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ATTITUDES TOWARDS EXERCISE CONTENT ON SOCIAL MEDIA AND THE CHOICE OF FITNESS TRAINER

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ABSTRACT

The aim of this study was to: a) investigate and determine gender differences towards factors influencing gym-goers' choice of fitness trainer; and b) to identify and explain gender differences in gym-goers' attitudes towards social media exercise contents (SMEC). For this purpose, a questionnaire was created. The study was conducted on a sample of 50 gym-goers (N1=13 male and N2=37 female), all attending a gym in Split, Croatia. The variable sample consisted of five groups of variables. Test-retest overlap was performed to determine the reliability (88.20%) of the questionnaire. The results showed that the affirmative attitudes were statistically significant in contrast to the non-affirmative attitudes (Wilcoxon Matched Pairs Test, T=250.00, Z=3.60, p<0.001). In addition, male gym-goers generally have a significantly more affirmative attitude towards SMEC than female gym-goers (Mann-Whitney U-test, U=119.50, Z=–2.68, p=0.007). Furthermore, there are gender differences in choosing a fitness trainer based on their appearance; but there are no gender differences in the attitude towards the number of fitness trainers' followers on social media as an indicator of trustworthiness. As this study was specifically concerned with the attitudes of gym-goers, future studies should focus on sports professionals and their attitudes toward this topic.

Keywords: *social media, attitudes, fitness trainer, exercise, gender*

ODNOS DO VSEBIN V DRUŽBENIH MEDIJIH, POVEZANIH S TELESNO VADBO, IN IZBIRA TRENERJA FITNESA

IZVLEČEK

Cilj raziskave je bil: a) proučiti in opredeliti razlike med spoloma v dejavnikih, ki vplivajo na odločitev obiskovalcev fitnesa o izbiri trenerja, ter b) ugotoviti in razložiti razlike med spoloma v odnosu obiskovalcev fitnesa do vsebin v družbenih medijih, povezanih s telesno vadbo. V ta namen smo na novo zasnovali vprašalnik. Raziskavo smo izvedli na vzorcu 50 oseb (N1 = 13 moških, N2 = 37 žensk), ki obiskujejo fitnes v Splitu. Vzorec spremenljivk je bil sestavljen iz petih skupin spremenljivk. Izvedli smo test ponovljivosti, s katerim smo določili zanesljivost (88,20 %) vprašalnika. Rezultati so pokazali statistično pomembnost afirmativnih odnosov v nasprotju z neafirmativnimi (Wilcoxonov test ekvivalentnih parov, $T = 250{,}00$, $Z = 3{,}60$, $p < 0{,}001$). Poleg tega je bil odnos moških obiskovalcev fitnesa do vsebin v družbenih medijih, povezanih s telesno vadbo, veliko bolj afirmativen kot odnos obiskovalk (Mann-Whitneyjev U test, $U = 119{,}50$, $Z = -2{,}68$, $p = 0{,}007$). Med spoloma so bile razlike tudi pri izbiri trenerja fitnesa na podlagi njegovega videza, ni pa bilo razlik med spoloma v odnosu do števila sledilcev, ki jih ima trener v družbenih medijih, kot kazalnika njegove verodostojnosti. Ta raziskava zajema samo obiskovalce fitnesa, zato bi se morale prihodnje raziskave osredotočiti na poklicne športnike in njihov odnos do te teme.

Ključne besede: *družbeni mediji, odnos, trener fitnesa, vadba, spol*

INTRODUCTION

Over the last twenty years, technology has not only changed the way we live but also the way we work. This has led to a sedentary lifestyle, less physical work and the emergence of modern diseases (WHO, 2021; European Commission, 2021).

