

# The Impact of Interest for Sport and Sustainability of GenZ on Fan Engagement in Sustainability Campaigns of Favourite Sport Club

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**Abstract.** *This paper aims to analyze how the involvement of Generation Z fans in sustainability activities of sports clubs can change depending on the interest they have in sports and sustainability. Thus, we aim to demonstrate that, when, at the level of the individual, there is both interest in sustainability and interest in sport, the level of fan involvement is higher, compared to the situation in which only one of them would be registered (interest in sustainability or interest in sport).*

*Recent literature highlights the fact that the involvement of young people from Generation Z is influenced by the manner in which the brand shows that it is receptive to commitments to sustainability and social inclusion, this way gaining their trust much more easily. Also, when it comes to Generation Z and their commitment to sustainability activities, the decision to get involved will be influenced by the authenticity, transparency and social values that the sports club exposes.*

*Thus, in this paper, we conducted a quantitative study through an online survey among students at the Bucharest University of Economic Studies, with a total of 198 respondents. The most important results of the research show that the simultaneous existence of interest in sport and sustainability at the individual level increases the level of fan engagement, compared to when there is only interest in one aspect (sport or sustainability). At the same time, it should be noted that GenZs tend to get involved by promoting or carrying out concrete actions, compared to getting financially involved in the club's sustainability activities.*

*The study can be useful to sports clubs and entities that are involved in the field of sport, as it brings a relevant conceptual framework on how to involve fans, based on their behavior and interests segmentation.*

**Keywords:** Fan Engagement, Sport Sustainability, Sustainability Campaigns.

## Introduction

The involvement of young people in various activities of contemporary society is of major importance, if we think about the speed with which society develops from one day to the next. However, in order to involve young people, it is necessary that the process is as attractive as possible, especially when it comes to sustainability, a major and topical area in which their involvement is necessary.

Sport is a field in which young people find themselves, from amateur to professional competitions, being supporters or practitioners. With the passage of time, it gradually became a

universal phenomenon, which managed to overcome any type of social, religious or linguistic barrier (Graham, Neirrotti & Goldblatt, 2001). However, sport must be seen through the prism of all its characteristics, whether they are positive or negative. In terms of the sport benefits for society as a whole, it is worth mentioning the economic impact created by the development of new jobs, attracting major investments and the development of local infrastructure (Bácsné-Bába et al., 2021; Msonge & Lekule, 2024). From the point of view of the objections raised in the literature, various negative associations are attributed to sport, the most common being doping, cheating, match-fixing and negative impact on the environment (Ennis, 2020). Authors such as Wicker (2019) discuss the footprint of sport on society, noting that it is increasingly accentuated, if we take into account the amount of greenhouse gas emissions of a single active sports participant in a competition.

Thus, the usefulness of this paper is to try to connect sustainability and sport in a conceptual way, so that the interest in sustainability campaigns coming from sports and the level of fan engagement associated with them would have an upward trend.

## Literature review

### *Fan engagement*

Most of the time, recent studies highlight the idea that individuals' involvement in sustainability-based practices continues to be on an ascending trend that directly correlates with aging (Wang et al., 2021), peaking in middle ages (this includes a part of the Generation Z), and then the involvement gradually decreases in older age segments (Escario, Rodríguez-Sánchez & Casalo 2020). If we think about the need for entertainment that current generations need, we can also turn our attention to how important it is to involve them in sustainable endeavors, so that future generations can also enjoy everything they currently own. All this can be achieved through broad strategies that consider building a sustainable future and meeting people's current needs in a way that avoids waste of any kind. However, the most important point of these approaches is represented by the quality of life and environmental protection, correlated with the economic growth of everyday life (Özmehmet, 2008).

