations with the sponsor's brand. In the opinion of Babiak and Wolfe (2006), this contributes to greater identification with the sponsor's brand. It should be noted, however, that the principle of sponsorship is "I give to get back", so it should be a pro-active effort to achieve a certain goal, and to yield measurable and positive effects by supporting important initiatives (Breczko, 2011). On the other hand, sport triggers emotions and at the same time it is an effective tool to educate and promote healthy lifestyle, attractive for young people, and as such, it may be successfully used in the sustainability and CSR strategy (Smith, Westerbeek, 2007). Also, the engagement of an enterprise is sporting competition is supposed to communicate to a broad group of stakeholders that the enterprise is sensitive to social and economic needs, especially in the local community (Scheinbaum, Lace, 2015). According to the research conducted by Djaballah et al. (2017) combining sponsorship with the sustainable development and CSR may yield both positive and negative results. First of all enterprises – sponsors manage to transfer the positive image of a sport facility brand to its own image. According to this opinion, the goal of sponsorship activities combined with sustainable and CSR activities is that the sponsor is associated with the beneficiary and the image of the sponsor is one of a company

that cares for people and solves their problems (Breczko, 2011). According to Waller and Conaway (Waller, Conaway, 2011), sponsors use the sustainable and CSR to prevent their negative image and to make them look good. On the other hand, sport disciplines that are nor very reputable, are associated with a high level of corruption or involved in doping scandals also affect the image and perception of the sponsor (Pawlak, 2015).

Stakeholders are usually positive about all kinds of sponsorship, if there is an association between a sponsor and the beneficiary. Thus, sponsoring may be helpful to achieve many different goals, such as good relationships between clients and employees, positive interest from the media, higher recognition and better brand image, more awareness of a given brand and even support from the community (Gregory, 2005). This is confirmed by Grohs and Reisinger (2014), who claim that the image of a sponsor is a function of the image of the sponsored activity and of how much an event fits the sponsor.

## 3. Research method

The following factors affecting image building were identified and served as the basis to interpret the research results:

- Hypotheses 1: the use of sustainable development and socially responsible activities in sponsorship opens in the pandemic Covid-19 up a wide range of opportunities for sponsors, in particular, supports their business objectives (H 1).
- Hypotheses 2: sponsorship activities, combined with sustainable development and CSR, increases the perception of sustainable development and CSR in the pandemic Covid-19 (H 2).
- Hypotheses 3: there is an increase in the significance of sponsorship communication in the field of sustainable development and CSR in the Covid-19 pandemic (H 3).
- Hypotheses 4: using sport potential in the sustainable development and CSR strategy in the pandemic Covid-19 helps create a responsible image internationally (H 4).

On this basis, the following main hypothesis (H) was formulated: sport helps create the image of a company as a sustainable and socially responsible organisation. The first step towards the goal of the research, defined above, was to develop the research model (Figure 1).

In this research, the instruments of econometric modeling were used, in the form of binomial models, which are the basis for the analysis of the relationships between one (or more) independent (explanatory) variable and a binomial (binary, dichotomous) dependent variable. Binomial modeling is mainly used for (Gruszczyński, 2010):

- verification of the adopted hypothesis (hypotheses) regarding the mechanism generating the variable $Y$, i.e. determining the set of variables $X$ that are important for determining the probability value $P$ in a given community,

