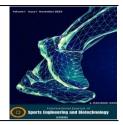


International Journal of Sports Engineering and Biotechnology

> https://ndpapublishing.com/index.php/ijseb/ e-ISSN: 3023-6010



Investigation the Views of Sports Sciences Faculty Students in Athlete Social Media Usage Behaviors

Zehra DEMIR^{*10}, Sema DAĞDELEN¹⁰ and Pervin TOPTAŞ DEMIRCİ¹⁰

¹Mersin University, Faculty of Sports Science, Türkiye

Keywords Athlete Social Media Behaviors

ABSTRACT

The aim of this study was to examine the opinions of sport sciences faculty students on the use of wearable technological products. The aim of this study is to examine the opinions of sport sciences faculty students on the use of wearable technological products. In this direction, a total of 100 students studying at the faculty of sport sciences voluntarily participated in the study. In addition to the personal information form created by the researchers, the attitude scale towards wearable technological sports products (ASTWTSP) was used as a data collection tool. Kruskal Wallis H and Mann Whitney U tests were used for nonparametric data. In the statistical analysis of the data obtained after the study and in determining the differences between the groups, p<0.05 value will be considered significant. According to the findings; the total scores of the attitude scale towards wearable technological sports products of the participants did not show a significant difference according to their gender (U=1192.00; p=0.781; p>0.05), did not show a significant difference according to age variable (X2=0,237; p=0,888; p>0.05) and did not show a statistically significant difference according to income variable (X2=4,516; p=0.105; p>0.05). As a result, based on the results obtained from our study and the literature, and considering the various advantages of wearable technological products, it can be stated that wearable technologies are a complement to the complex structure of exercise or sports on individuals.



1. INTRODUCTION

It is an undeniable fact that information and communication technologies are at the forefront in today's age. Along with rapidly changing have technology, communication tools also undergone a technological transformation in this historical process. In the developing internet technology and the new media order that has emerged with it, communication practices have and some new communication changed environments have emerged. Social media is a unique communication network that transcends geographical and social boundaries through instant sharing [1, 2]. In today's technologically driven world, social media platforms continue to evolve rapidly and continuously in terms of their scope of use and accordingly their popularity is increasing day by day.

Digital social media has changed the way we interact with others, gather information, and connect around the world [3]. With 4.9 billion people using social media apps in 2023, seventy to ninety percent of Americans access social media daily [4, 5].

Social media, which is a medium where people can create a social environment for themselves and communicate continuously, is the easiest and most effective sharing network of today [6]. Developments in communication and information technologies have allowed social media, which offers great advantages over traditional media, to enter people's lives.

Social media tools are widely used by many athletes in both traditional and action sports [Z]. Many athletes frequently use YouTube and Instagram to share photos and videos of their

How to cite this article

^{*}Corresponding author

^{*}e-mail: 3327demirzehra@gmail.com ORCID ID: 0009-0001-1360-0385

sporting endeavors and lifestyles [8]. In addition, many professional athletes have X (Twitter) accounts [7, 9]. On the other hand, amateur athletes increase their recognition on a large scale through social media platforms (e.g. Facebook) by creating sports videos away from competition [7]. In addition, sports clubs are also widely known to use social media as an interaction platform [10, 11]. Such widespread use of social media in the sports community is thought to play an active role in the use of social media by many athletes.

Studies show that, American adults spend an average of 127 minutes per day on social media [1]. Athletes consume more social media than the average person; more than 80% of athletes report using social media for two or more hours per day, and the average usage time is 4 hours per day [4. 12]. Athletes are subject to social media scrutiny regarding their physical appearance and competitive performance [13]. There is a paucity of published research dedicated to exploring the effects of social media on mental health, especially for athletes. The aim of this study is to examine the views of sport sciences faculty students on athlete social media usage behaviors.

2. MATERIALS AND METHODS

2.1. Participants

In terms of gender, 49% of the participants were women and 51% were men, totaling 100 participants (Table 1).

Ethical standards were adhered to in this study and the participant provided informed consent in the form of a consent form covering research details, risks, benefits, confidentiality and participant rights. The study strictly adhered to the ethical principles of the Declaration of Helsinki, prioritizing the rights and welfare of the participant in the design, procedures and confidentiality measures.

2.2. Research Model

In line with the objectives of this study, descriptive analysis model used. The descriptive model is an approach that aims to describe an existing event as it is. The person or object that is the subject of the research should be defined in its current conditions and should not be changed or transformed in any way. Whatever is desired to be researched or known is to be obtained. should be studied [14]. The scale technique was utilized for the information obtained in the study.