Annamalai et al. (2021) state that the term "engagement" is frequently used in the literature associated with sports marketing to describe "extreme degrees of fanaticism", but also the way fans identify and "emotionally connect" with the team or athlete for whom they have a certain level of appreciation. Drawing a parallel between the world of sports and that of goods and services, the involvement of the sports consumer is similar to that of classic customers of goods and services, the difference being made through the "non-transactional behavior of fans" (Yoshida, Nakazawa & Biscay, 2014). At the same time, at the level of professional sports teams, most of the time, the fans are the ones who help the favorite team on various occasions (in the stadium, in front of the TV, etc.) through various activities (volunteer work, team encouragement, financial support, mass media ratings etc.), regardless of whether we are talking about online or offline support (Huettermann, Uhrich & Koenigstorfer, 2022).

Thus, totaling the actions of the fans and their interaction with the favorite team, we can define the concept of "fan engagement" as an investment of time and resources on the part of the sports consumer (the fan) in the relationship with the sports organization (Hollebeek et al., 2022). However, when we talk about the high engagement of fans in relation to the favorite sports team, we understand that it is seen rather as a beneficial thing (Huettermann, Uhrich & Koenigstorfer, 2022). Recent literature highlights the fact that the involvement of young people from Generation

Z is influenced by the way in which the sport brand shows that it is receptive to commitments to sustainability and social inclusion, gaining their trust much more easily this way (Huang, Saleh, & Zolkepli, 2024; Sagar, Omkaara Jyothi, & Ranjith, 2025).

### ***Sports Sustainability***

With the passage of time, it becomes increasingly evident that the natural environment and the world of sports are in close connection, problems with the natural environment leading to the impossibility of people having a normal life and the impossibility of practicing sports. At the same time, human activity carried out daily and the uncontrolled consumption of natural resources lead to ruptures in the relationship between man and nature. In other words, if people do not consume natural resources in a balanced way, these resources will eventually disappear and the environment would become increasingly affected by all these changes (Trail & McCullough, 2020). When we talk about the sports industry, it is quite difficult to adopt quick and effective sustainability initiatives, the reason being the limitation of knowledge in relation to this topic (Amankwah-Amoah, 2020; Martinez-Martinez et al., 2019).

In the literature, a large majority of specialists define sustainability as a process aimed at increasing the quality of life, considering the limits imposed by three ecosystems: the social ecosystem, the economic and governance ecosystem, and the environmental ecosystem (Ellili, 2023; Sterling, 2013). At the same time, specialists also see sustainability as an important pawn that has the role of meeting people's needs today, but without jeopardizing the ability of future generations to meet their own needs (McCullough, Orr & Kellison, 2020; Vicente & Camocho, 2024), but also to help them have a balanced lifestyle (Ellili, 2023). For the sustainability process to be relevant over time, it must be based on a long-life cycle when it comes to products and services (Rogers, Deutz & Ramos, 2021), ensured through the 3R process (repair, recycle, reuse) (Istudor et al., 2022).

When it comes to the sports industry, authors such as Mariethoz & Bakonyi-Moeschler (2003) believe that sport helps promote an autonomous, long and satisfying life, often having an important role in the education process towards sustainability (Klaperski-van der Wal, 2023). The importance of sustainability in sport is even more evident if we refer to the sports events with global impact that take place periodically (Olympic Games, World Championships, etc.). Cury, Kennelly & Howes (2023) define the concept of sustainability as a way to properly manage the sports activities that sports entities and athletes carry out, so that they do not destroy environmental elements, take into account the economic impact they can produce and help the social integration of participants in the host community (especially in the case of events that bring together different nationalities). Moreover, the last decades have been a driver of development in the field of sustainability, with the focus shifting from the impact of mega-events on the environment to their social and economic impact (Wolfe et al., 2024), thus ensuring a triple approach – economic, social and environmental (Boros et al., 2024; Pal et al., 2025).

On the other hand, digitalization, the challenges associated with the marketing process and the diversity of stakeholders influence impact the sustainability of each community, so it is necessary that the three above-mentioned pillars of sustainability are always in a balance (Varmus, Kubina & Adámik, 2021). Madhavan, Jacob & Anilkumar (2025) believe that sustainability in sport should profit from the global influence that the sports industry has, with the aim of promoting sustainable practices and raising awareness of the increasingly evident climate change. In relation to sporting events, sustainability should focus on efficient management of greenhouse gas

emissions and energy efficiency (Su, Li & Xu, 2025), so that their contribution to the communities is as favorable and lasting as possible, and future generations can also reap the same benefits (Parra-Camacho et al., 2023).