- prediction $P(y_i = 1)$ of the probability of an event or state that the $Y$ variable takes the $y_i = 1$ value, or a prediction of a change in probability $P$ caused by a change in the value of one of the exogenous variables $X$.
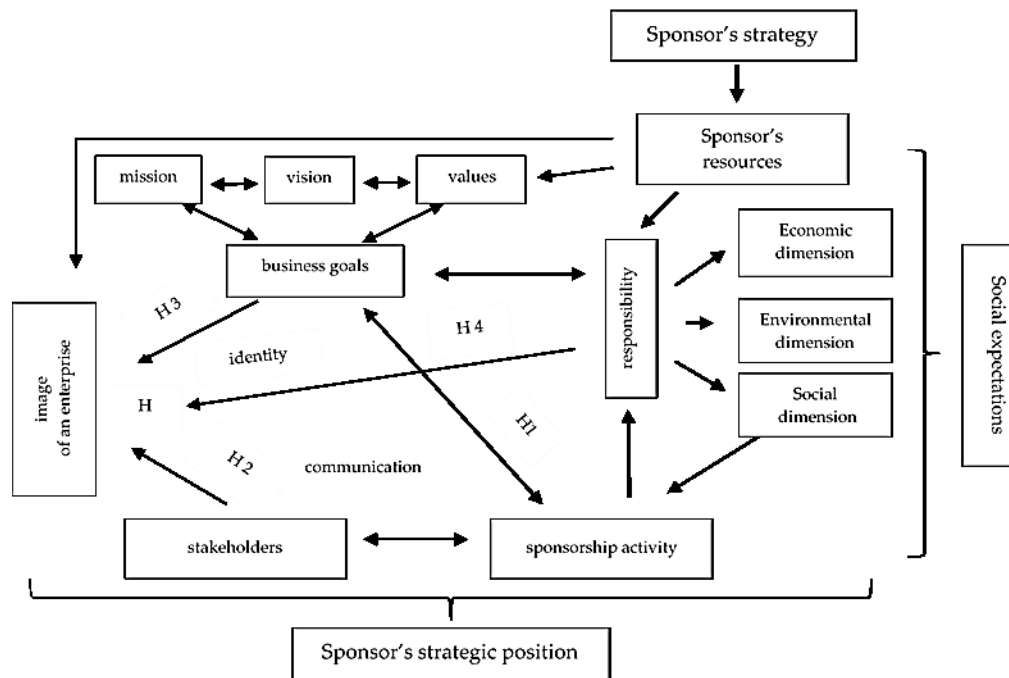


**Figure 1.** Research model. Source: own elaboration.

In practice, two types of binomial models are used, i.e., logit models and probit models. These models are used to specify probability and to analyze the relationships between one or more independent (explanatory) variables and a dichotomous dependent variable (taking the value of 1, when the desired event occurs, and the value of 0, when such an event does not occur), namely (Trendafilova et al., 2013):

$$y_i^* = \beta_0 + \sum_{j=1}^{k} \beta_j x_{ij} + u_i \tag{1}$$

where:

$y_i^*$ - hidden variable, taking:

$$y_i = \begin{cases} 1 \ for \ y_i^* > 0 \\ 0 \ for \ y_i^* \leq 0 \end{cases}$$

The purposes of the perception of sports sponsoring in Poland and its impact on the company's image as a socially responsible organization from the point of view of the participants of sports events, the logit model was used, taking the form of:

$$y_i^* = ln\frac{P_i}{1-P_i} = \beta_0 + \sum_{j=1}^{k} \beta_j x_{ij} + u_i \tag{2}$$

where:

$y_i^*$ - is called logit,

$P_i$ - is referred to as the probability of the dependent variable $y_t$, determined on the basis of the logistic distribution from the following equation:

$$P_i = \frac{P_i}{1-P_i} = e^{y_i^*} = e^{\beta_0 + \sum_{j=1}^{k} \beta_j x_{ij} + u_i} \tag{3}$$

$$P_i = \frac{P_i}{1-P_i} = \frac{P_i}{1 + e^{-(\beta_0 + \sum_{j=1}^{k} \beta_j x_{ij})}} \tag{4}$$

If:

$y_i^* \to \infty$, then $P_i \to 1$

$y_i^* \to -\infty$, then $P_i \to 0$

$y_i^* = 0$, then $P_i = 0{,}5$

To determine the goodness of the fit of the data to the estimated models, the basic statistical measures were used, such as: Likelihood Ratio Test, McFadden's R-squared, Adjusted R-squared, Number of cases of 'correct prediction'.

The data of dependent and independent variables, which are the basis for the estimated models, were obtained from the pilot studies conducted in III quarter of 2021, using the CAWI survey technique. The research used a structured questionnaire with 12 research problems, four of which (RP1-4) were later analysed statistically. Considering the substantial value and statistical criteria, 5 variables were selected to describe the respondents (Table 1), i.e. the explanatory variable ($x$).

**Table 1.**

*List of explanatory variables ($x$)*

| Statistical data of the respondents | | Independent variable | Value % |
|---|---|---|---|
| **Gender** | Female | *F* | 38.9 |
| | Male | *M* | 61.1 |
| **Age** | up to 24 years | A24 | 23.2 |
| | 25-34 years | A25-34 | 28.1 |
| | 35-44 years | A35-44 | 13.3 |
| | 45-54 years | A45-54 | 19.7 |
| | Above 55 years | A55 | 15.8 |
| **Education** | Graduate | G | 50.2 |
| | High school | H | 27.6 |
| | Professional | PR | 22.2 |
| **Marital status** | Single | S | 29.1 |
| | in relationship | R | 45.8 |
| | Widowed | W | 25.1 |
| **Professional activity** | Employed | E | 49.3 |
| | Unemployed | U | 27.1 |
| | Pensioner | P | 23.6 |

\* Reference group.

