

# Newsletter

## September 2022



## TECHNICAL FILE

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01

## EDITORIAL

New school year, new life!...

Once the summer holidays are over, a new cycle of activity begins, the academic year 2022-2023. New students and a renewed post-pandemic environment, resuming the face-to-face interaction regime with the respective expectations and anxieties.

The evaluation of research centres by the FCT would have started this September but was postponed by the FCT to the next year 2023. This decision extended, by one year, the period over which the centre will be evaluated and the respective report. The funding for 2024 is not yet properly clarified by the FCT, and it may be necessary to use the funding allocated until 2023.

The **2<sup>nd</sup> CIEQV International Congress** will take place at ESECS, IPLeiria, on February 23 and 24, 2023. “Research Trends in Quality of Life” is the thematic challenge facing researchers. We have a group of six international lecturers and a panel of researchers who will discuss the theme of the congress. We look forward to the participation of LQRC-CIEQV researchers and other units, to share the knowledge and results of the research produced. **The deadline for abstract submission is October 23.** Registration and abstract submissions are carried out through the congress website (<https://www.cieqv.pt/2nd-international-congress/>). Let's send our proposals!

In this newsletter, we have the identification of several published articles and projects that were approved within the scope of Erasmus+, revealing a great dynamic of the members of LQRC-CIEQV.

The Individual and Community Health area held, on September 22, the Theoretical-Methodological Seminar with the participation of several LQRC-CIEQV researchers and other researchers. The book “Individual and Community Health – Health in the edge of transdisciplinary for the promotion of Quality of Life”, an edition of LQRC-CIEQV, was presented by Professor Ana Escoval (National School of Public Health – UNL), moderated by researcher José Amendoeira.

This issue features an interview with researcher Pedro Sobreiro, coordinator of the scientific area of LQRC-CIEQV “Organizational Dynamics”, where he reflects on his journey and presents some of the projects under development.

Researcher Alfredo Silva is responsible for the multidisciplinary project “Perceived Sustainability, Physical Activity and Life Quality”, with a diverse team from the scientific areas of LQRC-CIEQV, presenting the project and its development status.

The article “Team identification and sponsors’ altruistic motives on the effectiveness of professional soccer sponsorship”, by researcher Alfredo Silva, questions whether the fans of professional soccer teams attribute to sponsors altruistic motives and collects data that reveal a positive attitude from fans towards the sponsors.

Good readings!



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## INTERVIEW

### — Interview with Pedro Sobreiro



Pedro Sobreiro <sup>1,2</sup>

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#### **Brief curricular presentation**

Pedro Sobreiro is a PhD professor at the Rio Maior School of Sport of the Polytechnic Institute of Santarém; Researcher at LQRC-CIEQV – Scientific Area of Organizational Dynamics. Graduated in Business Informatics and Master's in Informatics; PhD in Sports Sciences from the University of Trás-os-Montes and Alto Douro.

#### **What are your goals as a member of the LQRC-CIEQV?**

As a member of LQRC-CIEQV I have the main goal of contributing to the development of sport and scientific research. Intend to investigate analysis models to anticipate and develop countermeasures to avoid the dropout of customers mainly through the use of Machine Learning, focusing on the model's interpretability, which allows to support the development of retention measures. This idea contradicts existing approaches based on more accurate models, but with less interpretability. What we lose in predicting accuracy, we gain in better understanding of data patterns, such as in decision tree-based algorithms. These types of algorithms allow the extraction of simple IF-THEN-ELSE rules that can be applied by managers and decision makers (see Figure 1). The development of these approaches allows organizations to gather intel to increase the retention of their customers and consequently the financial gains, on the other hand, contributing also to the retention of customers in physical activity in organizations that provide those services.

## Which are your main research projects?

I highlight two projects:

1. Algorithms to predict customer dropout, using survival models or dropout prediction;
2. The evolution of move2earn platforms and the impact that they have on rewarding users with crypto assets (e.g., sheets such as STEP, SWEAT or AMAZY) for retaining them in physical activity.

The second project is at an early stage and will move faster after the completion of the second PhD, where I am developing on the use of machine learning to predict customer dropout, which I intend combine the know-how acquired in the first project with the decentralized technologies (at least in most cases) in the blockchain.

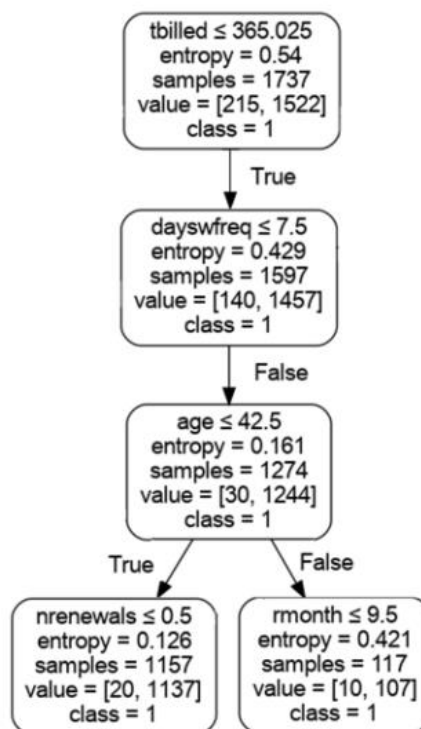
The project related to the customer dropout is aligned with the PhD that I am developing, an idea that started after 2014, when I was finishing my PhD in sports sciences at the University of Trás-os-Montes and Alto Douro, researching how can be streamlined an approach to develop business plans to help the sport organizations to achieve their business goals. One concern often identified to developed improvement actions was related to retaining and increasing practitioners to achieve their business goals.

In general, we can consider two dimensions in the prediction of the dropout, one with a static perspective and the other with a dynamic perspective, considering that the risk varies over time. From a static perspective we have predictions of customer dropout, which are carried out at a given time, here we essentially use algorithms that are trained with test data (for learning the models, hence the concept of machine learning) to predict the outcome of a customer's dropout or not. The algorithms generally used are in most cases nature-inspired (e.g., neural networks or swarm intelligence), decision trees (the algorithms preferred by the interpretability that they have), among others, such as Logistic Regression, Random Forests or support vectors machines. These studies that we have done with this static perspective in predicting dropout, allows us to help quantify the risk of churning that a customer has at a certain point in, without considering, however, that the risk of dropout varies over time.