However, things are not as simple as they seem in the world of sports, because the adoption of concrete strategies, starting from the micro level and migrating to a macro level, is most often seen as an obstacle in the development of a sports entity, financial waste being most often associated with this. Authors such as McCullough et al. (2020) mention a very important thing, namely that, although the attention paid to sustainability in sport is on an upward trend, implementation is poor (Wicker & Thormann, 2024), this being represented mostly by the partial adoption of environmental initiatives at the level of sports organizations. At the same time, Cury et al. (2022) complete the framework exposed and highlight the difference associated with the methods of assessing the impact of sports events on the environment, which most of the time leads to inaccurate or even non-existent results.

Thus, taking into account all the above, sustainability in sport can be considered a process that focuses on increasing the positive impact that sports events and organizations can have on society (sustainable infrastructures, development of the local economy, social inclusion), but also reducing the negative aspects associated with sports events, such as environmental degradation, noise produced by sports activity or carbon emissions caused by the entire process of carrying out sports events.

### ***Models that cover fan engagement and sustainability***

Currently, there is a wide variety of models in the literature based on the particularities of concepts associated with fan engagement, such as the one proposed by Annamalai et al (2021), but these are treated differently depending on the subject under investigation. At the same time, the models designed to analyze the particularities of sustainability in various fields, including sports (a field of interest for this paper), are similarly diverse. Obviously, each of them is differentiated by characteristics that make them, in most cases, unique (the method of application, the central subject of the research, the variables used, the target market, etc.).

The model proposed by Annamalai et al. (2021) highlights the importance of online content in fan engagement. Through this model, the authors demonstrate that there is no "one-size-fits-all", because the sports performance of the favorite team together with seasonality (the competition calendar) end up changing the way the target audience reacts to the same type of post:

- During the competition (Peak Season) the posts become more viral;
- After the end of the season (Off Season) only the involved fans remain active.

Another important aspect that can be found in this model is that at the end of the season (Off Season) social content and promotional contests become the most important in maintaining the attention of the target audience. On the other hand, victories (Performing Team), i.e. moments when the team is performing, help to multiply engagement for all content categories, while defeats (Poor-performing Team), i.e. moments when the team is less performing, reduce this effect. At the same time, many models aim to identify the relationship between fan engagement and sustainability, such as the one proposed by Trail & McCullough (2018), through which the authors want to explain how a fan can end up adopting sustainable behaviors when the sports club conducts a sustainability campaign.

According to the model proposed by the authors, at the base of the entire process is the context, which can influence the entire process through two categories of factors: external

(Awareness of Sustainability Campaign, Interest in Sustainability Campaign and Evaluation of Sustainability Campaign) and internal (Personal Needs, Personality, Personal Values and Personal Goals). These two categories lead to the formation of the fan attitude towards the sustainability campaign, with influences also from factors such as the loyalty towards a certain club and the sustainable behavior previously adopted. Further, the model demonstrates that the attitude adopted leads to behavioral intentions, but which can be limited by external constraints. Only after all this, sustainable behavior appear, which ultimately leads to the last stage of the model, namely post-behavioral reactions, in the form of (Dis)confirmation of Expectancies, Affective Response, Self-esteem Response and Future Intentions for Sustainable Behavior.

The present research differs from other existing researches, first of all, because it is carried out in South-Eastern Europe, more precisely in Romania, an ex-communist country, where the concept of sustainability is quite restricted in knowledge and applicability in almost all fields, even more so in the field of sports. At the same time, being an ex-communist country, the migration to a free and capitalist market has led to a decrease in the importance given to sport by both citizens and public authorities, compared to Western European countries. Conceptually, the most important difference of our model comes from the fact that it considers the simultaneous existence of interest for sport and interest for sustainability as a major influence for fan engagement in sustainability campaigns from the favourite sport club.