As online access to information does not require users to have any prior knowledge or knowledge of a programming language (Norman, 2012), people have easier and cheaper access than before (Chou, Hunt, Beckjord, Moser & Hesse, 2009; Hanson et al., 2011; Ralph, Berglas, Schwartz & Brindis, 2011; Selkie, Benson & Moreno, 2011; Usher, 2011). For example, statistical data indicate that 61% of American adults use the Internet to find information about sports and health every day, while 39% look for the same information on social media (Fox & Jones, 2018); 22% of healthcare professionals in Norway use Facebook as a source of health information, while 45% of healthcare professionals in Norway and Sweden use LinkedIn for the same purpose (Teodoro & Naaman, 2013); and 30% of the world's population uses social media as a medium of interaction every day (Regan, 2015).

Due to its efficiency and convenience, social media as a global phenomenon has become an indispensable means of communication today: a channel for the instant exchange of information, opinions, and attitudes shared by all generations worldwide (Ratinger, 2017; Stanojević, 2011; Akbari, Huc, Liqiangb & Chua, 2018). Even more, its use is not only a common medium to emphasize one's interests or hobbies but also a medium to share knowledge and opportunities in various fields and for various purposes in our daily lives: from its use in health and educational professions (Mani, Uma, John & Mieminen, 2023; Zaintal & Rahmat, 2020) to its impact on consumers' purchase intention, workers' creativity (Arora, Rana & Prashar, 2023; Zhang, Wang & Chen, 2023) and even as a tool to promote the career prospects of female academics in countries where women's career prospects are not as promising as men's (Sarwar, Imran, Akhtar & Fatima, 2023).

Furthermore, when browsing online profiles, people are subject to trends imposed by social media, whether consciously or unconsciously. One such trend concerns the profiles of fitness trainers and their social media exercise content (SMEC). The idea of taking care of one's health, combined with daily posts of exercises, healthy eating, and various ways to become physically active, has led to the emergence of this modern trend that has taken on an important, even invasive, role in contemporary life. In other words, Facebook and Instagram, as the most popular social media in terms of followers, have enabled fitness

trainers to publish such content and reach a large audience through pictures, videos and motivational posts (Stanojević, 2011; Kaplan & Haenlein, 2010). In addition, today's gym-goers have become more demanding and require more information and expertise than what they receive in a gym (McCall, 2015). Numerous studies have highlighted the positive impact of SMEC on its users. In addition to the ability to publish daily online exercise videos and motivational posts, fitness trainers who post on social media represent an important 'digital type of health communicator that could influence health behavior' (Durau, Diehl & Terlutter, 2022: 2). Tracking the influence of SMEC and fitness trainers on social media shows that they increase users' awareness of the importance of physical activity, healthy eating and good fitness, and increase physical activity among both men and women (Durau, Diehl & Terlutter, 2022). Social media platforms that expose SMEC provide the opportunity to reach a larger number of people in a timely manner and draw their attention to their posts and/or blogs where they disseminate information about a healthy lifestyle on a daily basis; it represents a valuable source of useful and correct information about health and sports (Adams, 2010a; Adams, 2010b); it brings profit to the influencers of social media fitness trainers as they use these platforms to promote themselves and their products in addition to all the aspects mentioned above (Grbavac & Grbavac, 2014; Teodoro & Naaman, 2013). However, some studies have also highlighted the negative aspects of SMEC use. Moorhead et al. (2013), for example, lists 12 negative aspects of SMEC. One of these is the inability to control the trustworthiness of the source of content posted on social media, highlighting the potential harm that can result from blindly following SMEC.

Given all this, and the fact that there is no way to control the accuracy of SMEC, the question arises: can users trust the SMEC they see, to what extent can they trust it, and how should they choose which influences from SMEC or fitness trainers to follow?

Based on these arguments, we hypothesize the following:

H1: Users tend to be indecisive when choosing their fitness trainer on social media;

H2: There are differences between males and females in terms of affirmative attitudes towards exercise via social media;

H3: There are statistically significant differences between males and females in terms of non-affirmative attitudes towards sports on social media.