Another perspective is the use of "dynamic" algorithms, such as the survival analysis. The word "dynamic" is used because it allows to obtain the risk of dropout that customers have over time, bringing a temporal perspective. This becomes interesting by combining with algorithms that help us segment customers (see Figure 1 where the decision allows create customer profiles). Following this idea, we use decision trees to power up "dynamic" algorithms inputting data of customers segmented. By placing

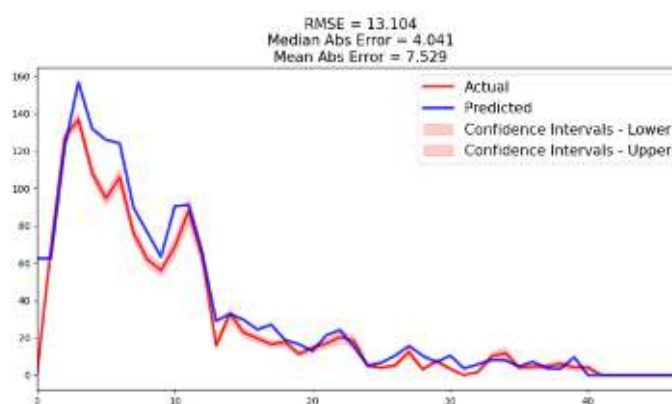
the output of one model as input from another, we implement the algorithms in pipeline, and we were able to increase the accuracy of the survival models being used.

In Figure 2, we have the representation in the prediction of the survival of customers, where we use 75% of the data to train the model and 25% to test. In a dataset used to test the performance with approximately 1250 clients we obtained prediction errors of 7.5 customers in the Mean Absolute Error metric, and 4.04 in Median Absolute Error.



**Figure 1.** Snippet a decision tree obtained in predicting the abandonment of customers in a gym.





**Figure 2.** Accuracy in predicting customer abandonment for 40 months.

**Knowing that knowledge should be transferred to society, how can the area of scientific research and professional intervention in which you are involved contribute to the union of theory and practice?**

I think that the scientific area of Organizational Dynamics, has been contributing to integrate a perspective of the management area to the problem of quality of life. The projects that have been developed integrate contribute to a multidisciplinary perspective with other scientific areas, allowing a holistic understanding of the problems that LQRC-CIEQV proposes to solve.

The transmission of knowledge to society is facilitated through the approach we are exploring. Since we are using an approach that is reproducible, that is, the data being explored is analyzed using R or Python instructions executed sequentially to achieve the research results. This idea makes easier for us to apply the same models to other data made available from other organizations, interested in obtaining these analyses to understand the patterns associated with their customers dropout.

The contribution to society can pass through here, if there is interest in understanding the phenomenon of dropout, when it can occur, what are the patterns identified in the data. In this way, we can apply the analyses and reproduce them using the same models and delivering to organizations reports to support their decision to increase customer retention. However, these models are developed in contractual settings environments (when the client has to pay periodically a fee and has to signal that he no longer wants the service, which defines dropout), for example, with the case of health clubs, sport federations or sport clubs.

**Considering that the LQRC-CIEQV promotes research on quality of life, what are the practical implications of its research?**

We can use it in a physical activity dimension and in the areas of interest related to retention in sport organizations, also possible in other areas of economic activity. It can also help to understand the length of stay in sports practice applied to sport federations or sport associations. There are other contractual scenarios that could be explored generally referred to in the literature as Contractual settings.

In general, it can help decision-makers working in public, private or non-profit organizations to better understand the dropout of their costumers and, consequently, to make decisions better informed to implement counteroffensives to avoid dropout.

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## NEWS – PROJECTS UNDER DEVELOPMENT

### — Project: Perceived Sustainability, Physical Activity and Life Quality



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The United Nations (UN) in 2015 defined the 2030 Agenda, consisting of 17 Sustainable Development Goals (SDGs), in the various dimensions of sustainable development (social, economic, environmental). The 17 Sustainable Development Goals are the common vision for Humanity, a contract between world leaders and people. (UN, 2021). Goal 3: Quality Health, Goal 4: Quality Education and Goal 12: Sustainable Production and Consumption, form the scope of our project.

Considering that the research paradigm on the quality of life of citizens in society imposes a multifaceted and complex analysis (Rodrigues et al., 2020), it is urgent to include constructs and variables that can allow an innovative perspective in the approach. This innovation includes constructs associated with perceived sustainability, satisfaction with organizations, mobile technologies, healthy eating and physical activity.

We intend, within the scope of LQRC-CIEQV, to carry out research and produce publications with the following general objective:

By the consumer perspective (marketing), study the relationships between the following constructs / variables:

1. Physical activity
2. Subjective well-being
3. Quality of life
4. Healthy food choices (Mediterranean Diet)
5. Sustainable food choices
6. Mobile Technology Identity
7. Use of mobile (fitness) apps
8. Apps perceived usefulness
9. Satisfaction with the mobile (fitness) app
10. Perceived sustainability of sports organizations
11. Value brand equity
12. Overall satisfaction with sports organizations
13. Word-of-mouth communications
14. Intention to repurchase, in the following possible contexts:
  - A. gym customers / users
  - B. sports clubs' practitioners
  - C. participants in physical activity programs
  - D. customers of companies selling sports products
  - E. customers of food products
  - F. students from school establishments
  - G. participants in training programs

LQRC-CIEQV team members and areas:

Name	Area
Alfredo José Henriques Carvalho da Silva (IR)	Organizational Dynamics
Carla Maria Chicau Costa Borrego	Physical Activity and Healthy Lifestyles
José de Jesus Fernandes Rodrigues	Education and training
Maria Adelaide Mota de Oliveira	Food Production and Technology / Food Behavior
Maria Paula de Sousa Ferreira da Silva Marinho Pinto	Food Production and Technology / Food Behavior
Maria Regina Sardinheira do Céu Fortunato Ferreira	Individual and Community Health

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Paula Lúcia da Mata Silvério Ruivo	Food Production and Technology / Food Behavior
Pedro Nuno de Alexandre Sobreiro	Organizational Dynamics
Sónia Morgado	Organizational Dynamics
Susana Cristina Henriques Leal	Organizational Dynamics

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04

## ARTICLE

### — Team identification and sponsors' altruistic motives on the effectiveness of professional soccer sponsorship



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#### Abstract

**Research question:** In a world where financial investment in sports sponsorship is at risk of committing corporate irresponsibility, do fans of professional soccer teams attribute to sponsors altruistic motives, develop a favorable attitude towards them and form purchasing intentions in relation to their products?

**Research methods:** For this purpose, a sample of 2,647 fans from two of the most successful soccer teams in Portugal completed a questionnaire. A Structural Equation Modelling analysis was carried out to test the model and the hypotheses.