Considering this research focus, our model is based on the following variables: Interest for Sustainability, “Interest for Sport”, “Perceived Importance of Sustainability Campaigns in Sport (Compared to other domains)”, “Support”, “Behavioral Engagement” and “Financial Engagement”.

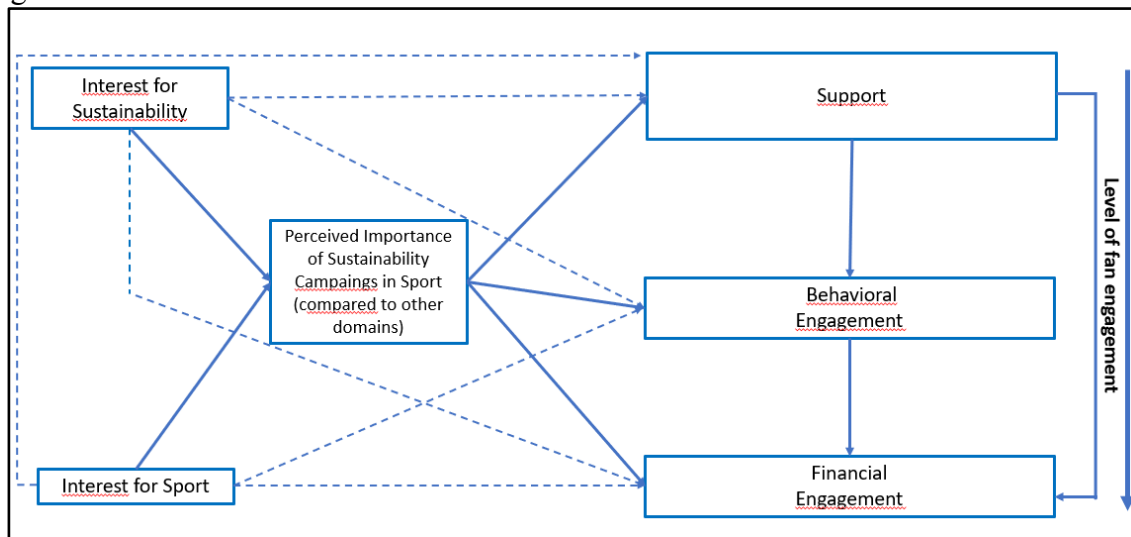


Figure 1. The conceptual model

Source: Authors' own research.

For an easier understanding of our model, we will detail its variables, according to the sentences used in the questionnaire in order to measure each variable:

- **Perceived Importance of Sustainability Campaigns in Sport (Compared to other domains)** = Sustainability campaigns launched by sports clubs are more important than those launched by other organizations (companies, public institutions, etc.);

- **Support** = The fan tends to support the sustainability campaigns of the favorite club by simply promoting it, not getting concretely involved through actions or financial support;
- **Behavioral Engagement** = The fan gets involved through actions in the sports club's sustainability campaigns;
- **Financial Engagement** = The fan reaches the level where he is directly financially involved in supporting the sustainability actions of the sports club.

The quantitative study to be described in the next part, as well as the proposed conceptual model, were based on several validated theories from the specialized literature that revolutionized the knowledge in the area of consumer behavior, such as the Theory of Social Identity, the Theory of Planned Behavior and the theory related to Values, Beliefs and Norms.

**Social Identity Theory** comes from the field of social psychology and considers an individual's membership in various social groups to which they belong (Tajfel et al, 1971). Thus, an individual does not interact in an isolated way, but as a member of a certain collectivity, most of the time trying to put the group to which he belongs in a good light, disregarding the groups he does not belong to (Hogg, 2016). In the present study, the theory helped us to verify whether or not individuals' status as fans of a sports club influences their behavior when it comes to sustainability activities. Moreover, we wanted to see if the involvement in promoting, carrying out certain activities or contributing financially to a sustainability activity is more intense when fans identify with the social group (the group of fans of a sports club).