Thus, this study aims to: a) investigate and determine gender differences towards factors influencing gym-goers' choice of fitness trainer; b) identify and explain the gender differences in gym-goers' attitudes towards SMEC.

METHODS

Procedure and participants

The sample consisted of a total of 50 gym-goers (N_1=13 male (26%) and N_2=37 female (74%)), all attending a gym in Split, Croatia (see Table 1 for a detailed description of the sample). All of the participants were annual gym members who exercised individually and not in groups programs.

As there were no previously developed and validated measurement instruments, a new measurement instrument (questionnaire with five questions) was constructed for data collection. The survey was conducted in May 2018. The questionnaire was anonymous and all participants were informed in writing that their participation was voluntary. The given time limit was ten minutes. The questionnaire was written in Croatian. It was handed out in paper.

The questionnaire consisted of five items: 1) Demographic variables (gender, age, height, weight and body mass index (BMI)); 2) Exercise habits (how often do they exercise, do they participate in any type of group workout); 3) Sources of knowledge about exercise (education, gym, social media, online articles or scientific sports literature); 4) Choice of social media platforms as a source of information about exercise (Facebook, Instagram, Twitter or YouTube); 5) 13 variables on attitudes towards SMEC (7 affirmative attitude variables, 4 non-affirmative attitude variables and 2 variables of a neutral character).

Affirmative attitudes were as follows: “I follow sports-content posts on the Internet and social media”; “Social media play an important role in the fitness industry”; “I often visit personal fitness trainers’ sites and their sports content posts on the Internet and social media”; “I trust personal fitness trainers’ posts on the Internet and social media”; ‘Personal fitness trainers’ posts on the Internet and social media motivate me”; “Exercising according to fitness trainers’ posts on the Internet and social media is the most practical way of exercising”; “Personal trainers’ posts on the Internet and social media have had a positive impact on the importance of exercising”. Non-affirmative attitudes were as follows: “People who cannot afford any other type of exercising, exercise using personal fitness trainers’ posts on the Internet and social media”; “One cannot exercise using personal fitness trainers’ posts on the Internet and social media without any prior knowledge”; “I have a hard time finding adequate personal fitness trainers’ posts on the Internet and social media for my exercises”; “I do not exercise using personal fitness trainers’ posts on the internet and social media, but via their posts I have enriched my knowledge on exercising”. Neutral attitudes were as follows: “I choose personal fitness trainers on the Internet and

social media according to their looks"; "The number of followers is a good quality sign of personal fitness trainers' posts on the Internet and social media".

All questions that could be answered quantitatively were asked on a 5-point Likert scale (1=strongly agree, 2=agree, 3=neither agree nor disagree, 4=disagree, and 5=strongly disagree).

The test-retest overlap was calculated (88.20%) to determine the reliability of the measurement instrument (questionnaire). This confirms the validity of the newly constructed questionnaire. Descriptive statistics (mean, standard deviation, minimum and maximum score, median, mode, and frequency of mode) were used to describe the variables of the sample and to determine the differences between the affirmative and non-affirmative variables. Frequency, percentage and mode were calculated for the questions describing the sample. The Wilcoxon matched-pairs test was used to determine the differences between affirmative and non-affirmative attitudes. The Mann-Whitney U test was used to determine differences in attitudes between male and female. Data were analysed using the statistical software package Statistics 14.0. (TIBCO Software Inc. (2020)).

RESULTS

Table 1 shows that non-affirmative attitudes statistically prevail ($p<0.001$) and that male users have more affirmative attitudes than female users ($p=0.007$).

Table 2 shows that, based on the results gained from the total sample, the majority of users exercise mostly 3 times per week or 3-5 times per week.

Table 3 shows that, based on the results gained from the total sample, gym-goers say they have gained their knowledge of exercises and fitness mostly from the gym and less from SMEC.

