

Associate Professor Mihaela CONSTANTINESCU, PhD

E-mail: mihaela.constantinescu@mk.ase.ro

Assistant Professor Andreea ORÎNDARU, PhD

E-mail: andreea.orindaru@mk.ase.ro

Professor Mihai Cristian ORZAN, PhD

E-mail: mihai.orzan@ase.ro

Department of Marketing

The Bucharest University of Economic Studies

Professor Ștefan-Claudiu CĂESCU, PhD

E-mail: stefan.caescu@mk.ase.ro

Professor Mihai Ioan ROȘCA, PhD

E-mail: miroasca@ase.ro

Florina BOTEZATU, PhD Student

E-mail: botezatuflor@gmail.com

Department of Marketing

The Bucharest University of Economic Studies

INTEREST IN SPORTS – A MARKETING RESEARCH APPROACH IN DISCOVERING PREDICTING FACTORS

***Abstract.** The need for more physical activity and sports involvement is an objective on which multiple stakeholders have an interest and there is an ongoing debate around tips that can help us achieve such an objective. In this context, the current paper adds on the discussion by bringing into attention predicting factors like three personality traits (extraversion, openness, and conscientiousness) and lifestyle features for three different types of involvement in sports (exercising, watching sports on TV, and attending live sports events). The research results point to certain patterns of predicting factors, patterns that later can be used in order to develop personalized and targeted measures for better outcomes in building marketing campaigns and interventional policies in raising sport interest.*

***Keywords:** sport interest; predicting factors; personality; quality of life; marketing research.*

JEL Classification: M31

1. Introduction

On a quest towards improving the overall quality of life (QoL), sport has been an area where a lot of interest and focus was directed with the strong belief in the overall benefits of sports in people's life. In this context, there is a growing

interest in discovering how we can achieve better results in promoting sport and making it a reality of the day-to-day life. The current paper adds on the existing literature by exploring the underlying factors that might predict people's interest in sport. The special feature of the current research is related to the fact that in its context, involvement with sports is defined by three pillars: exercising, watching sports on TV, or attending live sports events. While exercising is clearly defined as a significant factor influencing people's QoL, the other two pillars are also worth considering as they might improve exercising motivation and help with stress relief. All these elements and their predicting factors connected to personality and lifestyle components are evaluated in the current research, after a literature review section, as it follows.

2. Literature review

First of all, when defining sport, we refer to 'a group of physical exercises that may be classified into individual or team games with specific rules', all with the purpose of relaxation even if it means getting involved in the activity or just watching it as a spectator (Abimibayo Adeoya, Olugbemiga Adeleye and Egawa, 2021). There are a lot of international declarations, policies and publications on sport worldwide impact, starting in 1978 with the adoption of the International Charter of Physical Education, Physical Activity and Sport (UNESCO, 2015) and expanding nowadays with a comprehensive program called the 2030 Agenda for Sustainable Development adopted by the United Nations General Assembly. Central to the 2030 Agenda for Sustainable Development are 17 Sustainable Development Goals (SDGs), which are an urgent call for action, recognizing that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth (United Nations, 2015).

The potential for sport to contribute to sustainable development is explicitly stated in the 2030 Agenda by identifying the growing contribution of sports to the realization of development and peace in its promotion of tolerance and respect and the contributions it makes to the empowerment of women and of young people, individuals and communities as well as to health, education and social inclusion objectives (Lindsey and Chapman, 2017). Similar objectives for sports were also reported by Peráčková and Peráček (2015), who argued that nations should pay attention to building the right context for its citizens' leisure time activities as a way of achieving citizens' fulfilment. Therefore, sport is a powerful tool of promoting social, physical and psychological wellbeing of people, together with mitigating health and psychological risks (Obadiora, 2016). Sports becomes even more salient when discovering that on a global level, there are 1 in 4 adults and 3 in 4 teenagers that do not get sufficiently involved in physical activity (Abimibayo Adeoya, Olugbemiga Adeleye and Egawa, 2021).

2.1. Sport and quality of life

When evaluating the connection between sport and QoL, a definition of the latter concept is needed. So, QoL is a multidimensional concept that is influenced by ‘personal and environmental factors and their interaction, and has the same components for all people, and is enhanced by self-determination, resources, purpose in life and a sense of belonging’ (Bramston, Chipuer and Pretty, 2005). When evaluating the indicators of QoL, there are two major approaches: objective and subjective (Peráčková and Peráček, 2015), and physical activity or any kind of sport involvement is a component that influences the subjective indicators of QoL. When correlating sports with the health benefits, we discover that the most common items refer to lower risks related to ‘body mass index (BMI), systolic blood pressure, presence of type 2 diabetes mellitus, and cardiovascular disease risk’ (Diaz *et al.*, 2019). But its benefits are not limited only to physical health, but also to psychological health, as sport is a source of joy, satisfaction, and happiness that have an influence on life improvement (Peráčková and Peráček, 2015). As a stress mitigator, sport has also an impact on ‘7 out of 8 life satisfaction domains’ (Diaz *et al.*, 2019), being a great context in which people develop competence, autonomy and empathy which are so needed for developing nurturing relationships that lead to life satisfaction (Watanabe *et al.*, 2020).