**Results and Findings:** Despite the highly commercial context, the heavy investments made by sponsors are seen as altruistic by fans. The model explained 46% of attitudes towards sponsors, but the most relevant result was the strong mediating role performed by sponsors' altruistic motives.

**Implications:** This research departs from previous studies with divergent results and shows the limited mediating role of sponsors' commercial motives in forming favorable responses towards sponsoring companies and on people's intentions to buy sponsors' products.

**Keywords:** Soccer; Marketing; Sponsor motives; Sports sponsorship; Team identification.

## Introduction

In 2018, the Adidas sportswear company began a ten-year sponsorship contract with the Spanish soccer team Real Madrid Club de Fútbol. The deal caused a stir because of the values involved (€1,100 million) (Carpio, 2018). Consumers will ask themselves: is it because of these investments that it is not possible to sell the cheapest Adidas products?

It was believed that such heavy investments in clubs would have been unlikely to build a socially responsible organization (Plewa et al., 2016).

The principle of shared value involves creating economic value in a way that also creates value for society, meeting their needs and challenges (Porter & Kramer, 2011). When companies are widely perceived as thriving at the expense of the broader community and the principle of sharing value with society (Porter & Kramer, 2011) is not taken seriously, there are conditions for skepticism to take hold.

In sport, too, the real reasons for using sponsorship as a limitless business strategy have led to skepticism and encouraged consumers to punish corporate social irresponsibility (Lange & Washburn, 2012). It is precisely the sponsor's perceived motives that are at the root of the precedents that form the responses of sports fans. The most important findings show that sponsor's perceptions motives (e.g., self-serving or sport-serving) hold the most sway over effective outcomes, which fit between the sponsor and sponsee and that involvement with a club has the strongest influence on behavioral outcomes (Cornwell & Kwon, 2020; Kim et al., 2015).

The present study has four main objectives: (i) determine the direct effects of the sponsor's perceived motives on attitude towards the sponsoring company and on intentions to purchase the sponsoring company's products, (ii) determine the influence of the perceived congruence between the sponsor and the sports team on the attitude towards the sponsoring company, (iii) determine the direct effects of the fans' behavioral loyalty in relation to the sports team on the intention to purchase the sponsor's products, and; (iv) determine the mediating role of sponsor's perceived motives in the effect of team identification on attitude toward sponsor.

## Background and Evidence

The complex factors which influence the effectiveness of sponsorship have already been highlighted, and the variation in results from several investigations may be attributed to a great diversity of contexts

(Cornwell et al., 2005; Kim et al., 2015). There are therefore good reasons for choosing soccer as the context for our study.

### **Team identification**

It is from the supporter's social identification with the sports team that the feelings, judgments, evaluations, attitudes, intentions, and certainly their consequent behaviors, are developed towards the companies sponsoring the sports teams. This statement is assumed because, to a large extent, it is the companies that provide the resources that contribute to improving the success of the sports team (Kim & Kim, 2009). This, in turn, increases the identification of the supporter with the sports team.

Thus, the following hypotheses were formulated:

**H1:** Fans' identification with the sports team has a positive and direct effect on sponsor's perceived altruistic motives.

**H2:** Fans' identification with the sports team has a positive and direct effect sponsor's perceived commercial motives.

According to the Congruence Theory (Jagre et al., 2001), fans with higher levels of identification desire harmony within their beliefs and look for congruence between sponsoring companies and their sports team, as it would be illogical to think of sponsors as adding negative value to teams. Therefore, it is to be expected that the lack of attention paid to the team by the sponsor, or the excessive commercialization through the use of the team, may generate a contradiction that stimulates a disconnection or judgment between the company and the sports team.

In this sense the following hypothesis was formulated:

**H3:** Fans' identification with the sports team has a positive and direct effect on the perceived congruence between sponsors and sports teams.

### **Perceived sponsor's motives**

Consumers attribute motives to companies' actions, and these attributions affect their subsequent response to the company.



A lack of consistency, genuineness and sincerity regarding any interest in the club can result in the attribution to sponsors of stronger self-serving motives (Speed & Thompson, 2000) and give rise to the suspicion that these clubs' mass appeal is the real reason behind the sponsorship (Pappu & Cornwell, 2014). An example of this is when Adidas invested €1,100 million in sponsoring the Real Madrid Club de Fútbol. Other doubts about sponsors' motives arise when the message overemphasizes the profile of the sponsor, or the source of the message is the sponsoring company and not the cause (Yoon et al., 2006). Could skepticism among fans emerge in such a scenario?

Therefore, if the supporter assigns altruistic reasons for the company's involvement, he/she may develop a more favorable attitude towards that company.

In light of the above, the following hypotheses were formulated:

**H4:** Perceived altruistic sponsor motives have a positive and direct effect on attitudes towards the sponsoring company.

**H5:** Perceived commercial sponsor motives have a positive and direct effect on attitudes towards the sponsoring company.

In addition, it has been demonstrated that the perceived goodwill fully influences consumers' relationships with a sports team and their attitudes towards the sponsor (Kim et al., 2011), and sponsor integrity has indirect effects on sponsor receptiveness (attitudes towards sponsor) (Smith et al., 2008).

Thus, to evaluate the mediating role of motives, the following hypotheses were formulated:

**H6:** Altruistic sponsor motives will influence the relationship between fans' identification and attitudes towards the sponsoring company.

**H7:** Commercial sponsor motives will influence the relationship between fans' identification and attitudes towards the sponsoring company.

### **Perceived congruence between the sponsor and the sports team**

Congruence between the sponsor and the sports team is founded on the existence of a perception of similarity between both parties in the relationship. Speed and Thompson (2000, p. 230) refer to the concept as '... the degree to which the pairing is perceived as well matched or a good fit...' The

congruence theory (Jagre et al., 2001), applied to the sponsorship context, argues that the more commonalities that exist between the sponsor and the sponsored, the greater the propensity developed in consumers to view the sponsor favorably (Cornwell et al., 2005, McDaniel, 1999).

Therefore, it is plausible that fans who perceive higher levels of congruence between the sponsor and the sports team develop a more favorable attitude towards the sponsoring company. Thus, the following hypothesis was established:

**H8:** Perceived congruence between the sponsor and the sports team has a positive and direct effect on the intention to buy sponsors' products.

### **Attitudes towards sponsor company**

Frequently used in decision processes, attitude theory (Fishbein & Ajzen, 1975) considers that the behaviors and intentions that give rise to them are best understood within the framework of defining the hierarchy of beliefs-attitudes-intentions and behaviors.