2.3. Data Collection Tools

Personal Information Form: A questionnaire form was created to obtain information about the age, gender and income levels of the audience. Time Spent on Social Media Platforms (hours)

2.3.1. Athlete Social Media Usage Behavior Scale

In order to determine the athletes' athlete social media usage behaviors, a scale [15] consisting of 15 items and 3 sub-dimensions (content creation, frequency of use and social media addiction) was used. The scale is a 5-point Likert scale ranging from 1 - Strongly Disagree to 5 Strongly Agree. Analyses showed that the Cronbach Alpha internal consistency coefficient of the scale has a value above 0.70 in all sub-dimensions. In this context, it can be said that the scale developed in this study is reliable and can be used as a valid measurement tool.

2.4. Statistical Analysis

The data obtained within the scope of the study will be described using frequency and percentage values for classically measured variables. The difference between athlete social media usage behaviors and total score according to gender was analyzed with independent groups t test. Kruskal Wallis H and Mann Whitney U tests were used for non-parametric data. The subdimensions and total score of the artificial intelligence readiness scale for pre-service teachers were analyzed with Spearman correlation test. p<0.05 value will be considered significant in the statistical analysis of the data obtained after the study and in determining the differences between the groups.

3. RESULTS

Table 1 shows the distribution of gender, age, income level and daily social media usage time of the participants. In terms of gender, 49% of the participants were women and 51% were men. Individuals between the ages of 18-21 constitute the largest group of participants with 65%, while only 5% of the participants aged 26 and above. In terms of average income, 56% of the participants are in the income group of 10 thousand TL and above. In terms of daily social media usage time, 73% of the participants use social media between 3-6 hours, 19% use social media for 2 hours or less, and 8% use social media for 7-10 hours.

	Variables	Frequency	Percentage	
Gender	Female	49	49	
	Male	51	51	
	18-21	65	65	
Age (years)	22-25	30	30	
	26 and above	5	5	
	<15000	27	27	
Monthly income	15000 to 30000	17	17	
	>30000	56	56	
Time Creat on Cociel	<2 hours	19	19	
Time Spent on Social Media Platforms (hours)	3 hours to 6 hours	73	73	
Meula Flation IIIS (IIOULS)	7 hours to 10 hours	8	8	
	Total	100	100	

Table 1. Characteristics of the participants

There is no statistically significant difference between the total scores of the participants' athlete social media use behaviors scale according to gender variable (t=1,272; p=0,206; p>0,05) (Table 2).

Table 2. Independent groups t test results of total score of athlete social media use behaviors scale accordingto gender

,	Variables	n	Mean (x)	SD (±)	t	df	р
Gender	Female	49	54,59	8,78	1,272	98	0,206
Gender	Male	51	51,90	12,03	1,2,2	,0	0,200

There was no significant difference between the age groups in terms of the total scores of the athlete social media use behaviors scale (X^2 =1,412; p=0,494). The mean rankings of the groups were close to each other, with the 22-25 age group having the highest mean rank (Mean Rank=55,73) (Table 3).

Table 3. Kruskall Wallis H test results of athlete social media usage behaviors scale total score according to age variable

	Variables	n	Mean Rank	X ²	Df	р	Difference
_	18-21	65	48,38				
Age - (years)	22-25	30	55,73	1,412	2	0,494	-
	26 and above	5	46,70	_			

There was no statistically significant difference between the average income groups in terms of the total scores of the athlete social media

use behaviors scale (X^2 =5.238; p=0.073; p>0.05) (Table 4).

Table 4. Kruskall Wallis H test results of athlete social media usage behaviors scale total score according to average income variable

	Variables	n	Mean Rank	X ²	df	р	Difference
NG .11	<15000	27	40,61				
Monthly income	15000 to 30000	17	48,21	5,238	2	0,073	-
	>30000	56	55,96				

It was found that there was a statistically significant difference between the mean total scores of the participants' athlete social media use behaviors scale according to the time spent on social media platforms per day ($X^2=21,518$; p=0,001; p<0,05). When the mean rankings are examined, it is seen that those who use social media between 7-10 hours (Mean Rank=65,44) have the

highest mean ranking. As a result of the Bonferroni (post hoc) test for pairwise comparisons, a significant difference was found between the "2 hours or less" group and the "3-6 hours" group and between the "2 hours or less" group and the "7-10 hours" group against the "2 hours or less" group (Table 5).