These benefits of sport on QoL are not limited only to exercising, but actually expand to being a supporter for a sports team, a passion that has the ability to enrich people’s life and improve the social psychological health (Olmsted, 2021). As a consequence, sport can be a powerful tool to cope with conditions like anxiety, depression, and other psychological dysfunctions (Obadiora, 2016). The process through which this happens relates to how getting involved in a physical activity or watching sports created the context of distancing from own realities and gaining a different perspective this way (Olmsted, 2021).

All in all, according to QoL literature, sport is analysed more in connection to the sociology of sports and how it impacts social integration, health, education, even lowering tensions in war zones, while QoL practical researches show how sports can help achieve better results in solving all category of needs: physiological needs (more time dedicated to leisure time through sports), safety needs (healthy life), social needs (inclusion and building relationships), esteem needs (self-confidence, public appreciation), self-actualization needs (developing personal goals) (Constantinescu, 2011).

2.2. Types of sport involvement

While the majority of studies focus on sports only in connection to exercising, the current paper explores three levels of engagement: exercising,

watching sports on TV, or attending live sports events. Although most benefits come from exercising, we cannot dismiss the other two ways in which individuals develop a relationship with sport. Previous studies showed how watching live sports events had a positive impact on people's wellbeing. For example, Watanabe et al. (2020) and Ramchandani, Coleman and Millar (2019) discovered that people attending live sports events had stronger intentions to exercise. Even more than that, the great performance of a star soccer player seems to be correlated with a positive impact on their fans' physical activity (Watanabe *et al.*, 2020). Also, attending sport events was correlated with enhanced wellbeing, with a powerful effect on life satisfaction and happiness (Ramchandani, Coleman and Millar, 2019). But when it comes to watching sports on TV and its benefits for individuals' wellbeing, they were not so well covered in previous studies. Yet, there are authors pointing to the enhanced individual wellbeing as a result of the leisure and/or entertainment derived from sport event viewing (Kim, Kim and Kim, 2017). The same authors connect the hedonic, eudaimonic and social values connected to the experience of watching sports on TV with an improved well-being (Kim, Kim and Kim, 2017).

Still, we cannot ignore the negative impact and effects of these three approaches on the wellbeing of individuals, in order to gain a comprehensive image on the sports effects. These negative influences refer to sport addiction (when exercising becomes a drug, rather than a tool for wellbeing) (Allen and Laborde, 2014), negative emotions and depression associated to poor team performance among fans during a live sports event (Olmsted, 2021), or becoming a 'couch potato' (when watching sports on TV becomes too much) (Olmsted, 2021). Nonetheless, all three approaches of developing a relationship with sport are essential as they bring options from which individuals can choose the one that best fits them, making it easier to generate efficient behaviour interventions.

2.3. Predicting factors for sport involvement

Previous authors have extensively proven how various individual and group features have a greater or a smaller impact on the people's willingness to get involved with sports (regardless of the approach they choose out of those three mentioned in the previous sub-chapter). The predicting factors of sport involvement evaluated previously include: gender, age, the time available, motivation (which can relate to entertainment, slimness, fitness, competition) (Abimibayo Adeoya, Olugbemiga Adeleye and Egawa, 2021).

Out of the influence factors for sport involvement, personality traits have been proven to be good predictors of involvement in organised sports (Allen, Greenlees and Jones, 2013; Allen and Laborde, 2014). When we refer to personality, we refer to it as 'psychological qualities that contribute to an individual's enduring and distinctive patterns of feeling, thinking and behaving'

(Cervone and Pervin, 2013). Although many authors have discovered multiple models to conceptualize personality, the most common model is the five-factor model that includes: neuroticism, extraversion, openness, agreeableness, and conscientiousness (Cervone and Pervin, 2013). Out of these five dimensions, sport has been correlated with neuroticism dimension (it assesses the degree to which individuals are prone to emotional instability) which includes facets of anxiety, hostility, depression, self-consciousness, impulsiveness and vulnerability, while extraversion (that assesses the quantity and intensity of interpersonal interactions), openness (that assesses individuals' tendency to seek out new experiences), agreeableness (that assesses individuals' concern for cooperation and social harmony) and conscientiousness (that assesses organisation and goal-directed behaviour) also incorporate a number of more specific facets linked to sport (Allen, Greenlees and Jones, 2013). Another study showed that success in individual sport can be predicted by low neuroticism, high extraversion, and high openness to experiences (Piepiora, 2021). Even more than this, personality can be the key to predict performance and even motivation for sport involvement (Brinkman, 2013). And also personality can predict a certain type of sport involvement, like exercising or even discover differences between people that participated in organised sport and those who did not (Allen, Greenlees and Jones, 2013).

Starting from this context, the current research was developed to explore more predicting factors on the three approaches to sport (exercising, watching sports on TV or attending live sports events). The predicting factors that were approached through the current research refer to the most popular dimensions for sports' involvement out of the five-factor model: extraversion, openness, and conscientiousness (Allen, Greenlees and Jones, 2013; Piepiora, 2021), together with factors connected to the individuals' lifestyle. The following sections will introduce our research methodology, main results, and discussions.

3. Research methodology

The present research is focused on sports interest, with a special analysis on personality and lifestyle as predicting factors. As explained in the above sections, this interest is seen both from the exercising point of view, but also from the passive participant to the sports phenomenon – as spectator or TV viewer. To have a successful and sustainable sport integration, it is important to understand where the sport interest lies and not force any action towards it. This is the case of school making sports mandatory and not taking into consideration the adaptation of sport activities to children needs and abilities, but also the case of communist countries in which employees, especially from the public sector, were forced to take part as spectators in sport events related to their organization, as a job requirement. Any of these captive sports consumers will take the first occasion to quit sport and stay as far away as possible in the future.