Source: own elaboration.

The data presented in table 1 show that the research sample comprises 38.9% women and 61.1% men (reference group). The biggest group of respondents are young people up to 34 years − 51.2% of the respondents, of which 28.1% are aged 25 to 34 years and 23.2% − below 24 years (reference group). Most respondents are university graduates − 50.2% of the research population (reference group), 27.6% have comprehensive or technical secondary education and 22.2% − vocational education. Most respondents have spouses or partners −

45.8%, followed by singles (bachelors/maidens – 29.1% – reference group, widowers/widows – 25.1%). In terms of the last category of variables, i.e. professional activity, pensioners constituted the least numerous group – 23.6%. The most numerous group in this category were professionally active respondents – 49.3% (reference group).

Response variables were coded on the basis of respondents' feedback on the abovementioned research problems, where: $H1 - y_1$, $H2 - y_2$, $H3 - y_3$, $H4 - y_4$.

In this paper, in the logit model, for the purpose of evaluating the above H1-4s, a dependent variable is represented by a dichotomous variable, where: 1 – is the distinguished value meaning the respondent's confirmation of a dependence, 0 means that the respondent does not agree with the phenomenon in question. With this assumption, it was possible to define the respondents' perception of the H1-4s.

The research conducted by the Author suggests that Polish enterprises engage in sponsorship for:

- publicity – 32.25% of responses,
- a positive image – 29.03% of responses,
- product and company brand promotion – 22.58% of responses,
- to support a given sport discipline – 16.14% of responses.

Moreover, 45.45% of the respondents believed that using the image of athletes for promotion is a good way to attract customers. In their opinion, this not only influences the image of the company or the athlete but also confirms the reliability and quality of a product.

Accordingly, 80% of the responds think that enterprises should engage in sponsorship. Of course, they should be aware that being a sponsor has its cons as well as pros (Table 2).

**Table 2.**
*The pros and cons of sponsorship according to the respondents*

| Pros | Cons |
|---|---|
| *of engaging in sponsorship\** | |
| is beneficial for reputation and brand identity associates sport success with company image | the success of an advertising campaign depends on sport results |
| the brand is more recognisable and it triggers positive associations and trust | risk of unsportsmanlike behaviour or being caught on doping |
| informed sponsorship activities are more visible than traditional advertising | unlike in advertising, it is not possible to inform about the features of a product |
| bran appears in sport and news programmes in the best airtime | it is hard to emphasise the role of the sponsor multitude of advertising information with multiple sponsors or advertisements on athletes' costumes |
| boosts sales | is recommended for recognisable brands |

\* the factors in the table are listed according in the order suggested by most respondents

Source: own elaboration.

The above list suggests that engaging in sponsorship is, in the first place, beneficial for reputation and brand identity. This is because sport success is associated with company image. This, in turn, makes the brand more recognisable, triggering positive associations and trust.

On the other hand, it should be noted that the conduct, results or unsportsmanlike behaviour of athletes has a negative impact on company reputation and its financial performance.

Looking for answers to the above RPs, eight logit models were estimated using the Gretl programme – two models per each of the examined response variables $y$, of which:

- 4 full models, covering all the variables $(x)$,
- 4 reduced models covering only variables $(x)$, with significance.

Table 3 presents the results of logit model estimations for the variable $y_1$.