**The theory of Planned Behavior** is based on the individual decision-making process of the consumer, explaining why he tends to do or not do something (Ajzen, 1985). Thus, this theory is a psychological framework, which shows that the individual's actions are mostly determined by intention, which is based on 3 independent cognitive factors, namely attitude, subjective norm and perceived behavioral control (Ajzen, 1991). In other words, the individual will act only if he considers that he really wants to do that thing (attitude), if he feels that he has to do that thing (the norm) and if he feels that he can complete that task (control). In the present study, this theory helped to build the conceptual model, starting from the model proposed by Trail & McCullough (2018), that was adapted for our research question.

The third theory used for the present research, namely the '**Value, Belief, Norm**' Theory, is closer to the area of sustainability, the main topic in the present paper, and explains how a certain pro-social or ecological behavior of the individual is based on a causal system of the value-belief-norm type (Stern, 1999). Thus, this system starts from the individual's values (his own principles by which he guides his life), has as its middle stage the area of beliefs (the way in which the individual perceives reality) and ends with the area of personal norms (the moment when the individual does something as a result of his own decision, not because something or someone forces him) (Oreg & Katz-Gerro, 2006). In the present research, the theory helped to substantiate the conceptual model and was an integral part in establishing the variables of the model, especially the interest in sport and sustainability.

## Methodology

The aim of this research is to find out how young people from Generation Z understand the concept of sustainability and how it should be applied within a sports club, so that the attraction and involvement of fans in sports events increases.

Building on this research purpose, the objectives of the study were the following:

**O1** Determining the level of interest in sustainability among GenZs.

**O2** Determining the interest in sports among GenZs.

**O3** Determining the importance of sustainability campaigns in sport compared to other areas.

**O4** Determining the level of fan engagement in sustainability actions regarding Support, Behavioral Engagement, and Financial Engagement.

**O5** Determine the impact that interest in sustainability and sport have on fan engagement.

The present research starts from the hypothesis that when, at the individual's level, there is both interest in sustainability and in sports, the level of fan engagement is higher, compared to the situation in which only one of them would be registered (interest in sustainability or interest in sport). The research method used in the present study was the online survey, the process of collecting information being carried out exclusively on the Google Forms platform, through a self-administered questionnaire. The respondents were represented by students from the Bucharest University of Economic Studies, who practice physical activities, aged between 18 and 29 years. The survey was conducted between March and April 2025. The sample was gender-balanced, consisting of 51% men and 49% women, predominantly from urban areas and with an average monthly income mostly ranging between 1,500 and 6,000 lei. In terms of education, the majority of respondents were enrolled in master's programs. For the survey, young people from Gen Z who practice sports were selected because they are more likely to be interested in sports in general, so the market incidence would be higher. In addition, this is the segment that can kick-start involvement, thus inspiring other segments.

For the selection of respondents, we used the "snowball" technique, distributing the questionnaire through online communication platforms. Being an exploratory study conducted in the context of the present research, the final sample was 198 respondents, data collection been stoped when preliminary analysis showed a stabilisation in the results.

## Results and discussions

The research begins by measuring separately the interest in sustainability and sports, using a 7-level Likert scale. Taking into account the fact that our model wants to demonstrate the need for the simultaneous existence of interest in both areas (sustainability and sport), the third variable measured refers to the sustainability campaigns in sport analyzed in comparison with other areas.

**Table 1. Interest for Sustainability, for Sport and Perceived Importance of Sustainability Campaigns in Sport**

| Variable name                                                                         | Variable acronym | Average (on scale from 1 to 7) |
|---------------------------------------------------------------------------------------|------------------|--------------------------------|
| Interest for Sustainability                                                           | IfSUS            | 5.22                           |
| Interest for Sport                                                                    | IfSP             | 5.24                           |
| Perceived Importance of Sustainability Campaigns in Sport (compared to other domains) | PISCS            | 4.58                           |

Source: Authors' own research.

The first objective of this research was to determine the level of interest that physically active young people in GenZ have in sustainability-related topics. It can be seen that the value resulting from the measurement of this variable is 5.22, when measured on a scale of 1 to 7, which indicates a relatively high tendency of young people to be interested in topics related to

sustainability. Thus, we can conclude that they show a high level of awareness about the importance of the quality of their life, but also of those around them, not only in the present, but also in the long term.