Fans tend to look to supporting sponsors as allies (Madrigal, 2000), developing favorable attitudes about them. Thus, it is expected that attitudes towards the sponsoring company influence the purchasing intentions for sponsors' products. Therefore, the following hypothesis was formulated:

**H9:** Attitudes towards the sponsoring company have a positive and direct effect on purchasing intentions for sponsors' products.

## **Methods**

### **Participants**

The sample was formed of individuals who identified themselves as fans of Portuguese soccer teams Sport Lisboa e Benfica (SLB) or Sporting Clube de Portugal (SCP). Their sponsors are two well-known beer brands in Portugal. A total of 4,913 individuals answered the questionnaire, but only 2,647 were accepted as valid. Most respondents were employed (57.4%) and 25.3% were students. Most respondents, 39.0%, held a bachelor's degree and 36.8% have completed high school.

## Measures

The questionnaires were translated from the original language (English) to Portuguese and were adapted to the context, following the methodological procedures of retroversion (Vallerand, 1989). The measurement of variables was carried out as follows: Team Identification was measured through nine items on the Team Identification Scale (TIS), adapted from Dimmock and Grove (2006); Sponsor's Perceived Motives were evaluated per four items, adapted from various authors (Ellen et al., 2006; Smith et al., 2008; Speed & Thompson, 2000; Stipp & Schiavone, 1996; Rifon et al., 2004). Perceived Congruence between the Sponsor and the Sports Team the four items adapted from Speed and Thompson (2000). Attitude Toward Sponsor Company was measured by two items: Adapted from Gwinner and Swason (2003). Responses were recorder by reference to a semantic differential scale with 7 points. Respondents were asked the following: "Thinking about (company name), please evaluate this company by selecting the point on each scale that best represents your attitude to the company". Fan Loyalty, Media and Merchandise were measured per nine items, adapted from various authors (Andrew et al., 2009; Bauer et al., 2008; Fink et al., 2020; Funk & Pastore, 2000). Fan Loyalty and Attendance were evaluated by six items, adapted from various authors (Biscaia et al., 2013; Bodet & Bernache-Assollant, 2011; Kim & Trail, 2010). Responses to these items were open-ended. Purchase Intentions were measured through three items, adapted from Biscaia *et al.* (2013) and Madrigal (2001). All responses to the scale were made on a continuum from 1 (strongly disagree) to 7 (strongly agree).

## Procedures

Data were collected through an online survey which was made available on the "A Bola" homepage. A total of 4,913 individuals answered the questionnaire, although only 2,647 were accepted as being valid. The self-administered cross-sectional survey covered supporters of the two largest soccer clubs in the Portuguese Professional Soccer League: SLB and SCP.

## Statistical analysis

SEM (Arbuckle, 2007), using AMOS software (Analysis of Moment Structure, v20.0) and the Maximum Likelihood (ML) method was performed according to the following assumptions: (1) sample size (Hair et al., 2019); (2) asymmetry values for SEM are  $|Sk| < 2-3$  and  $|Ku| < 7-10$  (Finney & DiStefano, 2006), and; (3) absence of multicollinearity was verified through the constructs under analysis presented

discriminant validity, which was verified by comparing AVE scores and the squared correlation of each construct (Fornell & Larcker, 1981) and also by the correlation between each construct (Anderson & Gerbin, 1988).

## Results and Discussion

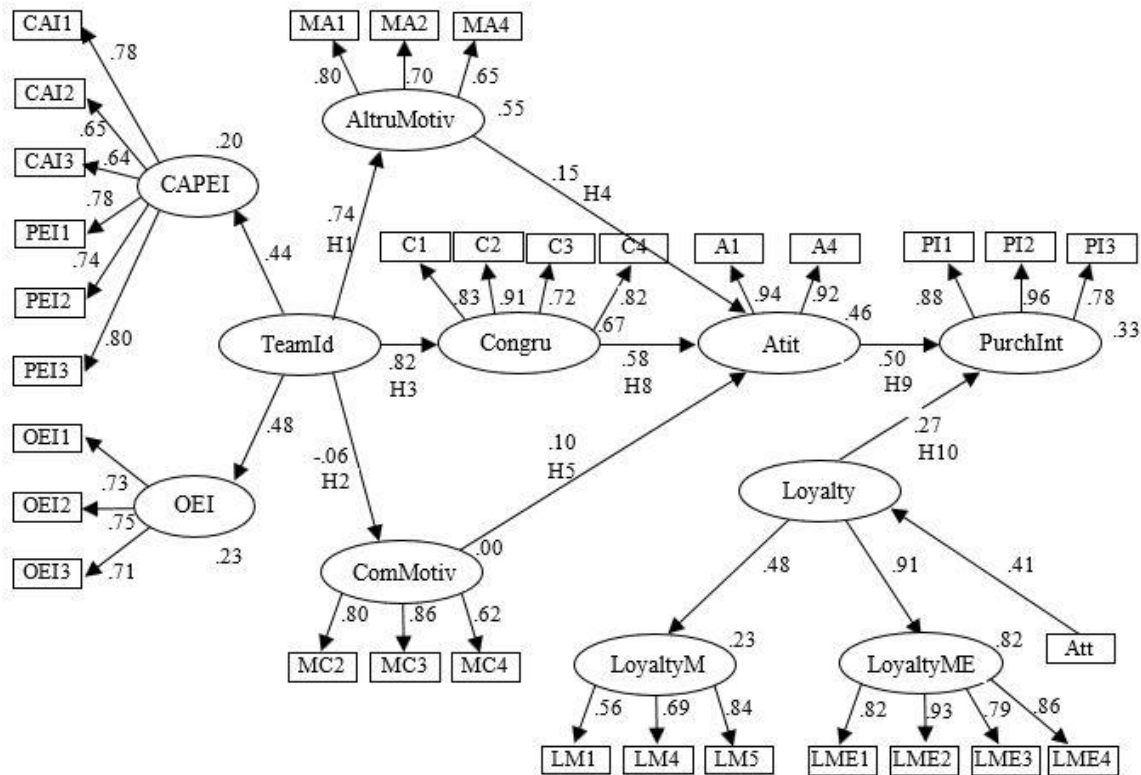
### *Team identification, sponsor motives and perceived congruence*

The results obtained showed that identification with the sports team exerted a significant positive direct effect on the altruistic motives attributed by fans to sponsoring company involvement (H1:  $\beta = .74$ ,  $p < .001$ ). The explanatory power of fans' social identification was considerable, since it explained 55% of the variance in the formation of altruistic motives attributed to sponsoring company involvement.

Fans with the highest level of identification with the sports team believe that the sponsoring company's involvement occurs for altruistic reasons, associated with genuine interest in the team and the value of the team. These fans do not believe that sponsorship of the sports team lends itself to the achievement of business objectives by the sponsoring companies.