**Table 3.**
*Results of logit model estimations for the variable $y_1$*

* observations used 1-203

| Variable | Coefficient | Standard deviation | z | p-value | Marginal effect | Indicators of data adjustment to model estimations |
|---|---|---|---|---|---|---|
| **MODEL 1 full logit model for $y_1$** | | | | | | |
| *const* | 0.1624 | 0.4240 | 0.3831 | 0.7016 | | Likelihood Ratio Test 36.9403 [0.0001] |
| *F* | −0.2919 | 0.3347 | −0.872 | 0.3832 | −0.0723 | |
| *A2543* | 0.2144 | 0.4027 | 0.532 | 0.5945 | 0.0534 | |
| *A3544* | −0.03747 | 0.5214 | −0.071 | 0.9427 | −0.0093 | |
| *A4555* | 0.5343 | 0.4577 | 1.167 | 0.2430 | 0.1327 | McFadden's R-squared 0.1321 |
| *A55* | 0.9050 | 0.4833 | 1.872 | 0.0612* | 0.2207 | |
| *H* | −1.109 | 0.4278 | −2.593 | 0.0095*** | −0.2617 | Adjusted R-squared 0.0462 |
| *PR* | 0.1809 | 0.3880 | 0.466 | 0.6410 | 0.0451 | |
| *R* | 0.2913 | 0.3254 | 0.895 | 0.3707 | 0.0724 | |
| *W* | 0.5126 | 0.4017 | 1.276 | 0.2019 | 0.1274 | Number of cases of 'correct prediction' 142 (70.3%) |
| *U* | −1.403 | 0.3799 | −3.694 | 0.0002*** | −0.3225 | |
| *P* | −0.4045 | 0.3849 | −1.051 | 0.2932 | −0.0994 | |
| **MODEL 2 reduced logit model for $y_1$** | | | | | | |
| *const* | 0.4806 | 0.2175 | 2.210 | 0.0271 ** | | Likelihood Ratio Test 31.0148 [0.0000] |
| *A55* | 0.7028 | 0.4388 | 1.602 | 0.1093 | 0.1733 | McFadden's R-squared 0.1109 |
| *H* | −1.1668 | 0.3526 | −3.309 | 0.0009 *** | −0.27418 | Adjusted R-squared 0.0823 |
| *U* | −1.4499 | 0.3656 | −3.965 | 7.33e-05 *** | −0.3319 | Number of cases of 'correct prediction' 139 (68.8%) |

Explanation: The level of significance of the parameters: *** $\alpha = 0.01$, ** $\alpha = 0.05$, * $\alpha = 0.1$

Source: own elaboration.

An analysis of the material suggests that the respondents believe it is worth being a sponsor, but they are not quite convinced if this has a positive impact on the achievement of goals, including increased value. On the one hand, this may be connected with placing sponsorship activities in the overall operation strategy and thus defining the objective of such activities. Some sponsors take actions in the field of sustainability and CSR in order to create the "responsible" image and some – out of willingness to help. The confirmation of this is the research by Djaballah et al. (2017), which clearly pinpoints that sponsors are unwilling to communicate on S-CSR activities since they can see the risk of being accused of greenwashing.

The results (Table 3) show that neither gender nor marital status are a statistically significant determinant of the probability of the variable $y_1$. Such dependence existed between respective age, education and professional activity groups, and in the latter two, there was a relationship both in the full and in the reduced models. A relationship on the $\alpha = 0.1$ level (full model) is visible for the variable $A55$. Meanwhile, the variables $H$ and $U$ revealed a relationship on the $\alpha = 0.01$ level (full and reduced models). Taking into account the obtained marginal effects, it should be stated that an increase in age by each year increases the probability (an increase by 0.22%) of the positive perception of activities for sustainable development and CSR in sponsorship activities, contributing to greater opportunities of the sponsor. In turn, among people with lower education, one may observe a decrease by 0.26% (full model) and by 0.27% (reduced model) of the positive perception of the selected activities. It is similar in the case of the unemployed. In this group, one may observe a decrease by 0.32% of the positive perception of sustainable and CSR activities in sponsorship activities. It should be noted here that both Model 1 and Model 2 have correct adjustment, proven by the value of the likelihood ratio test (36.9 and 31.01, respectively).

Taking into account H2, it should be stated that, in the opinion of the respondents, sponsorship activities, combined with sustainable development and CSR, increases the perception of sustainability and CSR, which translates into the creation of positive relationships with a wide range of stakeholders, in particular among the local community. As rightly claimed by Trendafilova et al. (2013) and Kufel (2007), sport is the industry in which a variety of stakeholders are involved in shaping the behavior of sports organizations. This, in turn, contributes to greater adaptation and implementation of practices related to sustainable development and CSR. This leads to the so-called strategic-corporate partnership. The use of sustainable and CSR initiatives contributes to the generation of the desired brand, fans' loyalty, sport development and ticket sales.

Considering RP 2, in the opinion of the respondents, sponsorship activity helps build positive relationships with a broad group of stakeholders, especially the local community. Accordingly, the logit models were evaluated and the results are presented in Table 4.

The same as in the case of $y_1$ gender is not a statistically significant factor determining the probability of the occurrence of a variable $y_2$. The age of the respondents proved to be an equally insignificant factor. Therefore, for these two groups of respondents, sponsorship activities combined with sustainable development and CSR are insignificant. Such dependence was reported in the case of $PR$ and $U$, on the significance level $\alpha = 0.05$ (full model). This dependence is somewhat different in the case of the reduced model, where the variable $PR$ had stronger dependence ($\alpha = 0.01$), while the other variable $U$ had the same level of dependence. Looking at the marginal effects, it can be concluded that the higher the education the lower (by 0.18%) the probability of better perception of sustainable development and CSR in sponsorship activities in the case of the full model. It is slightly different in the case of the

reduced model in which people with higher education perceive sponsorship activities combined with sustainability and CSR better (a likely increase of the factor by 0.24%).