The second objective of the present research was to determine their level of interest in sport. It can be seen that young people manifest a similar level to that for topics related to sustainability, which means that sport represents an important part of their daily lives, the average score being 5.24 (a score also justified by the fact that the research participants are physically active young people). Thus, not only the quality of daily life is important, but also health and physical condition. On the other hand, in terms of opportunities for sports industry development, it is clear that young people can be an important pawn in creating new opportunities for sports organizations, whether we are talking about sports equipment suppliers or performance sports clubs.

The third objective focused on analyzing the simultaneous impact of interest in sport and sustainability, by measuring the level of importance that sustainability campaigns from sport have among young people, compared to sustainability campaigns from other fields. In other words, through this variable we measure the synergistic effect of an individual being interested both in sport and sustainability, not just in one of the two areas. This way, we can see that the average score for this variable was 4.58, which indicates moderate interest. Obviously, this is normal, if we take into account the fact that, in this case, young people must take into account both their interests in relation to sustainability and sport, but also the origin of sustainability campaigns from the sports sector.

Finally, even if their busy daily schedule affects the frequency of physical activities to one extent or another, GenZs understand the importance of sport in their lives, are interested in topics related to sustainability, which leads to a portion of them also showing an interest in sustainability campaigns that come from the sports area.

The second part of the research aims to measure how fans can be involved in sustainability activities in sport. Within this step of the research, we wanted to see how young people's intentions are manifested in relation to fan engagement, when they move from Support, to Behavioral Engagement, and finally to Financial Engagement. Thus, in this transition we wanted to start from the basic level (Support), where the fan is in his comfort zone, and the effort made by him is minimal. Further we moved on to the intermediate area (Behavioral Engagement), where the fan must be actively involved through actions. The last area of fan engagement was represented by Financial Engagement, because here already the effort made by the fan is one that has a lot to do with the quality of his own life, his own purchasing power, as well as his willingness to invest in sustainability and sport.

For each of the three variables, the respondent had to present his agreement, on a 7-level Likert scale, in relation to a series of statements, as can be seen in Table 2.

**Table 2. Level of fan engagement**

| Variable name         | Variable acronym | Measurement Items                                                                                            | Average (on scale from 1 to 7) |
|-----------------------|------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------|
| Support               | SUPP             | It is easier for me to support sustainability initiatives when they are promoted by my favorite sports club. | 4.85                           |
| Behavioral Engagement | BE               | If my favorite sports club is involved in sustainability projects, I also tend to get involved.              | 4.84                           |

| Variable name        | Variable acronym | Measurement Items                                                                                                                                   | Average (on scale from 1 to 7) |
|----------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Financial Engagement | FE               | I would financially support (through donations or purchases of sustainable products) a sustainability project organized by my favorite sports club. | 4.67                           |

Source: Authors' own research.

Regarding the first fan engagement variable (Support), it can be seen that young people are willing to support the activities to promote the sustainability initiatives of their favorite sports club to a moderate extent, with an average score of 4.85, on a scale of 1 to 7. Also, the average score for the second variable of fan engagement (Behavioral Engagement) shows us that young people are moderately willing to get involved through actions in sustainability projects that the sports club carries out, this variable having an average score of 4.84.

The average score corresponding to the third variable (Financial Engagement) is smaller but still above average, which shows that young people tend to financially support the sustainability projects of their favorite sports club. However, 4.67 is not a high score, but this can be explained, first of all, by the fact that the participants in the research are young, therefore they have lower purchasing power. Secondly, the answers can also be influenced by the fact that in Romania the economy is affected by an increase in the inflation rate, with the National Bank of Romania reporting for 2025 about 10% (NBR, 2025). Thus, Gen Z youngsters prefer to give of their time to help their favorite club rather than give their money.

The last part of the research aimed to measure the impact that the interest in sport and sustainability has on the level of fan involvement in the sustainability activities of the favorite sports club. As mentioned above, we want to demonstrate that, when there is a simultaneous interest in both sport and sustainability, fan involvement is higher, compared to the situation in which there would be an interest in only one of the two areas.