Our research is trying to identify the triggers in increasing the interest in sport, in correlation with each sport consumer profile. Having this in mind, the research was organized around the following objectives:

- a) Evaluating the level of interest for sports, depending on the degree of involvement (practitioner, spectator, viewer);
- b) Uncovering reasons behind lack of interest in sports;
- c) Discovering actions taken towards the element of interest in sports (becoming a fan, following on social media, and buying sport memorabilia);
- d) Evaluating the evolution of interest for sport during the COVID-19 pandemic;
- e) Describing the impact of personality and lifestyle as predicting factors for interest in sports.

One of our hypotheses for this research is that a greater sport interest leads to more actions taken within this sector, both in terms of exercising and feeling the drive to get closer to the sport element of interest (athlete or team). The other hypothesis is that both personality and lifestyle have an impact on building interest for sports, thus knowing what type of personality and lifestyle features favour sport involvement will give the opportunity for better interventional campaigns and policies, as the message will focus on each segment's interest in sports.

The research was conducted through an online survey in October 2021, within a representative national panel for Romanian population, from urban areas, 18+ years old. The sample of 1009 respondents corresponds to a $\pm 3.09\%$ margin of error and a 95% confidence level. Although we have statistical data about Romanian's lack of involvement in physical activity (63%, according to the latest Eurobarometer on Sport and Physical Activity from 2018), we cannot extend this value to the whole population interested in sport, as we lack information about those going to live sports events and those watching sports on TV. Thus, the incidence rate of Romanian having an interest in sports is unknown, which is why, in determining the sample size, we have considered $p = 0.5$. As a representative survey for urban areas at the national level regarding sport involvement, the sample was structured based on age, gender, and town size for the place of residence, as presented in Table 1.

Before moving to the results of our study, we shall present the reasons for choosing Romania and the urban population for our sample. Besides the authors' personal interest in the country context and development, we must see the need for this research also from a European integration, Romania being part of the EU. First, as all reports from the European Commission show, Romania is lagging behind in any sports related statistics, both in terms of individual's involvement, and macroeconomic impact. The latest official European report on Sport and Physical Activity (European Commission and TNS Opinion & Social, 2017) puts Romania among the last countries, with 63% of the population never exercising or playing sport and only 16% attending a live sports event in the last 12 months. We can compare these data with countries such as Finland or Sweden, where only 13%

of the total population never exercises or plays sport, and 48% attend live sports events.

Table 1. Sample structure

<i>Age</i>	<i>%</i>	<i>Gender</i>	<i>%</i>	<i>Town size</i>	<i>%</i>
18-25 years	10%	Men	48%	Bucharest	17%
26-35 years	19%	Women	52%	>200k	23%
36-45 years	21%			50-200k	27%
46-55 years	19%			<50k	33%
56-65 years	18%				
Over 65 years	13%				

Such a low participation in sport activities has also a major impact on country's GDP and employment. The European Union average of share of sport-related GDP is 2.12% and share of sport-related employment is 2.72%, whereas for Romania we have 1.04%, respectively 1.22% (European Commission, 2018). It's obvious the need for better policies, but these policies must be substantiated on real facts and statistics, and not just those obtained through European reports (such as Eurostat or Eurobarometer), but also on in-depth insights showing the reasons behind such low sport involvement and interest.

In terms of our research focus only on the urban population, as marketers we see the need of confronting the situation differently between urban and rural, based on the discrepancies that occur both on a macroeconomic and individual level. In terms of sports, the gap between urban and rural is defined by facilities, organizational structures, leisure activities, and needs hierarchies. Cities have numerous gyms, stadiums, and recreational areas, thus facilitating exercising and attending sports events. The city's organizational structure favours the inclusion of sport within leisure time options, as there are a lot of sport events that happen every day, as well as a lot of sports clubs that offer the opportunity to practice professional or amateur sport. In terms of needs hierarchy, if we look at the Maslow's pyramid, we discover that the rural population is focused most of the time at the bottom levels, trying to cope with physiological (food, water, sleep, shelter) and safety needs (stability, protection against illness, financial security, order, and law). Even though exercising does not directly influence these needs, balancing time spent for covering those needs with time spent in other activities (such as recreation through sport) leads to improved QoL (Constantinescu, 2011).

Based on these differences, a general approach of the sport consumer would not offer relevant information, as a common strategy for urban and rural sport consumer is not possible. We must see the discrepancies and build specific strategies and programs, taking into consideration the place sport has in the individual's daily life, as well as its role in enhancing QoL. In the current research,

we focus on one of these two major segments – the urban population. The nowadays innovative technologies available to the urban areas facilitate the absorption of population’s majority by cities in many countries. Although there is still population living in the rural area, the economic and social trends arise from the urban region where there are more opportunities related to human development and social breakthrough.

4. Research results

a) *The level of interest for sports* must be determined both on a general level, and in relation to the three instances of a sport consumer – doing sport, attending live sports events, and watching sports on TV. The general level gives us a first look on people openness to sports, as it is salient to know if the message gets the individual’s attention. There are a lot of campaigns and policies without any targeting, sending the message to everyone, an approach that is least effective in a context with all the mass information bombarding the consumer.