Table 5. Kruskall Wallis H test results of the total score of the athlete social media usage behaviors scale according to the variable of time spent on social media platforms

Variables		n	Mean Rank	X ²	df	р	Difference
Time Spent on Social	<2 hours	19	23,24				4.0
Media Platforms (hours)	3 hours to 6 hours	73	55,96	21,518	2	0,001*	1-2 1-3
(10013)	7 hours to 10 hours	8	65,44				

*p<0,05

There is a positive correlation between the total score of the ASMUB Scale and the subdimensions (p<0,001). It was found that there was a high level of correlation between the frequency of social media use (r=0.831), social media addiction (r=0.725) and content creation (r=0.736) subdimensions and the total score.

Table 6. Spearman correlation analysis results of athlete social media usage behaviors scale sub-dimensions and total score

Sub-Dimensions		Content Generation	Frequency of Use	Social Media Addiction	ASMUE Scale
Content Generation	r	1			
	р	I			
Frequency Of Use	r	,405**	1		
	р	,001	1		
Cosial Madia Addiation	r	,180**	,613**	1	
Social Media Addiction	р	,001	,001	1	
ASMUB Scale	r	,736**	,831**	,725**	1
	р	,001	,001	,001	1

4. DISCUSSION

Although social media use may seem like a positive situation in terms of the interaction opportunities it provides, it may also pave the way for some negativities to emerge. Media use affects physical participation in sport. This means that watching television or playing games can replace high-intensity physical training among young people. Theoretically, because a person's time is limited, doing one thing is a different cult if a person chooses to do something else, apart from work, study or rest. When an individual is invested in media, it becomes difficult to participate in sports activities [16].

According to our study; It was found that there was a statistically significant difference

between the mean total scores of the participants' athlete social media use behaviors scale according to the time spent on social media platforms per day (p<0.05). When the mean rankings are examined, it is seen that those who use social media between 7-10 hours have the highest mean ranking. As a result of the Bonferroni (post hoc) test for pairwise comparisons, a significant difference was found between the "2 hours or less" group and the "3-6 hours" group and between the "2 hours or less" group against the "2 hours or less" group against the "2 hours or less" group.

Relevant studies in Germany have shown that intensive use of digital media is incompatible with sports participation. Moreover, the more time is spent in the media, the less time is allocated to sports. However, time actually increases when social media is used in sports [17]. Young people are 78.6% more likely to participate and have good attitudes towards sports after watching online videos or articles. Sport celebrities online also positively influence youth participation in sport. Overall, there is an ambiguous relationship between media and physical activity in sport, with the effect of participation or independence canceling out the alternative utility in quantitative studies. However, the use of social media can increase participation in sport [18]. Moreover, information and trend-based sports are more beneficial than organized sports on social networks and integrated into "medicine and physical activity".

Although social media use seems to be a positive situation in terms of the interaction opportunities it provides, it may also pave the way for the emergence of some negativity. According to some studies; spending long periods of time on social media can cause some disruptions in daily life. In another study; pointed out that face-to-face communication may decrease with the spread of social media communication. On the other hand, some researchers emphasize that social media use can be addictive [19, 20].

According to our study; There is a positive correlation between the total score of the ASMUB Scale and the sub-dimensions (p<0.001). It was found that there was a high level of correlation between the frequency of social media use (r=0.831), social media addiction (r=0.725) and content creation (r=0.736) subdimensions and the total score. In addition, as mentioned in an earlier study, some moderating variables also played an important role in the final results. First, in terms of media form, both new media and traditional media show a positive relationship, but the specific magnitude varies. Although the results of this study show that traditional forms of media have more influence than new media, when combined with previous research, they show that new forms of media (in many forms, including the Internet) are more important than traditional forms of media such as TV [21]. This is mainly because the most widely used form of media, the Internet, overcomes the barriers of time and space and significantly increases the speed and frequency of information dissemination, thereby deepening people's perceptions and transforming those perceptions into behavior. Secondly, the measurement of media yields contradictory results, with some studies showing that as the time spent on media per day increases, the time spent exercising per week decreases, suggesting that excessive media use can lead to low activity levels and reduced motor skills [22]. Such results only apply to sport and non-sport physical participation.

5. CONCLUSION

The use of social media among athletes is becoming widespread, especially to express themselves and interact with fans. The social media applications mostly preferred by athletes are Twitter, Instagram, Facebook, Youtube and Snapchat. While it is emphasized that the use of social media by athletes is extremely important, it is also obvious that this use should be done with extreme caution. It should be carried out within the framework of attention and meticulousness without ignoring that any content produced by the athlete will reach thousands of people within seconds when it is shared.