**Table 3. The impact that interest in sustainability and sports has on fan engagement**

|                                                                                               | Perceived Importance of Sustainability in Sport (Compared to other domains) | Level of Fan Engagement |                            |                           |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------|----------------------------|---------------------------|
|                                                                                               |                                                                             | Support (SUPP)          | Behavioral Engagement (BE) | Financial Engagement (FE) |
| Interest for Sustainability (IfSUS)                                                           | .248**(0.001)                                                               | .316**(0.000)           | .324**(0.000)              | .319**(0.000)             |
| Interest for Sport (IfSP)                                                                     | .236**(0.000)                                                               | .114 (0.108)            | .250**(0.000)              | .181**(0.011)             |
| Perceived Importance of Sustainability Campaigns in Sport (compared to other domains) (PISCS) | -                                                                           | .517**(0.000)           | .592**(0.000)              | .693**(0.000)             |

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Source: Authors' own research.

Analyzing the Pearson coefficient values in the table above, it can be seen that when the Interest in Sustainability increases, the Perceived Importance of Sustainability in Sport (compared

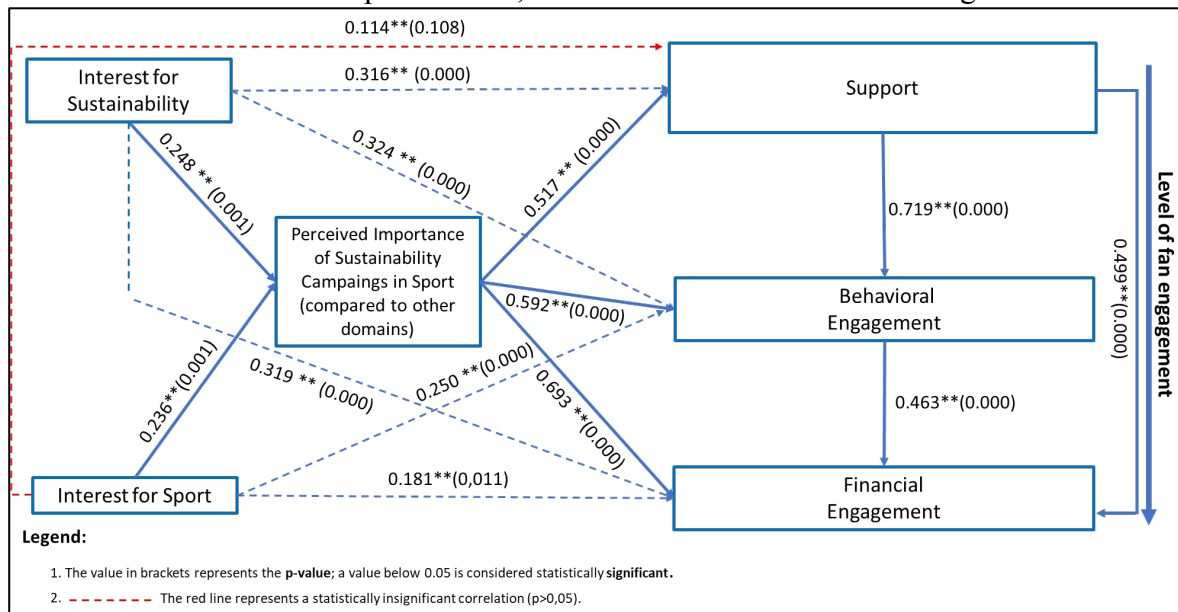
to other domains) automatically increases. Obviously, there is a positive relationship between these two variables, although of relatively weak intensity ( $r=.248$ ), it is statistically significant ( $p<0.05$ ).

At the same time, we can see that young people who give greater importance to sport tend to perceive sustainability as more important when it comes from sport compared to other areas. Here, there is a positive correlation between the two variables, of relatively weak intensity ( $r=.236$ ), but statistically significant ( $p<0.05$ ).