**Table 4.**

*Results of logit model estimations for $y_2$*

* observations used 1-203

| Variable | Coefficient | Standard deviation | z | p-value | Marginal effect | Indicators of data adjustment to model estimations |
|---|---|---|---|---|---|---|
| **MODEL 3 full logit model for $y_2$** | | | | | | |
| *const* | 0.2653 | 0.4175 | 0.635 | 0.5252 | | Likelihood Ratio Test 23.8248 [0.0135] |
| *F* | −0.2544 | 0.3402 | −0.747 | 0.4546 | −0.0581 | |
| *A2543* | −0.0835 | 0.3973 | −0.210 | 0.8334 | −0.0190 | |
| *A3544* | 0.0682 | 0.5373 | 0.127 | 0.8989 | 0.0153 | |
| *A4555* | −0.2617 | 0.4546 | −0.575 | 0.5648 | −0.0607 | McFadden's R-squared 0.0897 |
| *A55* | −0.2981 | 0.4560 | −0.653 | 0.5134 | −0.0695 | |
| *H* | −0.3489 | 0.4179 | −0.834 | 0.4038 | −0.0808 | Adjusted R-squared -0.0006 |
| *PR* | −0.7842 | 0.3866 | −2.028 | 0.0425** | −0.1860 | |
| *R* | 1.1659 | 0.3336 | 3.494 | 0.0005*** | 0.2559 | |
| *W* | 0.254192 | 0.3860 | 0.658 | 0.5103 | 0.0565 | Number of cases of 'correct prediction' 135 (66.8%) |
| *U* | 0.877623 | 0.3929 | 2.233 | 0.0255** | 0.1843 | |
| *P* | 0.0191729 | 0.3783 | 0.050 | 0.9596 | 0.0043 | |
| **MODEL 4 reduced logit model for $y_2$** | | | | | | |
| *const* | −0.1397 | 0.2366 | −0.590 | 0.5548 | | Likelihood Ratio Test 18.3156 [0.0004] |
| *PR* | 1.0889 | 0.3157 | 3.449 | 0.0006 *** | 0.2409 | McFadden's R-squared 0.0690 |
| *R* | 0.0849 | 0.3522 | 0.241 | 0.8095 | 0.0192 | Adjusted R-squared 0.0388 |
| *U* | 0.8362 | 0.3690 | 2.266 | 0.0235 ** | 0.1773 | Number of cases of 'correct prediction' 135 (66.8%) |

Explanation: The level of significance of the parameters: *** $\alpha = 0.01$, ** $\alpha = 0.05$, * $\alpha = 0.1$.

Source: own elaboration.

Taking into account the *U* variable, it should be noted that an increase in professional activity (finding employment) causes an increase in the probability of better perception of sustainable development and CSR in sponsorship activities (respectively by 0.18% and 0.17%). Statistically significant was also one more variable, i.e. *R*, on the level $\alpha = 0.01$ (full model). Therefore, people in relationships perceive the activities discussed better since the probability of their perception is by 0.25% higher than in the case of single people. In terms of the data adjustment indicators, it should be noted that both model 3 and model 4 have a good quality of estimation, which is proven both by the likelihood ratio test ant the R-square coefficient.

Somewhat different are the results of the estimation of models 5 and 6 (Table 5), where statistical significance was only reported for one variable, i.e. *W*, from the group of marital status variables. Both in the full and in the reduced models, the variable had a medium-level statistical significance. Thus, it can be stated that the communication of sustainable development and CSR activities is very important in this group of respondents. This fact is indicated by the obtained values of marginal effects. Obviously, it should be remembered that the estimated models indicate the probability of the occurrence of the specific factor.

An analysis of the responses suggests that the respondents believe that sport sponsorship translates to a positive image, which is related to increasing communication in this area, and also the communication of sustainable development and CSR activities. As indicated by the previous studies (Campbell, Kirmani, 2008; Flöter et al., 2016), in sponsorship linked to sustainable development and CSR, a potential – relevant source of transmission should be taken into account. This is related to the limitation of persuasive communication. It happens since the activation of persuasive knowledge arouses suspicion in the minds of customers – sports beneficiaries, which leads to negative effects. Importantly, in the opinion of the respondents however, it should be treated as the promotional activity of a company – the sponsor, rather than its socially responsible activity. Nonetheless, supporting the sport or other areas makes a company more visible on the market, which results in value increase.