Although we see a high percentage of people declaring to have an interest in sports (89%), a differentiation on level of interest is needed. This variable has been evaluated on a Likert scale, from 1 to 5, where 5 is the maximum interest. Those with answers of 1 or 2 have been eliminated from the analysis, as they’ve declared a low or inexistent interest in sports. This level of interest in sport also differs between type of sport consumer: practitioner, spectator, viewer, as seen in Table 2.

Table 2. Interest in sport according to the three instances of a sports consumer

<i>Interest in sports</i>	<i>%</i>	<i>Type of sport interest (instances of sport consumer)</i>	<i>%</i>	<i>Average level of interest for sport (on a scale from 1 to 5, where 5 is max)</i>
Interested in sports to a greater or lesser extent	89%	Watching sports TV	69.2%	4.15
		Doing sports	52.4%	4.28
		Spectator	28.0%	4.48
Not interested in sports	11%			
Total	100%			

Although half of the mature urban population (52.4%) declare to do some type of sport (including fast walking and marching), it is interesting to comment on the extremes. First, there is most of the population with a passive involvement in sport, as they just watch sports on TV (69.2%). Those who are more interested in sport (4.48 compared cu 4.15, as seen in the last column of Table 2) make an effort in attending live sports events, but their segment is way smaller, just 28% of the adult urban population.

Our article brings a new perspective on looking at the sport consumer, as we do not see a person being described by one dimension (doing, watching, or

Interest in Sports – A Marketing Research Approach in Discovering Predicting Factors

attending), but identified 7 segments based on aggregated data, as presented in Figure 1. As expected, the biggest segment consists of sports TV watchers (28.6%). These are people not exercising or going to live sports events. We can also see that their level of interest in sport is not so high (3.78, on a scale from 1 to 5). The highest level of interest is for those who practice sport, but also attend live event and follow sport in mass media (the first segment from Figure 1), with a 4.61 level on sport interest. This segment represents 18% of the market. The segmentation presented here is more efficient in terms of future campaigns and policies aimed at increasing sport involvement, as we now know what to expect from each segment. For example, in the past we were expecting people that exercise to also watch sports TV. However, we now can see that there are some segments on the market that do exercise, but do not watch sports on TV (such as segment 6, which represents 16.3% of the market).

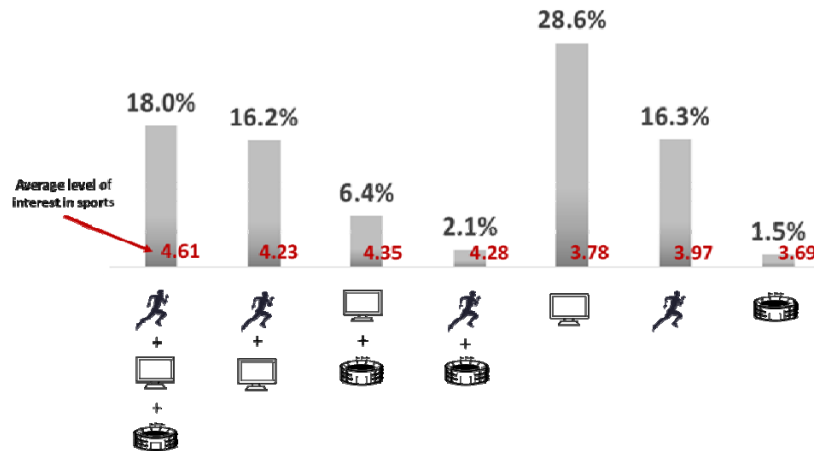


Figure 1. Type of sport consumer according to their interests in sports – exercising, watching sports on TV, or attending live sports events (%) and average level of interest in sport (on scale from 1 to 5, where 5 is max)

b) Although most Romanian adults from the urban areas declare an interest in sports, an analysis of the segment with no or low interest is needed as it is relevant to understand the *reasons behind this lack of interest*. As presented in Table 3 (first column), among the main reasons there are 2 sport-related and 2 people-related. The sport-related are about sport being boring and hard to understand, pain points that can be addressed if sport organizations stop assuming that everyone has the same level of understanding sports game rules. However, sport cannot be explained in a pure objective manner, thus the boring barrier can only be removed by finding people’s daily life interests and link them somehow to sport, in order to make sport a natural integration, not an interruption. Also, within the segment of people that do have an interest in sport, there are some who do not

attend live sport events or exercise. These two sub-segments must also be understood in terms of reasons behind saying no to sport participation (as a spectator or a practitioner), as it can be seen in column 2 and 3 from Table 3. The main reason behind people not attending live sport events shows us that they are not willing to travel to far in order to watch sport, thus the willingness to put effort into such spare time activities is low. When looking at the third column, we can argue that sport is not finding its place within people's free time, 3 out of the first 5 reasons being time related. Almost all studies concerning exercising show time as the main barrier. Nonetheless, this is just an easy-to-give reason, as people could easily integrate sports as a 15–30-minute break in their daily 14-16 active hours.