Table 4 shows that Instagram (46%) is the most popular platform for gaining information on exercises; Twitter (30%) is the second most popular platform, Facebook (22%) comes in third place and YouTube (2%) is the least popular platform for gaining information on exercises.

Table 5 shows the results of the gym-goers answers for each of 12 variables regarding all three attitudes. Variable 1 has the highest frequency in males, in females, and in all groups together.

Table 1: Descriptive statistical parameters (mean, standard deviation, minimal and maximal result) for sample description and affirmative and non-affirmative attitudes regarding exercising using contents published online and on social media

	All groups		Female		Male	
Variable	**AS ± SD**	**MIN/ MAX**	**AS ± SD**	**MIN/ MAX**	**AS ± SD**	**MIN/ MAX**
Age	58.44 ±8.99	17.00/ 54.00	28.62 ±9.64	17.00/ 54.00	27.92 ±7.09	19.00/ 43.00
Body height	174.72 ±6.15	165.00/ 191.00	172.11 ±4.43	165.00/ 183.00	182.15 ±3.85	178.00/ 191.00
Body weight	70.60 ±12.14	51.00/ 97.00	66.19 ±8.47	51.00/ 96.00	86.00 ±6.28	76.00/ 97.00
BMI	23.02 ±3.02	18.21/ 31.71	22.01 ±2.73	18.21/ 31.71	26.91 ±2.73	23.20/ 28.41
Affirmative	2.69 ±0.54†	1.71/ 4.43	2.55 ±0.42*	1.71/3.43	3.08 ±0.68*	1.86/ 4.43
Non-affirmative	3.30 ±0.74†	2.00/ 5.00	3.40 ±0.70	2.00/5.00	3.03 ±0.81	2.00/ 5.00

Legend: †Statistically significant difference between affirmative and non-affirmative on the total sample (Wilcoxon Matched Pairs Test, T=250.00, Z=3.60, p<0.001); *Statistically significant difference between females and males in affirmative attitudes (Mann-Whitney U test, U=119.50, Z=-2.68, p=0.007)

Table 2: Descriptive statistical parameters (frequency, percentage, and mode) for the variable 'Exercise habits of gym-goers'

All groups		
I exercise	**f**	**%**
Daily	4.00	8.00
3-5 times per weekw	21.00	42.00
3 times per week	22.00*	44.00*
2 times per week	3.00	6.00
Never	0.00	0.00

Legend: *mode; f - frequency; % - percentage

Table 3: Descriptive statistical parameters (frequency, percentage, and mode) for the variable 'Source of knowledge about exercise'

All groups		
I gained my knowledge on exercises	**f**	**%**
Throughout my education	6.00	12.00
In a gym	31.00*	62.00*
Via social media	10.00	20.00
Via online articles	2.00	4.00
From scientific sports literature	1.00	2.00

Legend: *mode; f - frequency; % - percentage

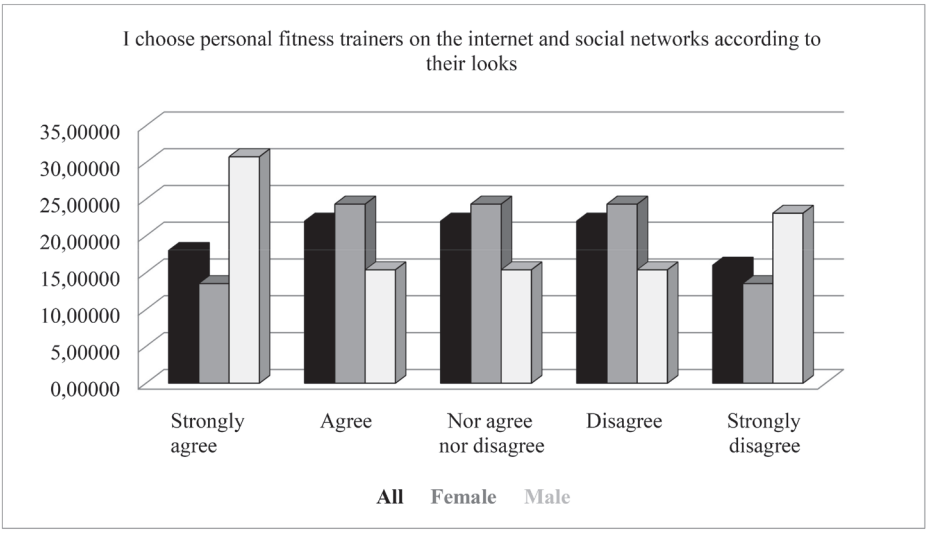
Table 4: Descriptive statistical parameters (frequency, percentage and mode) for the variable 'Choice of social media platforms as a source of information about exercising'