**Table 5.**
*Results of logit model estimations for $y_3$*

* observations used 1-203

| Variable | Coefficient | Standard deviation | z | p-value | Marginal effect | Indicators of data adjustment to model estimations |
|---|---|---|---|---|---|---|
| **MODEL 5 full logit model for $y_3$** | | | | | |
| const | −0.2187 | 0.4123 | −0.530 | 0.5958 | | Likelihood Ratio Test 12.1982 [0.3489] |
| F | 0.2130 | 0.3263 | 0.652 | 0.5139 | 0.0505 | |
| A2543 | 0.5334 | 0.3926 | 1.359 | 0.1743 | 0.1231 | |
| A3544 | 0.2444 | 0.4881 | 0.500 | 0.6166 | 0.0570 | |
| A4555 | 0.2590 | 0.4366 | 0.593 | 0.5530 | 0.0606 | McFadden's R-squared 0.0448 |
| A55 | 0.6661 | 0.4645 | 1.434 | 0.1515 | 0.1486 | |
| H | 0.3147 | 0.4104 | 0.766 | 0.4432 | 0.0737 | Adjusted R-squared -0.0433 |
| PR | −0.1846 | 0.3713 | −0.497 | 0.6190 | −0.044 | |
| R | 0.1070 | 0.3088 | 0.346 | 0.7288 | 0.0255 | |
| W | 0.8423 | 0.3991 | 2.110 | 0.0348** | 0.1882 | Number of cases of 'correct prediction' 128 (63.4%) |
| U | −0.2197 | 0.3494 | −0.628 | 0.5294 | −0.0529 | |
| P | −0.0803 | 0.3701 | −0.217 | 0.8282 | −0.0192 | |
| **MODEL 6 reduced logit model for $y_3$** | | | | | |
| const | 0.1993 | 0.1635 | 1.219 | 0.2230 | | Likelihood Ratio Test 6.3191 [0.0119] |
| | | | | | | McFadden's R-squared 0.0232 |
| W | 0.8733 | 0.3605 | 2.422 | 0.0154 ** | 0.1954 | Adjusted R-squared 0.0085 |
| | | | | | | Number of cases of 'correct prediction' 121 (59.9%) |

Explanation: The level of significance of the parameters: *** $\alpha = 0.01$, ** $\alpha = 0.05$, * $\alpha = 0.1$.

Source: own elaboration.

In the next modelling (models 7 and 8), statistical significance was reported in two groups of variables: gender and age, and in the gender group (Table 6):

- the variable *F* had low dependence, both in the full and in the reduced models,
- the age variable *A*55 had average significance only in the full model.

In the reduced model, this variable was not significant.

**Table 6.**

*Results of logit model estimations for $y_4$*

* observations used 1-203

| Variable | Coefficient | Standard deviation | z | p-value | Marginal effect | Indicators of data adjustment to model estimations |
|---|---|---|---|---|---|---|
| MODEL 7 | | | | | | |

| Variable | Coefficient | Standard deviation | z | p-value | Marginal effect | Indicators of data adjustment to model estimations |
|---|---|---|---|---|---|---|
| **MODEL 7 full logit model for $y_4$** | | | | | | |
| const | 0.9226 | 0.4262 | 2.165 | 0.0304** | | |
| F | 0.5963 | 0.3373 | 1.768 | 0.0771* | 0.1336 | |
| A2543 | −0.6366 | 0.3927 | −1.621 | 0.1050 | −0.1503 | |
| A3544 | −0.6735 | 0.5125 | −1.314 | 0.1888 | −0.1621 | |
| A4555 | −0.5572 | 0.4561 | −1.222 | 0.2218 | −0.1326 | |
| A55 | −1.007 | 0.4469 | −2.254 | 0.0242** | −0.2433 | |
| H | −0.5056 | 0.4109 | −1.230 | 0.2185 | −0.1190 | |
| PR | 0.1151 | 0.3844 | 0.299 | 0.7647 | 0.0261 | |
| R | −0.0523 | 0.3151 | −0.166 | 0.8680 | −0.0120 | |
| W | −0.1715 | 0.3845 | −0.446 | 0.6555 | −0.0398 | |
| U | 0.2349 | 0.3666 | 0.640 | 0.5216 | 0.0530 | |
| P | 0.3750 | 0.3781 | 0.991 | 0.3214 | 0.0833 | |
| **MODEL 8 reduced logit model for $y_4$** | | | | | | |
| const | 0.4568 | 0.1969 | 2.319 | 0.0204 ** | | Likelihood Ratio Test 5.8410 [0.0539] |
| F | 0.5309 | 0.3099 | 1.713 | 0.0867* | 0.1202 | McFadden's R-squared 0.0220 |
| A55 | −0.6384 | 0.3918 | −1.629 | 0.1033 | −0.1537 | Adjusted R-squared -0.0005 |
| | | | | | | Number of cases of 'correct prediction' 133 (65.8%) |

Explanation: The level of significance of the parameters: *** $\alpha = 0.01$, ** $\alpha = 0.05$, * $\alpha = 0.1$.