Table 3. Reasons for disinterest in sport in general, as well as reasons for not going to live sport events or doing sport

<i>Reasons for disinterest in sport in general</i>		<i>People interested in sports</i>			
		<i>Reasons for not attending live sport events</i>		<i>Reasons for not doing sport</i>	
Because I'm not good at sports	51.2%	I do not have the possibility in my area of residence	37.1%	I like to do other activities in my free time	31.1%
It bores me	42.3%	I don't like the conditions in the stadiums / halls	29.0%	I am busy with work / school	23.7%
I don't like to do physical activities	28.6%	I prefer to do something else in my free time	26.4%	Injury / medical reasons	23.0%
I don't understand it	15.3%	Ticket prices are too high	22.6%	I don't have time because of the household	19.7%
Others	22.7%	I have no one to go with	19.7%	I can't find the motivation to start again	16.8%
		The quality of the show is low	15.0%	We do not have facilities near the home	14.8%
		I associate such events with violence	11.5%	I have no one to do it with	10.8%
		Others	7.3%	Others	31.1%

Another reason worth mentioning is the fact that people have the desire to participate in sports, but they do not have someone to do it with, both in terms of participating in live sports events (19.7%) and exercising (10.8%). This reason shows an easy to convert sport consumer, which waits for the right context to come closer to sport.

c) The sport involvement should also be analysed in terms of *actions taken towards the element of interest in sports* (becoming a fan, following on social media, and buying sport memorabilia), as those are real indicators of interest

converted into actions. As seen in Table 4, almost half of the Romanian adult urban population is a fan of an athlete or sport team, the percentage decreasing to one third when it comes to following those athletes or teams on social media and one quarter for sport memorabilia purchasing.

Table 4. Actions taken towards the sport element of interest

Actions taken towards the sport element of interest	People interested in sports (%)		Average sport interest (on a scale from 1 to 5, where 5 in max)	
	Yes	No	For people saying YES	For people saying NO
Are you a fan for an athlete or a sports team	47.8%	52.2%	4.34	3.90
Are you following on social media any athletes or sports teams	32.0%	68.0%	4.54	4.00
Did you buy any sports memorabilia until now?	26.5%	70.6%	4.42	3.99

Although this paper is focused mainly on individual’s QoL relationship to sport, we can see the importance of the three above-mentioned actions also for the economic environment, as these actions lead to higher consumer spending and increased revenue for athletes and sports organizations. These actions also show a stronger relationship between the individual and the sport element of interest, which means a longer involvement of the individual in the sport phenomenon, a positive QoL factor. It’s obvious that to increase these actions, the level of interest in sports should also face an improvement, as it can be seen in comparison column 4 and 5 from Table 4: the average sport interest is higher for those who act towards their favourite athlete or team, by liking, following and buying products sport-related.

d) Taking into consideration the drastic changes occurred within the last two years, due to the *COVID-19 pandemic*, we must also put the current study results in a dynamic perspective.

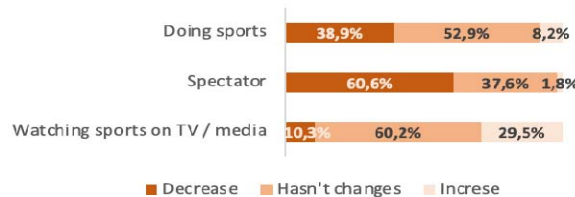


Figure 2. The evolution of interest for sport during the COVID-19 pandemic

Although we have asked our respondents to share their general interest towards sports, not just what happened in the last 2 years, we can conclude that there is a visible shift due to national restrictions, but also individual fears. This shift relates to less people attending live sports events and more people watching sports on TV, as it can be seen in Figure 2.

e) The last part of our study is focused on analysing *the impact of personality and lifestyle as predicting factors for interest in sports*. As mentioned in the literature review section, this analysis was also partially covered by other research projects, but our study comes with two major differences. First, we are covering not just the impact on exercising, but rather on the general sport interest, which includes also participating in a passive manner to sports – spectator or TV viewer. The second difference relies on the lifestyle impact, taken as a separate factor, not because of the individual’s personality. The construct’s items corresponding to the research model were measured using a 5-point Likert scale, and the bipolar attributes for each item is presented in Table 5. Each of the 3 personality traits are analyzed based on two items, fact also applicable for lifestyle impact. We have relied on existing literature to develop the model constructs, as shown in Table 5. Three of our predictors were adapted from scholar sources, whilst Lifestyle is a personal adaption of two metrics used as well in various previous research projects.

Table 5. Source of construct variables

<i>Construct</i>	<i>Code</i>	<i>Items</i>	<i>Source</i>
Extraversion	EXTRA	E1=Extrovert / Introvert E2=Going out / Staying home	(Cervone and Pervin, 2013) (Piepiora, 2021)
Openness	OPEN	O1=Open to new / Conservator O2=Adventure / Safety	(Cervone and Pervin, 2013) (Allen, Greenlees and Jones, 2013)
Conscientiousness	CONSC	C1=Present / Future C2=Emotion / Rational	(Cervone and Pervin, 2013) (Brinkman, 2013)
Lifestyle	STYLE	S1=Active / Passive S2=Social / Secluded	Self-developed
Interest in sport	INT	I1	Dependent variable

The structural equations model (SEM) was analyzed with IBM SPSS Statistics Package, IBM SPSS Amos and Warp PLS 7.0 (Kock, 2019). To avoid further consistency issues, we replaced the remaining 1009 data points with the horizontal mean of the other items from a construct, or the vertical mean of the items. We also used IBM SPSS to identify duplicates and drop them from our data set. IBM SPSS Amos was used to check for multivariate outliers, which were detected using the Mahalanobis D-Squared distance test for a $p < 0.05$. 14 multivariate outliers were found for a $p < 0.01$, but were not removed from the database, remaining to decide later about that problem, according to the results of the PLS analysis (Tuță *et al.*, 2014).