More important for the present research is the comparison between the impact of the variable **PISCS** on the fan of engagement, compared to **IfSUS** and **IfSP**. It can be seen that the values of the Pearson coefficient corresponding to the impact that **PISCS** has over the 3 levels of fan engagement – SUPP, BE, FE (0.517, 0.592, 0.693) are clearly superior to the values corresponding to the impact of the variables **IfSUS** and **IfSP**, thus confirming our research hypothesis.

Finally, one thing to note is that, although the average score for **PISCS** (4.58) is lower compared to the average scores for **IfSUS** (5.22) and **IfSP** (5.24), its impact on the level of fan engagement is higher, compared to the impact of **IfSUS** and **IfSP**. Thus, the idea from which we started in this research is reconfirmed, namely that when the individual is interested both in sustainability and in sport, the level of fan involvement is higher, compared to the situation in which only one of them would be registered (interest in sustainability or interest in sport).

To conclude on all of the above, in the next step of the study we overlapped the information from the research on the conceptual model, and the final result is shown in Fig. 2.



**Figure 2. Correlation coefficients corresponding to the relationship between the model variables**

Source: Authors' own research.

## Conclusion

The present research shows us the high interest that GenZ has for quality of life, both for themselves and for those around them. They are interested in sustainability topics and willing to get involved in such activities, especially when this come from their favorite sports club. It is observed that the importance of sustainability coming from sports is more strongly appreciated by GenZ, and it can help increase fan engagement among them.

At the same time, this data suggests that fan engagement is not a stand-alone construct, but rather one that spans several stages (hierarchically). It starts from the attitude area (Support), moves to the behavior area (Behavioral Engagement), and then can reach the financial contribution area (Financial Engagement). Thus, the financial involvement of young people is rather put at the end of their willingness to get involved, the priority being the promotion and involvement in the sustainability activities of the sports club.

**From an academic perspective**, this paper contributes to the development of the literature on fan engagement by introducing a new concept: to increase fan engagement in a sports club's sustainability activities, it is necessary to create a process that effectively links sustainability characteristics with the level of engagement demonstrated by fans (Support - Behavioral Engagement - Financial Engagement).

**From a global practice perspective**, this paper contributes to the field of sustainability by proposing a potential new framework that could further engage sports fans in sustainability-based activities: Support - Behavioral Engagement - Financial Engagement.

**From the perspective of sports club management**, this paper can help foster a better understanding of the reasons why fans might want to get involved in club activities. In this way, managers could gain a new perspective on how to develop a fan engagement strategy so that fan participation in club activities follows an upward trend.

Obviously, like any other research, our study has some important limitations that make it more of a starting point for future more in-depth research in the area of fan engagement and sustainability, as follows:

- The research is limited in terms of the target audience to young people from GenZ who are physically active, without taking into account other categories in respect to sport involvement. It is obvious that young people who do not play sports will not have the same level of involvement, but analyzing their behavior is important in order to see how we can attract them towards sustainability actions in sport.
- The selected sample is mainly from the Bucharest-Ilfov area, young people with completed or ongoing higher education. Future studies on an extended sample may measure how the level of education impacts engagement in sustainability activities in sport.
- The research methodology is one that focused only on the quantitative area, namely the online survey, without taking into account a qualitative method, which could provide detailed information about the motivations behind the fan engagement.
- In the research, Pearson-type correlations were mainly performed, without extending to the area of regression or SEM modeling, so the present research is limited to only highlighting how the variables associate with each other.

With regard to future research directions, studies should be extended in terms of the target sample and the methodology used as follows:

- Sample expansion: The sample used should be nationally representative, with respondents from both rural and urban areas, including all Gen Z segments, regardless of their education or how physically active they are.
- Extending research to other age groups: Research should also be carried out among other age groups (Millennials, Generation X, Generation Alpha, etc.), in order to more easily identify behavioral and attitudinal differences between generations in relation to sustainability and how they are involved. This way we could create a "buyer personas" for each category.

- In-depth research: Conducting a preliminary qualitative study in order to identify the motivation for involvement in sustainability activities.
- Data modeling: Research should move to the next level, and the conceptual model created should be tested to see if there is a mediation through the middle variable, what direct or indirect effects are there and, obviously, if the conceptual model carried out fits the real market data.

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