Source: own elaboration.

Moreover, it can be concluded that female supporters show the probability of the perception of "the sustainable development and CSR-sponsorship relationship" by 0.13% higher than male ones. Also, the younger the viewers of sports events the lower the perception of the responsible image of the sponsor (by about 0.24%). The feedback from respondents proves that contemporary companies should include sport sponsorship in their sustainable and CSR strategies.

## 4. Discussion

Research indicates that in the times of the Covid-19 pandemic, the sponsor's activities in the area of sustainable development and CSR are gaining importance. The results of the conducted analysis indicate that there is a close link between sponsoring and creating the image in terms of socially responsible activities. Various other studies have also revealed the same fact (Babiak, Wolfe, 2006; Pope et al., 2009; Walters, Tacon, 2011; Djaballah et al., 2017). The research conducted by the author extends the previous analyses with the identification of factors determining the perception of sports sponsoring in the era Covid-19. It is particularly

important towards consumers considering a sports organization as an opportunistic one (Walker et al., 2017), and also, in relation to those beneficiaries of sport who perceive sponsoring negatively, especially when using club social media channels to share content related to sponsors (Weimar et al., 2020).

As noted by Habitzreuter & Koenigstorfer (2021) and others (Rowe et al., 2019), sports sponsoring related to sustainability and CSR is oriented to the promotion and prevention of positive effects associated with creating the image. As claimed by Djaballah et al. (2017) and Karamichas (2020), sport, as a whole, is seen as an interesting vector of sustainability and CSR, generally evoking positive perception. However, considering it in the categories of individual sports disciplines, there are many both negative and positive links with sustainability and CSR. A similar opinion is expressed by Trendafilova et al. (2013), according to whom some sports, such as hockey, motor sports, have a negative impact on the environment. Therefore, sponsorship activities in terms of sustainable development and CSR ought to primarily relate to the environmental aspect and operations in this field. Such negative perception also arises when social responsibility programs are not well suited to the core business objectives of the organization (Hills, Walker, Barry, 2019). Moreover, it seems essential to define the motives of socially responsible activities (philanthropic and not profit-oriented). This is particularly important in the perception of CSR activities that may reduce (or even eliminate) the negative impact of adverse effects (e.g., corruption activities) on the attitude towards sponsoring events (Kulczycki, Koenigstorfe, 2016a) and thus the sponsor's image (as indicated in this study). In addition, the philanthropic motivation of the sponsor translates into the perception of socially responsible activities among sportspeople, thus affecting their social attitudes (Kulczycki, Koenigstorfe, 2016b). This research indicates the need for further studies in the field of the problem related and in particular the determination of the specific relationships at the level of sports sponsoring-image − a sustainable and socially responsible company. This is also the result of the previous studies, e.g. by Inoue & Kent (2012), which indicate the growing involvement of the sports industry in sustainable and CSR operations, or the one by Huang, Ye & Kao (2015), according to which the activities of enterprises in the sports market are less frequently examined compared to other organizations. Also, the research by Flöter et al. (2016) indicates the need for further studies in the field of CSR activities and sponsoring, taking into account the need for communication of these activities. It should be remembered that CSR communication constitutes a strategic element of the market game. Moreover, it has a significant impact on the sports beneficiaries. This is due to the assumption that CSR is primarily based on transparent activities and building their trust, convincing them that responsible decisions are made, and they are responsible for their actions. The analysis of the factors influencing the perception of CSR in the sports sponsoring confirmed the study by Djaballah et al. (2017) that CSR practices in sport are a strategic approach to designing a better image, maximizing corporate financial performance or mitigating the negative perception of stakeholders.

## 5.  Constraints and prospects

In the conducted research, logit modeling was used, which enabled the estimation of 8 models, demonstrating the perception of the analyzed aspects of sports sponsoring in combination with sustainable development and CSR activities. Unfortunately, the weakness of such a solution is the inability to perform calculations for continuous data, and they are only limited to the statement: YES (1) or NO (0). In view of the above, the estimated models relate to the subjective evaluation of participants of sporting events, relating to the activities of sponsors in the field of sustainability and CSR.