To test for reliability and internal consistency, values from Table 6 were used. Thus, we can infer that the items corresponding to each construct have a good internal consistency, with values for Cronbach’s Alpha well over 0.7 (Nunnally, 1978), and a composite reliability over 0.7 (Fornell and Larcker, 1981), therefore the items associated to each latent variable are well understood and addressed by our respondents. Also, in Table 6 we can see that the VIF (variance inflation factor)

values are under 5 (Hair, Anderson and Tatham, 1987), so we can infer that we have a significantly low multicollinearity in our data set.

Table 6. Descriptive statistics

	Cronbach Alpha	Composite Reliability	AVE	VIF
Sport	0.715	0.814	0.680	1.037
Extra	0.776	0.981	0.802	2.151
Openness	0.702	0.825	0.718	2.715
Consc.	0.886	0.811	0.712	2.251
Lifestyle	0.812	0.775	0.828	1.944

As we can infer from Table 7, our model also has a good discriminant validity, as all the square roots of average variance extracted is higher than any other correlation among latent variables (Fornell and Larcker, 1981)

Table 7. Latent variable correlations

	E1	E2	O1	O2	C1	C2	I	S1	S2
E1	1.000	0.474	0.347	0.263	0.090	0.213	0.392	0.399	0.067
E2	0.474	1.000	0.361	0.318	0.079	0.198	0.420	0.410	0.106
O1	0.347	0.361	1.000	0.344	0.086	0.220	0.356	0.392	0.081
O2	0.263	0.318	0.344	1.000	0.121	0.216	0.396	0.310	0.229
C1	0.090	0.079	0.086	0.121	1.000	0.245	0.244	0.034	0.229
C2	0.213	0.198	0.220	0.216	0.245	1.000	0.337	0.203	0.165
I	0.392	0.420	0.356	0.396	0.244	0.337	1.000	0.382	0.319
S1	0.399	0.410	0.392	0.310	0.034	0.203	0.382	1.000	0.075
S2	0.067	0.106	0.081	0.229	0.229	0.165	0.319	0.075	1.000

For testing the structural model and hypotheses, WarpPLS 7.0 was used, which can analyze nonlinear relationships between latent variables (Kock, 2019) and include the results for the whole sample of 1009 respondents using as resampling method bootstrapping. As seen in Figure 3, the path or β (Beta) coefficients between the model's latent constructs are significant for a $p < 0.05$, as well as the R^2 , which shows the percentage of variance of our exogenous variable explained by its predictors or dependent variables. Thus, our model validates all our research hypotheses, as all the corresponding relationships between latent variables have p-values below .01. Most of our factors have almost identical influences on consumers' interest in sport, with general Lifestyle approaches ranking highest (0,25), and Openness being the least influential (0,19).

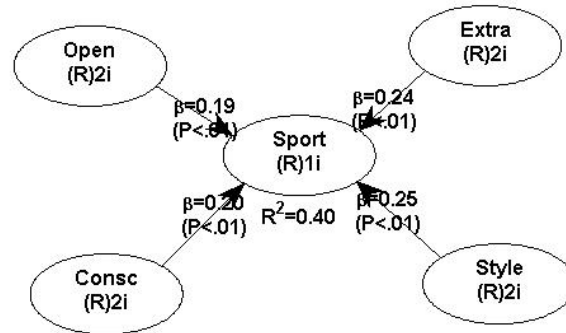


Figure 3. Results of PLS Analysis

From Table 8 we can observe that the overall fit and quality indices for our proposed research structural model are valid, with the ARS index at 0.398 for a $p < 0.001$, and AVIF at 1.308, much under the threshold value of 5 (Kock, 2019).

Table 8. Model fit and quality indices

Indices	Value	Conditions
Average path coefficient (APC)	0.221	$P < 0.001$
Average R-squared (ARS)	0.398	$P < 0.001$
Average adjusted R-squared (AARS)	0.396	$P < 0.001$
Average block VIF (AVIF)	1.308	acceptable if ≤ 5 , ideally ≤ 3.3
Average full collinearity VIF (AFVIF)	1.437	acceptable if ≤ 5 , ideally ≤ 3.3
Tenenhaus GoF (GoF)	0.533	small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36
Sympson's paradox ratio (SPR)	1.000	acceptable if ≥ 0.7 , ideally = 1
R-squared contribution ratio (RSCR)	1.000	acceptable if ≥ 0.9 , ideally = 1
Statistical suppression ratio (SSR)	1.000	acceptable if ≥ 0.7

Considering the results of the structural equations model, a comparison between personality traits and lifestyle of those interested in sports and those disinterested can be conducted.