The results obtained diverge from those found by Wakefield (2012) and Zhang *et al.* (2005) in the context of soccer, motorsports, and college sports. However, they confirm the majority of research regarding the positive and direct effects exerted by team identification on favorably perceived attributions of sponsor motives (Deitz *et al.*, 2012; Woisetschlager *et al.*, 2017), altruistic motives (Plewa *et al.*, 2016), and perceptions of sponsor integrity (Smith *et al.*, 2008).

Identification with the sports team exerted a significant positive direct effect on the formation of perceived congruence between the sponsor and the sports team. This is an effect of relevant magnitude expressing that identification with the sports team accounts for 67% of the variance in perceived congruence (H3:  $\beta = .82$ ,  $p < .001$ ).



Notes: TeamId - Team Identification; CAPEI - Cognitive/affective, personal evaluative identification; OEI - Other evaluative identification; AltruMotiv - Sponsor Altruistic Motives; ComMotiv - Sponsor Commercial Motives; Congru - Perceived Congruence; Atit - Attitude; Toward Sponsor Company; Loyalty - Fan Loyalty; LoyaltyM - Fan Loyalty Media; LoyaltyME - Fan Loyalty Merchandise; Att - Attendance; PurchInt - Purchase Intentions

Figure 1. Standardized coefficients of the structural model.

### Sponsor motives, team identification and attitudes towards sponsor

The extraordinary growth in companies' investment in sponsorship reflects, at least in part, consumers' favorable attitude responses toward sponsors, which may culminate in the choice of those sponsors' products or services (Barone et al., 2000). The results obtained showed that both altruistic motives (H4:  $\beta = .15, p < .001$ ) and commercial motives (H5:  $\beta = .10, p < .001$ ) attributed by supporters to sponsoring company involvement, exerted a direct positive effect of similar magnitude on the formation of favorable attitudes towards the sponsoring company.

The results confirmed much of the research showing the effects of sponsor altruistic motives on attitudes towards the sponsor, predictors being: inference of affective motives (Woisetschlager et al., 2017), altruistic motives (Carrilat et al., 2014; Rifon et al., 2004), perceived to be benevolent (Kim et al., 2010;

Madrigal, 2001), perceived sincerity (Demirel & Erdogmus, 2016; Ko & Kim, 2014; Olson, 2010; Speed & Thompson, 2000) and credibility perception (Kim & Choi, 2007).

The results obtained allow us to highlight the strong power exerted by the altruistic motives attributed. As has been assumed in other contexts of corporate donations, also in sports team sponsorship, the attitudinal response of fans was positively conditioned by the mediating role of the altruistic motives attributed to the companies' sponsorships. The result can be discussed from the perspective raised by Meenaghan (2001), that the attitude of spectators towards the sponsor may result from the perception of the overall behavior of the sponsor regarding all aspects of the sponsored activity. This behavior is judged by the team's fans and the perceived benefits are rewarded with strong feelings of affinity towards the sponsor. Thus, it seems that for fans with a higher level of identification with the team, a sponsor is seen as a support that makes possible more resources that contribute to a better performance of the preferred team, a central element of the fans' social identity. Therefore, we can conclude that these results reveal the principle of shared value advocated by Porter and Kramer (2011) and diminish the threats of skepticism that are likely to emerge as a result of irresponsible corporate behavior (Lange & Washburn, 2012).

#### *Perceived congruence and attitudes towards sponsor*

Perceived congruence between the sponsor and the sports team has been shown to influence attitudes positively and significantly toward the sponsoring company (H8:  $\beta = .58$ ,  $p < .001$ ). These results allow us to highlight the existence of a relevant and significant causal flow between: identification with the sports team → the perceived congruence between the sponsor and the sports team and → the attitude towards the sponsoring company.

This result can be argued on two grounds. The first argues that fans with a higher level of identification with the sports team will have greater knowledge of the characteristics of the sponsoring companies and the sponsored teams, which may lead to a greater perception of congruence between the sponsor and the team. The second is based on the social identity theory (Tajfel & Turner, 1979), which argues that individuals tend to have congruent perceptions with the salient aspects of their own identities, so they may also consider to be congruent those institutions that embody these identities (Ashforth & Mael, 1989), in this case the company sponsoring the sports team with which the fans are identified.

### *Attitudes towards sponsor and purchasing intentions*

The main reason for companies' investment in sponsorship is to obtain a consumer response (Meenaghan, 2001), in which attitude, purchasing intention and, purchase and brand loyalty are elements of relevant importance that constitute the best evidence for the effectiveness of sponsorship (Dees et al., 2008; Silva & Verissimo, 2020). The results show the strong and significant role played by attitude towards the sponsoring company on the intention to purchase the sponsoring company products (H9:  $\beta = .50$ ,  $p < .001$ ). It can thus be stated that fans of the sports team with a more favorable attitude towards the sponsoring company are more likely to consider buying the sponsoring company's products. It seems that fans tend to develop the belief of seeing sponsors who support their favorite team as allies, and therefore develop positive feelings and favorable attitudes towards them and may even amplify this positive disposition by developing the intention to buy their products.

### **Implications**

The most important contribution of this study, in the context of sponsorship of professional soccer teams, whose essence is commercial, is the finding that fans with a higher level of identification with the sports team, attribute altruistic motives to the sponsorship operation. The second, finding shows the significant mediating role of altruistic sponsor motives; they amplify the effects between identification with the team and attitudes towards the sponsored company.

At the managerial level, these findings have implications for two main parties: 1) the managers of professional soccer teams and 2) the managers of the sponsoring companies' brands or products. To maximize the value of sponsorship, these professionals need to have a proper understanding of the factors that determine the attitudes and intentions of the spectators who are their target market.

### **Conclusion**

Corporate partnerships with an increasing variety of entities are becoming more common and frequent as a form of marketing communication. In 2018, sponsorships represented a volume of investments by companies of \$57.5 billion (IEG, 2017). Sponsorship of sports and professional soccer teams is big business around the world. Companies have committed to sponsorships in the hope that the passion fans feel for their favorite teams will spread to themselves and their products.

The explanatory contribution of each of the constructs to the formation of fans' responses to sponsorship was found to be diverse, so the following should be highlighted: The action of altruistic motives, whose intervention between identification with the sports team and attitudes towards the sponsoring company, meant indirect effects of identification with the team of 43% of the total effects, as compared with 5% for commercial motives.