It should be remembered that the estimated models determine the probability of the occurrence of the relevant factor (PB1-4). This means that the estimated models present the significance of the factors identified in the study, shaping the sponsor's image in terms of sustainable development and CSR activities among participants of sporting events. Therefore, it can be concluded that these models and the identified characteristics constitute the basis for further research into the perception of sponsoring among the group under consideration.

In practice, it is convenient to use the odds ratio, which determines the possibility of comparing the odds of the analyzed phenomenon in another comparable group. In the analyzed cases, the odds ratio informs on how many times the odds of the occurrence of the analyzed phenomenon changes compared to the reference group (Table 1).

It is worth pinpointing that despite the obvious and unquestionable positive significance of sponsoring, sponsors' ambition is to create a real relationship with consumers, including (or perhaps most of all) sports fans. However, this does not mean that the sponsor's activities are not aimed at creating value from the undertaken investment. It is, therefore, a matter of dispute whether sports sponsorship is a philanthropic activity, or an activity aimed at profit maximization. In view of the above, according to the model estimation in relation to those determined in RQ, it can be noted that:

- RP 1, it is difficult to say whether or not sponsorship activity supports business goals. Sponsorship requires major financial contribution, so, without analysing specific data, it is hard to determine the relationship.
- RP 2, contemporary companies should take an active part in the life of the local community by supporting not only famous sport teams, events or persons, but also local clubs, which is in line with the CSR concept.
- RP 3, supporting the sport or other areas makes a company more visible on the market, which results in value increase.
- RP 4, enterprises that use the sport potential in their sustainable and CSR strategies are more able to create a positive – responsible image. Also, their activity in this area translates into value increase or (despite some uncertainties) achievement of business goals.

As a result of the conducted analyses, it can be concluded that the support for sport is to bring tangible benefits to the company (sponsor). At this point, the combination of sponsorship activities with sustainable and CSR activities can be questioned. Although sports sponsorship is a constituent of CSR programs, it has been adapted to them rather than developed by them. This is reflected precisely in sponsorship objectives, which are generally defined, and thus difficult to measure. Regardless of the emerging dilemmas and constraints in the analyzed area, it is undeniable that the objective of using sports sponsorship is a positive impact on a wide range of stakeholders.

Therefore, it should be considered whether the possibility of participating in sports events, which today cannot be held without the support of sponsors, also brings benefits to the entity and the society.

## 6. Conclusion

In the period of many restrictions related to the Covid-19 pandemic, sports sponsors have limited opportunities to display their brand, thus creating their image, which in turn translated into a decrease in the income generated on this account. Additionally, the lack of sports gatherings limited the interactions occurring on the plane of the sports event – sponsor-beneficiaries of the event. However, it did not change the perception of the sponsor as an implementer of activities related to sustainable development and social responsibility. Moreover, Covid-19, in a way, forced them to act in a sustainable manner and CSR. The commercialization of sport introduced sustainable development and CSR as means to achieve organizational goals. The Covid-19 pandemic has become a period of adjusting activities in the area of sustainable development and CSR to new conditions and social expectations. The obtained test results confirm this.

The estimated logit models (full and reduced) revealed different perceptions of the examined phenomena. Using the sport potential serves the business purposes of contemporary enterprises recognized from the point of view of settled, well-educated people with a stable professional position. Taking into account PB 2, the perception of sponsorship activities, combined with sustainable development and CSR, is of the greatest importance for people with well-established both professional and family position. This aspect is also significant among well-educated people. The perception of sponsorship communication in terms of sustainability and CSR is slightly different. This manifestation of the discussed subject matter is noticeable only in one group, i.e., in the group distinguished by marital status. In the case of the last PB, it can be observed that the perception of sports potential in the sustainable and CSR strategy, which translates into the creation of a responsible image, is of great importance, both for women and men, in different age groups.

It should be noted that a relatively higher quality of the estimated models is presented by model 1. In this model, the number of "correct prediction" cases reaches 70.3%. This means that in the case of variable y_1, there is the most convergence between predictions and the actual state of affairs. The other models represent as follows: model 2 – 68.8%, model 3 – 68.8%, model 4 – 68.8%, model 5 – 63.4%, model 6 – 59.9%, model 7– 66.3% and model 8 – 65.8%. To sum up, the overall classification of cases proved to be positive, which is a satisfactory result.

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