Table 9. Differences in personality traits and lifestyle between profile of people interested in sports and those disinterested

Interest in sports	E1=Extrovert / Introvert			Interest in sports	C1=Present / Future		
	Extrovert	Neutral	Introvert		Present	Neutral	Future
Yes	41.0%	19.7%	39.3%	Yes	21.2%	22.2%	56.6%
No	30.0%	21.8%	48.2%	No	22.0%	27.5%	50.5%
	E2=Going out / Staying home				C2=Emotion / Rational		
	Going out	Neutral	Stay home		Emotional	Neutral	Rational
Yes	42.8%	21.6%	35.6%	Yes	21.4%	23.4%	55.2%
No	30.9%	21.8%	47.3%	No	17.3%	18.2%	64.5%
O1=Open to new / Conservator				S1=Active / Passive lifestyle			

Interest in Sports – A Marketing Research Approach in Discovering Predicting Factors

	<i>Open to new</i>	<i>Neutral</i>	<i>Conservator</i>		<i>Active</i>	<i>Neutral</i>	<i>Passive</i>
<i>Yes</i>	51.3%	17.6%	31.1%	<i>Yes</i>	48.3%	21.9%	29.8%
<i>No</i>	44.5%	15.5%	40.0%	<i>No</i>	31.5%	24.3%	44.2%
	O2=Adventure / Safety				S2=Social / Secluded lifestyle		
	<i>Adventure</i>	<i>Neutral</i>	<i>Safety</i>		<i>Secluded</i>	<i>Neutral</i>	<i>Social</i>
<i>Yes</i>	26.8%	18.2%	55.0%	<i>Yes</i>	11.9%	14.7%	72.4%
<i>No</i>	27.3%	13.6%	59.1%	<i>No</i>	15.3%	33.3%	51.4%

As extracted from Table 9, the profile of Romanian adult urban individual interested in sport is extrovert, going-out type of person, open to new, concerned about safety, thinking about the future, rather rational in the decision-making process, with an active and a highly social life. In comparison to this first segment, the people disinterested in sports are introverts, with a tendency to stay home, not go out so much, also open to new things (but in rather low percentage compared to those interested in sports, 44.5% versus 51.3%), more concerned about safety and more rational than sport fans, also thinking about the future, with a rather passive lifestyle and less social than sport interested people.

5. Discussions and implications

According to the European Commission (2018), a lack of physical activity is responsible for over 500 000 deaths per year across Europe and accounts for economic costs amounting to €80.4 billion per year to the EU-28. Thus, the necessity of highly efficient sport promoting policies is more than obvious for almost all European countries, but the sought after results are late to occur, even though there are several funding sources available and a lot of EU committees in place to provide implementation assistance.

One of these countries is Romania, where a National Strategy for Sport was developed since 2016, but is still under discussion even in 2021, as there are a lot of unknown factors that need evaluation and a lot of political and economic interests to be reconciled. One potential enhancer factor for a more efficient and innovative strategy could be represented by consumer-centred insights that cover not just sport practice, but also sport passive involvement (as spectators and sport media consumers). This information will show a broader potential of the sport market, with opportunities to develop the interest towards sports. One thing is to show people how they can include sport in their life, based on specific information about their needs and interests, and another thing is to send the message that everyone should exercise, message sent through cold and unsympathetic argument about health and sedentariness. To avoid the latter option presented here, the decision-making factors, such as the Ministry of Sport, should try to understand the citizen's habits, needs and potential, and should adapt the message to each segment, so everyone could feel that the campaign is talking to and about them.

This is where our study intervenes with a different take on things, proposing a series of interventional policies based on the individual's personality traits and lifestyle. Our research showed what is the profile of a person interested in sports and how a disinterested person can be described. In the specific literature there are some similar proposals in which authors analysed the relationship between personality and sport, but they were focused mainly on professional athletes, showing the considerable practical as well as theoretical value in being able to statistically predict athletic behaviour (Allen, Greenlees and Jones, 2013). This way coaches, parents, or sport psychology consultants may increase athletes' feelings of autonomy, competence, and relatedness, and thereby increase self-determined motivation and possibly performance (Brinkman, 2013).

Our take on the subject is different in terms of both input and output. First, in our model, the input is not just about personality traits, but also about lifestyle, as the context of each one's life can alter the personality, thus also changing the perspective about sport. Also, when considering the input, we also included information about the individual's interest in sport in general, not just the one about practicing sport. The output can have more than one direction, meaning that the final objective is not just to convince people to exercise, but also to join the phenomenon as passive participants (spectators or TV viewers), as there are a lot of positive effects on QoL this way also.

The present research can be of interest for a series of stakeholders, starting with the sport organizations that want to know how to convince people to join a club, but also to identify from the beginning the risk of sport abandonment, based on personality traits. These sport organizations are also interested in the other two instances of a sports consumer, as they want to have fans attending live events and people at home watching their games. From a macroeconomic perspective, other stakeholders interested in our research could be the Ministry of Sports and all the other public organizations related to sport, as they need the proper tools to build and implement efficient strategies. Also, another stakeholder for this research could be the business environment, which uses sport as a platform for promoting and connecting with their target audience, thus a better understanding on how sport is perceived is salient, together with the reasons for which a person includes or rejects sport in/from his life.

6. Conclusions and further research

All in all, the current research showed how various subjective factors can predict an individual interest for getting involved in sports activity, be it exercising, watching sports on TV, or attending live sports events. Our research adds on the existing debate around this subject by offering a wider, more inclusive perspective related to what we define as sport. When talking about the limits of this research approach, we can mention the sample structure and its focus on Romania and its

shortage of perspective on the side of rural area inhabitants. Even though the urban areas might prove to be the trendsetters of behaviors related to sport, replicating the research also to rural citizens might lead to a better understanding, which could be a very appealing further research direction. Additionally, developing a research project with a sample of sports' stakeholders might be a second further research direction with the purpose of going into depth with the interventionist measures proposed for better outcomes.