All groups		
As a source of information about exercising, I use:	**f**	**%**
Facebook	11.00	22.00
Instagram	23.00*	46.00*
Twitter	15.00	30.00
YouTube	1.00	2.00

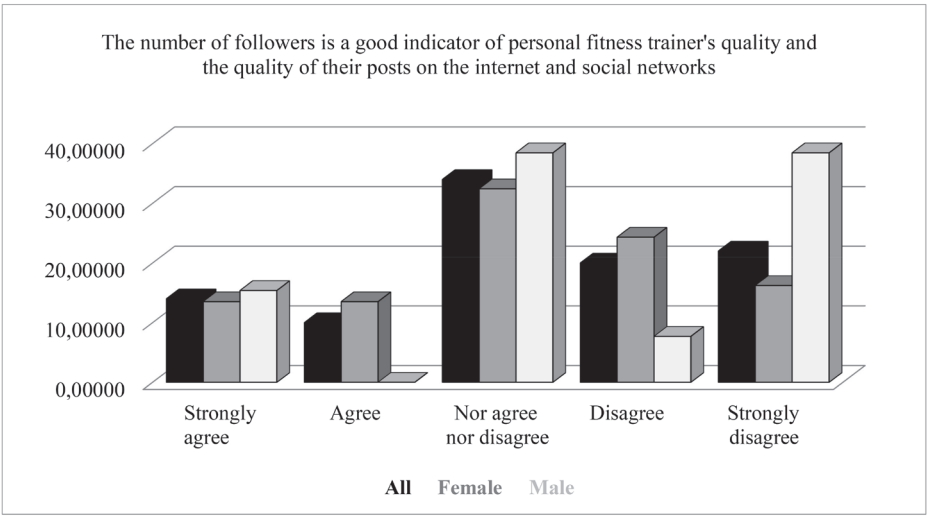
Legend: *mode; f - frequency; % - percentage

Graph 1 shows that for males the answers vary from 'Strongly agree' to 'Strongly disagree' while, for females, answers vary from 'Agree' to 'Disagree'.

Graph 2 shows that the answers 'Nor agree nor disagree' dominate; females were more likely to answer 'Disagree' than males, and males were more likely to answer 'Strongly disagree' than females.



Graph 1: Percentages of answers to the neutral attitude: 'I choose personal fitness trainers on the Internet and social networks according to their looks'



Graph 2: Percentages of individual responses to the neutral attitude: 'The number of followers is a good indicator of a fitness trainer's quality as well as the quality of their posts on the Internet and social networks'

Table 5: Descriptive statistical parameters (median, mode, and frequency of mode-F mode) for 12 variables on the positive and negative attitudes