The most relevant result of the study, in the context of sponsorship of professional soccer teams, whose essence is commercial, was the finding that fans with a higher level of identification with the sports team, attribute altruistic motives to the sponsorship operation. We can thus conclude that perhaps Adidas' sponsorship deal with Real Madrid Club de Fútbol of €1,100 million (Carpio, 2018) can orient itself towards the principle of shared value and create value for society (Porter & Kramer, 2011), thereby curbing consumer skepticism towards business.

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## References

For reasons of space, the original article has been reduced and references will be provided upon request to the author Alfredo Silva [alfredosilva@esdrm.ipsantarem.pt](mailto:alfredosilva@esdrm.ipsantarem.pt).



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## PUBLICATIONS

Brito, J.P., Domingos, C., Pereira, A.F., Moutão, J., Oliveira, R. (2022). The Multistage 20-m Shuttle Run Test for Predicting VO<sub>2</sub>Peak in 6–9-Year-Old Children: A Comparison with VO<sub>2</sub>Peak Predictive Equations. *Biology*, 11, 1356. <https://doi.org/10.3390/biology11091356>

Espada, M., Santos, F., Conceição, A., Louro, H., Ferreira, C., Reis, J., Pessoa-Filho, D. & Pereira, A. (2022). The Effects of 12 Weeks In-Water Training in Stroke Kinematics, Dry-Land Power, and Swimming Sprints Performance in Master Swimmers. *J. Mens. Health*, 18(9): 186. <https://doi.org/10.31083/j.jomh1809186>

Fernandes, R., Martins, A.D., Clemente, F.M., Brito, J.P., Nobari, H., Reis, V.M., Oliveira, R. (2022). Variations of Distance and Accelerometry Based GPS Measures and Their Influence on Body Composition in Professional Women Soccer Players. *Proc IMechE Part P: Journal of Sports Engineering and Technology*, 1-9. <https://doi.org/10.1177/17543371221122076>

Makarowski, R., Predoiu, R., Piotrowski, A., Görner, K., Predoiu, A., Oliveira, R., Pelin, R.A., Moant, ă, A.D., Boe, O., Rawat, S. *et al.* (2022). Coping Strategies and Perceiving Stress among Athletes during Different Waves of the COVID-19 Pandemic—Data from Poland, Romania, and Slovakia. *Healthcare*, 10, 1770. <https://doi.org/10.3390/healthcare10091770>

Martins, A.D., Fernandes, O., Oliveira, R., Bilro, V., Lopes, G., Rego, A.M., Parraça, A., Raimundo, A.M. & Brito, J. (2022). Effects of exercise programs on phase angle in older adults: a systematic review and meta-analysis. *Archives of Gerontology and Geriatrics*, 103, 104787. <https://doi.org/10.1016/j.archger.2022.104787>

Santos, F., Domingo, F., Cruz, G., Alves, R., Ferreira, C., Figueiredo, T. & Espada, M. (2022). Performance analysis of professional U-23 portuguese players in small-sided games. *Retos*, 46:1056-1064. <https://doi.org/10.47197/retos.v46.90769>

Santos, F., Santos, J., Espada, M., Ferreira, C., Sousa, P., & Pinheiro, V. (2022). T-pattern analysis of offensive and defensive actions of youth football goalkeepers. *Frontiers in psychology, 13*, 957858. <https://doi.org/10.3389/fpsyg.2022.957858>

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## LQRC-CIEQV ACTIVITIES

- **Book**

LQRC-CIEQV edited a book written by member José Amendoeira, with the following reference: Amendoeira, J. (2022). *Saúde Individual e Comunitária*. Centro de Investigação em Qualidade de Vida.

**SEE MORE.**

- **Invitation for publication in Symmetry journal**

The researcher Prof. Dr. Mário Espada with researcher Prof. Dr. Fernando Santos are the guest editors of a special issue with the topic: *Symmetry and Asymmetry in Biomechanics and Human Physiology*. Deadline for manuscript submissions: 31 December 2022. More information **SEE MORE.**

- **Invitation for publication in Healthcare journal**

The researcher Prof. Dr. João Brito with researcher Prof. Dr. Rafael Oliveira are the guest editors of a special issue with the topic: *Improve Athletes' Performance and Avoid Health Issues*. Deadline for manuscript submissions: 28 February 2023. More information **SEE MORE.**

- **Invitation for publication in International Journal of Environmental Research and Public Health (IJERPH)**

The researcher Prof. Dr. Nuno Loureiro, prof. Dr. Rafael Oliveira and prof. Dr. Fernando Santos are the guest editors of a special issue with the topic: *“Football Related Injury and Health Problems”*. Deadline for manuscript submissions: 20 April 2023. More information **SEE MORE.**

- **Invitation for publication in International Journal of Environmental Research and Public Health (IJERPH)**

The researcher Prof. Dr. João Brito with researcher Prof. Dr. Rafael Oliveira are the guest editors of a special issue with the topic: *“Exercise Monitoring, Testing and Prescription Strategies to Improve*

*Quality of Life in Athletes and Non-athletes*". Deadline for manuscript submissions: 31 May 2023. More information **SEE MORE**.

- **FCT funding the program *Verão com Ciência***

The researcher Raul Antunes and Roberta Frontini are the coordinators of the project "*Sintomatologia depressiva e ansiosa, qualidade de vida e bem-estar subjetivo em praticantes de exercício e desporto*" that was financed and executed.

- **Erasmus+ approved projects**

- PTime2Act@SD: Time to Act through Sustainable Experiences for Higher Education Students – Susana Leal (coordinator), Sandra Oliveira, Carla Vivas, Claudio Barradas, João Nascimento and Ana Loureiro;
- Int4Furn: Enhancing Internationalisation Capabilities of micro-SMEs in Furniture Sector through ECVET Compliant Innovative Training Course: Susana Leal (coordinator), Sandra Oliveira, Carla Vivas, João Nascimento and Ana Loureiro;
- GAP WOMEN: Gender Actions to increase Women's Participation in Sports; Teresa Figueiras, Cláudia Pinheiro;
- GREEN TEAM; Sustainability Strategy for Greener and more Inclusive sport events; Teresa Figueiras, Cláudia Pinheiro;
- Fit4Alz: Fitness for Alzheimer; Teresa Figueiras, Cláudia Pinheiro;
- New Health 2022: aims to provide organizations, professionals, volunteers, and consumers with knowledge and tools to improve physical activity, healthy eating, mental health, and a healthy lifestyle. The working group met in Bratislava. Susana Franco, Carla Chicau Borrego.