REFERENCES

- [1] **Abimibayo Adeoya, A., Olugbemiga Adeleye, A. and Egawa, S. (2021), *Psychological Factors as Predictor of Sport Participation among Japanese and Foreign Students in Sendai, Japan*, in G. Nielsen, H. (ed.) *Sport Psychology in Sports, Exercise and Physical Activity*. IntechOpen. doi:10.5772/intechopen.99244;**
- [2] **Allen, M.S., Greenlees, I. and Jones, M. (2013), *Personality in Sport: A Comprehensive Review; International Review of Sport and Exercise Psychology*, 6(1), pp. 184–208. doi:10.1080/1750984X.2013.769614;**
- [3] **Allen, M.S. and Laborde, S. (2014), *The Role of Personality in Sport and Physical Activity ; Current Directions in Psychological Science*, 23(6), pp. 460–465. doi:10.1177/0963721414550705;**
- [4] **Bramston, P., Chipuer, H. and Pretty, G. (2005), *Conceptual Principles of Quality of Life: An Empirical Exploration ; Journal of Intellectual Disability Research*, 49(10), pp. 728–733. doi:10.1111/j.1365-2788.2005.00741.x;**
- [5] **Brinkman, C. (2013) , *The Big Five Personality Model and Motivation in Sport*; p. 61;**
- [6] **Cervone, D. and Pervin, L.A. (2013), *Personality: Theory and Research*. Twelfth edition. Hoboken, NJ: Wiley;**
- [7] **Constantinescu, M. (2011), *Quality of Life – Sport Relationship. Analysis Indicators; Management & Marketing*, 6(2), p. 12;**
- [8] **Diaz, R. et al. (2019), *Impact of Adaptive Sports Participation on Quality of Life; Sports Medicine and Arthroscopy Review*, 27(2), pp. 73–82. doi:10.1097/JSA.0000000000000242;**
- [9] **European Commission (2018), *Study on the economic impact of sport through sport satellite accounts*. LU: Publications Office. Available at: <https://data.europa.eu/doi/10.2766/156532> (Accessed: 23 November 2021);**
- [10] **European Commission and TNS Opinion & Social (2017), *Sport and physical activity: report*. LU: Publications Office. Available at: <https://data.europa.eu/doi/10.2766/483047> (Accessed: 23 November 2021);**
- [11] **Fornell, C. and Larcker, D.F. (1981), *Evaluating Structural Equation Models with Unobservable Variables and Measurement Error; Journal of Marketing Research*, 18(1), p. 39. doi:10.2307/3151312;**

- [12] **Hair, J.F., Anderson, R.E. and Tatham, R.L. (1987), *Multivariate Data Analysis with Readings*. 2nd ed. New York : London: Macmillan ; Collier Macmillan;**
- [13] **Kim, J., Kim, Y. and Kim, D. (2017), *Improving Well-being through Hedonic, Eudaimonic, and Social Needs Fulfilment in Sport Media Consumption*; *Sport Management Review*, 20(3), pp. 309–321. doi:10.1016/j.smr.2016.10.001;**
- [14] **Kock, N. (2019), *WarpPLS User Manual*. Laredo, Texas, USA: ScriptWarp Systems;**
- [15] **Lindsey, I. and Chapman, T. (2017), *Enhancing the Contribution of Sport to the Sustainable Development Goals. Commonwealth Secretariat*. Available at: https://www.sportanddev.org/sites/default/files/downloads/enhancing_the_contribution_of_sport_to_the_sustainable_development_goals_.pdf;**
- [16] **Nunnally, J.C. (1978), *Psychometric Theory*. 2d ed. New York: McGraw-Hill (McGraw-Hill series in psychology);**
- [17] **Obadiora, A.H. (2016), *The Influence of Sport Participation on Quality of Life Perceptions among Inmates in Nigerian Prisons*. 4(6), p. 8;**
- [18] **Olmsted, L. (2021), *Fans: How Watching Sports Makes us Happier, Healthier, and More Understanding*. Algonquin Books;**
- [19] **Peráčková, J. and Peráček, P. (2015), *Role of Sports in the Development of an Individual and Role of Psychology in Sports*; *Mens Sana Monographs*. Edited by R. Ghildiyal, 13(1), p. 165. doi:10.4103/0973-1229.153335;**
- [20] **Piepiora, P. (2021), *Personality Profile of Individual Sports Champions*; *Brain and Behavior*, 11(6). doi:10.1002/brb3.2145;**
- [21] **Ramchandani, G., Coleman, R. and Millar, R. (2019), *The Perceived Influence of Sport Event Spectatorship on Subjective Wellbeing*; *Journal of Global Sport Management*, pp. 1–16. doi:10.1080/24704067.2019.1669066;**
- [22] **Tuță, M. et al. (2014), *Competitive Intelligence- An Enhancement to Business Intelligence* ; *Economic Computation and Economic Cybernetics Studies and Research*, 48(2), pp. 151–162;**
- [23] **UNESCO (2015) , *International Charter of Physical Education, Physical Activity and Sport*. Available at: <https://en.unesco.org/themes/sport-and-anti-doping/sport-charter>;**
- [24] **United Nations (2015), *Sustainable Development Goals*. Available at: <https://sdgs.un.org/goals>;**
- [25] **Watanabe, Y. et al. (2020), *Sport Spectatorship and Health Benefits: A Case of a Japanese Professional Golf Tournament*; *Frontiers in Psychology*, 11, p. 1494. doi:10.3389/fpsyg.2020.01494.**