		All groups			Female			Male		
Variable		Median	Mode	F mode	Median	Mode	F mode	Median	Mode	F mode
Affirmative attitudes	1	strongly agree	strongly agree	40	strongly agree	strongly agree	30	strongly agree	strongly agree	10
	2	neither agree nor disagree	neither agree nor disagree	19	agree	neither agree nor disagree	17	disagree	disagree	4
	3	neither agree nor disagree	neither agree nor disagree	19	neither agree nor disagree	neither agree nor disagree	13	neither agree nor disagree	neither agree nor disagree	6
	4	neither agree nor disagree	neither agree nor disagree	16	neither agree nor disagree	neither agree nor disagree	13	disagree	strongly disagree	5
	5	neither agree nor disagree	neither agree nor disagree	19	neither agree nor disagree	neither agree nor disagree	12	neither agree nor disagree	neither agree nor disagree	7
	6	agree	agree	19	agree	agree	16	neither agree nor disagree	strongly disagree	4
Non-affirmative attitudes	7	disagree	disagree	20	agree	strongly disagree	15	disagree	disagree	7
	8	neither agree nor disagree	agree	14	neither agree nor disagree	neither agree nor disagree	12	strongly agree	strongly agree	7
	9	neither agree nor disagree	neither agree nor disagree	15	neither agree nor disagree	neither agree nor disagree	13	neither agree nor disagree	strongly agree	5
	10	agree	agree	17	agree	agree	12	agree	agree	5

		All groups			Female			Male		
Variable		Median	Mode	F mode	Median	Mode	F mode	Median	Mode	F mode
Neutral attitudes	11	neither agree nor disagree	Multiple	11	neither agree nor disagree	Multiple	9	neither agree nor disagree	strongly agree	4
	12	neither agree nor disagree	neither agree nor disagree	17	neither agree nor disagree	neither agree nor disagree	12	neither agree nor disagree	Multiple	5

Legend: Median; mode; f mode-frequency

Variables: 1-'Social media play an important role in the fitness industry'; 2-'I often visit personal fitness trainers' sites and their sports content posts on the Internet and social media'; 3-'I trust personal fitness trainers' posts on the Internet and social media'; 4-'Personal fitness trainers' posts on the Internet and social media motivate me'; 5-'Exercising thanks to fitness trainers' posts on the Internet and social media is the most practical way of exercising'; 6-'Personal trainers' posts on the Internet and social media have had a positive impact on the importance of exercising'; 7-'People who cannot afford any other type of exercising, exercise using personal fitness trainers' posts on the Internet and social media'; 8-; 'One cannot exercise using personal fitness trainers' posts on the Internet and social media without any prior knowledge'; 9-'I have a hard time finding adequate personal fitness trainers' posts on the Internet and social media for my exercising'; 10-'I do not exercise using personal fitness trainers' posts on the Internet and social media but via their posts I have enriched my knowledge on exercising'; 11-'I prefer choosing personal fitness trainers on the Internet and social media according to their looks'; 12-'The number of followers is a good quality sign of personal fitness trainers' posts on the Internet and social media'

DISCUSSION

Firstly, based on the obtained results, we can confirm that non-affirmative attitudes towards SMEC dominate (Affirmative 2.69±0.54; Non-affirmative 3.30±0.74). There can be many reasons for this. For example, you do not need to have any license or diploma to post any type of content related to exercise; there is no form of control or review of the content published on the Internet; it seems that people can post whatever they want as long as the content is not pornographic or discriminatory. On the one hand, it is necessary to protect children and young people, but, on the other hand, it encroaches on freedom of speech (Ružić, 2008). Furthermore, if we compare the results regarding gender differences, we notice that male users are significantly more affirmative than female. A higher percentage of males play sports, so we can assume that they have more knowledge on this topic, i.e. it would be logical for males to be more critical of the content.

Secondly, although the gym-goers say that most of their gained knowledge comes from the gym, probably from fitness trainers working at the gym, still, when using social media as their source of information, users prefer using Instagram. It comes as no surprise that Instagram is the platform that is currently the trendiest and, as such, the most used by athletes as a platform to post their content. Research has shown that females in elite sports are more likely to post pictures on Instagram, but that males get more attention and comments (Geurin-Eagleman & Burch, 2016). Instagram is a network used by athletes for self-promotion (Smith & Sanderson, 2015; Li, Scott, Naraine & Ruihley, 2021), while social networks are used a lot in sports and by the sports industry and fans, in general (Shahzad, Bajwa, Hussain & Naz, 2021; Anagnostopoulos, Parganas, Chadwick & Fenton, 2018; Calvio, 2013).