- **Grupo *Projeto Creche***

The report aims to show the work developed within the scope of the Grupo Projeto Creche (GPC) from the 2008/2009 school year to the present. The first point presents the Projeto Creche Group, showing its elements, its dynamics and the main results of its operation. Next, the partnerships/collaborations and final considerations are identified.

- ***Física(Mente)* – Physical exercise, Quality of Life and Mental Health** – Isabel Simões Dias, Marta Fonseca and Maria Odília Abreu

This research project was carried out in the academic year 2013/2014, at ESECS/PL, from the convergence of interests of two colleagues from the Department of Communication, Education and Psychology, Isabel Simões Dias and M<sup>a</sup> Odília Abreu, members of the LQRC-CIEQV. Considering the data from the World Health Organization on the importance of the practice of Physical Exercise in the perception of Quality of Life and Mental Health, this project aims to study the relationship between these 3 variables in order to proposed intervention to promote health and well-being.

- **FCT Call for I&D Projects in All Scientific Domains – 2022**

*“Monitorização e Promoção da Dieta Mediterrânica com Inteligência Artificial”* and *“Exercício combinado para melhorias da marcha no envelhecimento”* by LQRC-CIEQV members, were submitted and ranked well although not funded.

- **I&D Projects in the scientific areas of LQRC-CIEQV**

More information [\*\*SEE MORE\*\*](#).

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### CALLS AND FUNDING

- Calls for support to *Turismo*. Status: open. More information [\*\*SEE MORE\*\*](#).
- Calls for support to *Programa de Desenvolvimento Rural*. Status: in preparation. More information [\*\*SEE MORE\*\*](#).
- Calls for support to *Plano de Recuperação e Resiliência*. Status: open. More information [\*\*SEE MORE\*\*](#).
- Calls for support to *Programa ATIVAR.PT*. Status: open. More information [\*\*SEE MORE\*\*](#).
- Calls for support to *Apoio à Produção Nacional*. Status: open. Deadline: to be defined. More information [\*\*SEE MORE\*\*](#).
- Calls for support to *Programa de Incentivo para os Açores*. Status: in preparation. More information [\*\*SEE MORE\*\*](#).
- Calls for support to *Apoios à contratação – IEFP*. Status: open. More information [\*\*SEE MORE\*\*](#).
- FCT contest schedule 2021-2023. FCT provides the calendar of competitions scheduled for the years 2021 to 2023. More information [\*\*SEE MORE\*\*](#).
- Founders Program Indico. Call continuously open. More information [\*\*SEE MORE\*\*](#).
- Work programs 2021-2022, Destinations Fight Against Crime and Terrorism (FCT) & Effective management of EU external borders (BM) & Resilient Infrastructure (INFRA) & Disaster-Resilient Society for Europe (DRS) & Strengthened Security Research and Innovation (SSRI):
  - Call 2022 opening on 30 June 2022 and deadline 23 November 2022
  - More information [\*\*SEE MORE\*\*](#).
- Financing opportunities for *PMEs na área do Digital*. Calls opening on 28 June 2022 and deadline on 9 December 2022. More information [\*\*SEE MORE\*\*](#).
- Swiss Government Excellence Scholarships, For Foreign Scholars and Artists for the 2023-2024 Academic Year. Deadline: 2 November 2022. More information [\*\*SEE MORE\*\*](#).
- Work programs 2021-2022, Destination Increased Cybersecurity (CS)
  - Call 2022 opening on 30 June 2022 and deadline on 16 November 2022
  - More information [\*\*SEE MORE\*\*](#).
- “La Caixa” Foundation | Junior Leader Postdoctoral Fellowships 2023. Deadline: 7 October 2022. More information [\*\*SEE MORE\*\*](#).
- FLAD support program for the internationalization of higher education. Deadline: 9 October 2022. More information [\*\*SEE MORE\*\*](#).

- Award for Social Human Sciences from the National Institute for Rehabilitation. Deadline: 18 October 2022. More information [\*\*SEE MORE\*\*](#).
- EU Award for Gender Equality Champions. Deadline: 13 October 2022. More information [\*\*SEE MORE\*\*](#).
- Call European Heritage Hub. Deadline: 18 October 2022. More information [\*\*SEE MORE\*\*](#).
- 70 new COST Actions now online: apply to join. Deadline: 20 October 2022. More information [\*\*SEE MORE\*\*](#).
- European Cooperation in Science & Technology (International) – COST Action Call. Areas of interest: All scientific and technological areas. Deadline: 20 October 2022. More information [\*\*SEE MORE\*\*](#).
- ERC-2023-STG. Deadline: 20 October 2022. More information [\*\*SEE MORE\*\*](#).
- HORIZON-CL5-2022-D3-02: Sustainable, secure and competitive energy supply. Deadline: 25 October 2022. More information [\*\*SEE MORE\*\*](#).
- EIC Pathfinder – Support to research teams to research or develop an emerging breakthrough technology. Deadline: 27 October 2022. More information [\*\*SEE MORE\*\*](#).
- Call Boosting Fact-checking Activities in Europe. Deadline: 31 October 2022. More information [\*\*SEE MORE\*\*](#).
- Water4All 2022 Joint Transnational Call. Deadline (Pre-proposal): 31 October 2022. More information [\*\*SEE MORE\*\*](#).
- Call on “Improved transnational monitoring of biodiversity and ecosystem change for science and society”. Deadline (Pre-proposal): 9 November 2022. More information [\*\*SEE MORE\*\*](#).
- Synergy Grants – ERC-2023-SYG. Deadline: 23 November 2022. More information [\*\*SEE MORE\*\*](#).
- Effective fight against trafficking in human beings (HORIZON-CL3-2022-FCT-01-07). Deadline: 23 November 2022. More information [\*\*SEE MORE\*\*](#).
- HORIZON-CL3-2022-INFRA-01-01 Nature-based Solutions integrated to protect local infrastructure. Deadline: 23 November 2022. More information [\*\*SEE MORE\*\*](#).
- EIT Digital Innovation Factory 2022. Deadline: 30 November 2022. More information [\*\*SEE MORE\*\*](#).
- Horizon Europe: a new initiative for Young Observer. Deadline: 14 December 2022. More information [\*\*SEE MORE\*\*](#).
- ERC Science Journalism Initiative. Deadline: 15 December 2022. More information [\*\*SEE MORE\*\*](#).
- New European Bauhaus 2022 – Transformation of places of learning. Deadline: 31 December 2022. More information [\*\*SEE MORE\*\*](#).