In addition, studies show that everyday exposure to social media awakens an individual's creativity and innovation making its user's profile a reflection of their identity (Kušić, 2010). In other words, if we have acknowledged the impact of social media on and in our daily lives, as well as the fact that we use and buy many of the products advertised online, then the issues regarding a fitness trainer's appearance as a determining factor and the number of their followers as an indicator of their trustworthiness, comes as no surprise.

The results indicate that for males, a fitness trainers' appearance is not the prime reason for following them. The same goes for females who, based on their answers that varied from 'Agree' to 'Disagree', also state that the appearance does not have the expected impact on the determining choice of fitness trainer. This may be, as Soekmawati et al. (2022) explain in their research, in

direct relationship between gym-users' age and gender. In other words, they confirmed that the gym-users who said they were influenced by appearance and weight management motives were more likely to identify with physically attractive fitness trainers. Based on the age of our sample (young adults), we believe that extrinsic motives, such as physical appearance, do not seem to motivate them (at least as our small sample is concerned). This is rather a surprise since we know that today a lot of young people spend a lot of time trying to look physically attractive and more like some famous social media persona (Jiotsa, Naccache, Duval, Rocher & Grall-Bronnec, 2021; Fardouly, Pinkus & Vartanian 2017; Choukas-Bradley, Nesi, Widman & Higgins, 2019). The second statement, based on the prevailing answers, 'Nor agree nor disagree', informs us that the number of fitness trainer followers and the quality of their posts do not stand as an indicator of their quality and trustworthiness. The reason might be that gym-goers are aware of the complexity of fitness coaching as a profession, i.e. they might believe that, in addition to theoretical and practical knowledge, fitness trainers should master several other professional, scientific and teaching skills (Marković, Marković & Metikoš, 2006). Or, since it has not yet been regulated anywhere, we cannot avoid the question regarding the type of competencies needed for an individual who posts or owns such SMEC.

Limitations of the study

The fundamental limitation of this study is the rather small and unbalanced sample. The inclusion of a larger sample, perhaps consisting of professional athletes, would complement the available data and provide a more complete picture of the attitudes towards the issues addressed. As the data analysis was conducted in a local gym, further research is needed to generalise the current findings on a more national and international level. Finally, it would be interesting if the future studies would do a qualitative research based on which we would get direct answers regarding the issue.

CONCLUSION

Social media platforms in general have become the most popular means for users to create, share, and receive all kinds of information/content on a daily basis. In this context, many social media users share content about physical

activity, nutrition, fitness activities and sports, consciously or unconsciously influencing the attitudes of a large number of their users.

Based on the results of this case study, we can confirm hypothesis H1, which states that respondents are statistically significantly more likely to be non-affirmative towards SMEC. We can also confirm hypothesis H2, according to which there are statistically significant differences between males and females in affirmative attitudes towards exercising via the Internet and social media. Finally, we can reject hypothesis H3, as there were no confirmed statistically significant differences between males and females in non-affirmative attitudes towards exercise via the Internet and social networks. In conclusion, we can summarise that females tend to choose a fitness trainer based on their appearance more often than males and that the number of followers does not play a role in the decision to follow a fitness trainer's social media profile.

We, therefore, conclude that this study contributes to a better understanding of how gender differentiated users can be motivated to engage in physical activity by fitness trainers on social media, i.e. it provides insights into how the use of social media related to sports and fitness can influence users' attitudes towards choosing specific SMEC. Also, we believe that repeating the same study, after the COVID-19 pandemic, would show significantly stronger results in favour of using SMEC precisely due to the type of exercise and physical contact that was (not) allowed during the pandemic.

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