- New European Bauhaus 2022 – Transformation of places of learning. Deadline: 31 December 2022. More information [\*\*SEE MORE\*\*](#).
- Fernandes Fellowships. Deadline: 31 December 2022. More information [\*\*SEE MORE\*\*](#).
- Calls for innovative projects in various areas of social and exact sciences, funded by EEA Grants Portugal. Deadline: 4 December 2020 to 30 June 2023. More information [\*\*SEE MORE\*\*](#).
- Support Fund for Small and Medium Companies of the European Union. Deadline: 16 December 2022. More information [\*\*SEE MORE\*\*](#).
- Future of Food. Deadline: December 2022 and March 2023. More information [\*\*SEE MORE\*\*](#).
- Portal Funding & Tenders, for the following areas of Cluster 5 – *Clima, Energia e Mobilidade*: “Energy supply”. Deadline: 10 January 2023. More information [\*\*SEE MORE\*\*](#).
- HORIZON-CL5-2022-D3-03: Sustainable, secure and competitive energy supply. Deadline: 10 January 2023. More information [\*\*SEE MORE\*\*](#).
- HORIZON-CL5-2022-D4-02: Efficient, sustainable and inclusive energy use. Deadline: 24 January 2023. More information [\*\*SEE MORE\*\*](#).
- Sustainability 2022 Young Investigator Award. Deadline: 31 January 2023. More information [\*\*SEE MORE\*\*](#).
- Water4All 2022 Joint Transnational Call. Deadline 20 March 2023. More information [\*\*SEE MORE\*\*](#).
- BioeconomyVentures – Open calls – Future of Food. Deadline: March 2023. More information [\*\*SEE MORE\*\*](#).
- LIFE Calls for proposals 2022. Deadline (Full proposals): 30 March 2023. More information [\*\*SEE MORE\*\*](#).
- *Programa Cidadãos Ativ@s* – Bilateral Cooperation Initiatives of the *Fundação Bissaya Barreta* and *Fundação Calouste Gulbenkian*. Deadline 30 June 2023. More information [\*\*SEE MORE\*\*](#).
- European Commission – Competitive calls and calls for third parties. Areas of interest: Food; Energy Transition; Climate; Mobility; Digitization. Deadline: 22 July 2023. More information [\*\*SEE MORE\*\*](#).



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## AGENDA

- **LIFE-2022-SAP-ENV Circular Economy and Quality of Life – Standard Action Projects (SAP)**, 4 October 2022 – Brussels, Belgium. More information [SEE MORE](#).
- **SAVE THE DATE**, 6 October 2022 – Brussels, Belgium. More information [SEE MORE](#).
- **EU Bioeconomy Conference 2022**, 6-7 October 2022 – Brussels, Belgium. More information [SEE MORE](#).
- **UBUNTU**, 10-14 October 2022.
- **EIT – INNOVEIT Brussels – EIT Summit**, 11 October 2022 – Brussels, Belgium. More information [SEE MORE](#).
- **LUSOCONF2022 – IV Encontro Internacional de Língua Portuguesa e Relações Lusófonas**, 13-14 October 2022, at Higher School of Education of the Polytechnic Institute of Bragança. More information [SEE MORE](#).
- **EIT Food 2022 Annual Event**, 17-18 October 2022 – Brussels, Belgium. More information [SEE MORE](#).
- **Open Science Conference 2022**, 18-19 October 2022 – Brussels, Belgium. More information [SEE MORE](#).
- **10<sup>th</sup> ICESD – 10<sup>th</sup> International Congress of Educational Sciences and Development**, 19-21 October 2022, online event. More information [SEE MORE](#).
- **1<sup>a</sup> Conferência Internacional sobre Formação Contínua de Professores (ICTCE 22)**, 20-21 October 2022, at University of Aveiro. More information [SEE MORE](#).
- **Hydrogen Europe's Flagship Event**, 25-27 October 2022. More information [SEE MORE](#).
- **17<sup>o</sup> Seminário de Desenvolvimento Motor da Criança 2022 Faro**, 28- 29 October 2022, at the Higher School of Education and Communication of the University of Algarve (Faro). More information [SEE MORE](#).
- **12<sup>a</sup> Edição Congresso Nacional de Educação Física**, 29-30 October 2022, at the José Lúcio Silva Theater. More information [SEE MORE](#).
- **Appropriation**. Deadline: 30 October 2022. More information [SEE MORE](#).
- **XXIII Jornadas da Sociedade Portuguesa de Psicologia do Desporto**, 2 to 5 November 2022, at the Polytechnic Institute of Maia. More information [SEE MORE](#).

- **IC Congresso Nacional das Escolas Superiores (CNESA)**, 3-4 November 2022, at the Higher Agricultural School of Santarém. More information [SEE MORE](#).
- **CAPSI2022 – 22ª Conferência da Associação Portuguesa de Sistemas de Informação**, 3-5 November 2022, Assomada, Santiago – Cabo Verde. More information [SEE MORE](#).
- **3º Congresso Internacional de Teoria da Ação Conjunta em Didática (TACD)**, 7-9 November 2022, at Brest/Rennes. More information [SEE MORE](#).
- **CENTERIS 2022 – International Conference on ENTERprise Information Systems**, 9 November 2022, at Lisbon (Portugal). More information [SEE MORE](#).
- **10<sup>th</sup> International Conference on Project MANagement**, 9-11 November 2022, at Lisbon (Portugal). More information [SEE MORE](#).
- **ETSI IoT Week, “Pursuing Digital and Green Transformation”**, 9-11 November 2022. More information [SEE MORE](#).
- **III Simpósio de Economia e Gestão da Lusofonia**, 15-17 November, 2022, at IPSantarém. More information [SEE MORE](#).
- **Colloque Acedle – Didactique(s), plurilinguisme (s), mondialisation (s)**, 17-18 November 2022, at University of Aveiro. More information [SEE MORE](#).
- **XXIV Simpósio Internacional de Informática Educativa (SIIE22)**, 17-19 November 2022, at Coimbra. More information [SEE MORE](#).
- **CZEDU CON 2022 – International Conference on Strategy and Policy in Higher Education**, 21-22 November 2022. More information [SEE MORE](#).
- **FECSE 2022 – Fórum Europeu de Componentes e Sistemas Eletrónicos**, 24-25 November 2022. More information [SEE MORE](#).
- **European Forum for Electronic Components and Systems**, 24-25 November 2022. More information [SEE MORE](#).
- **Colloque Plurimaths – Contextes et pratiques multilingues dans l’enseignement de disciplines scolaires**, 30 November and 1 December 2023, Paris. More information [SEE MORE](#).
- **ICES2023**, 6-8 February 2023. More information [SEE MORE](#).
- **6º Colóquio Internacional de L’ARCD**, 27-30 June 2023, Switzerland. More information [SEE MORE](#).