Many athletes often use YouTube and Instagram to share photos and videos of their sporting endeavors and lifestyles. It is also widely known that sports clubs use social media as a platform for interaction. Such widespread use of social media in the sports community is thought to play an active role in the use of social media by many athletes. Athletes consume more social media than the average person; athletes report using social media for two or more hours per day, with the average usage time being 4 hours per day. Athletes are subjected to social media scrutiny in terms of their physical appearance and competitive performance.

Conflict of Interest

No conflict of interest is declared by tehe authors. In addition, no financial support was received.

Ethics Committee

Ethical standards were adhered to in this study and the participant provided informed consent in the form of a consent form covering research details, risks, benefits, confidentiality and participant rights.

Author Contributions

Study Design, P.T.D.; Z. D. ; Data Collection, Z. D. S. D.; Statistical Analysis, P.T.D.; Data Interpretation S. D.; Manuscript Preparation, P.T.D.; Z. D.; Literature Search, Z. D. S. D. All authors have read and agreed to the published version of the manuscript.

REFERENCES

- 1. Filo, K., Lock, D., & Karg, A. (**2015**). Sport and social media research: A review. *Sport Management Review*, 18(2), 166-181. [Crossref]
- 2. Perloff, R. M. P., Richard M. (**2007**). The Dynamics of persuasion: Communication and attitudes in the 21st century. (2nd Ed.). *Routledge*. [Crossref]
- Tammy, Ng., Sanders, H., Merrill, S., Faustin, M. (2023). Media Effects on Athletes' Mental Health. *Clinics in Sports Medicine*,6956(1):1–284. [Crossref]
- Watkins, R.A., Sugimoto, D., Hunt, D., Oldham, J., Cacolice, P.A. Stracciolini, A. (2022). Association of social media use on sleep quality and performance among collegiate athletes. Clin J Sport Med, 32(5):486–92. [PubMed]
- Keles, B., McCrae, N., Grealish, A. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. Int J Adolesc Youth, 25(1): 79–93. [Crossref]
- 6. Tezcan, E.T. (**2017**). Social Media Use as a Public Relations Practice Area: Change.Org Olive is Life Signature Campaign Review. *New Media Electronic Journal*. 1(1), 47-59.
- 7. Thorpe, H. (**2017**). Action sports, social media, and new technologies: Towards a research agenda. *Communication & Sport*, 5(5), 554-578. [Crossref]
- 8. Ojala, A.-L. (**2014**). Institutionalisation in professional freestyle snowboarding Finnish professional riders' perceptions. *European Journal for Sport and Society*, **11**(2), **103-126**. [**Crossref**]
- 9. Pieper, L. P. (**2013**). It's a whole new ball-game: how social media is changing sports. *Journal of Sport Management*, 27(3), 261-262. [Crossref]
- McCarthy, J., Rowley, J., Ashworth, C. J., & Pioch, E. (2014). Managing brand presence through social media: The case of UK football clubs. *Internet Research*, 24(2), 181-204. [Crossref]
- 11. Vale, L., & Fernandes, T. (**2018**). Social media and sports: Driving fan engagement with football clubs on Facebook. *Journal of Strategic Marketing*, 26(1), 37-55. [Crossref]
- Barry, C.T., Moran-Miller, K., Levy, H., Gray, T. (2022). Social media engagement, perceptions of social media cost and benefits, and wellbeing in college student-athletes. Jour Amer Col Health,1–10. [Crossref]
- Rees, L., Robinson, P., Shields, N. (2019). Media portrayal of elite athletes with disability– a systematic review. *Disabil Rehabil*, 41(4):374–81. [PubMed]
- 14. Karasar, N., (**2016**). Report Preparation in Research. Ankara: Nobel publishing.

- Akarsu, M., İlbak, İ. & Gündoğdu, C. (2024). Athlete Social Media Use Behaviors Scale: Validity and Reliability Study. New Media (16), 317-328, [Crossref]
- 16. Marshall, S.J., Biddle, S.J., Gorely, T. et al. (**2004**). Relationships between media use, body fatness and physical activity in children and youth: a metaanalysis. *Int J Obes Relat Metab Disord*; 28: 1238– 1246. [**PubMed**]
- Spengler, S., Mess, F., & Woll, A. (2015). Do media use and physical activity compete in adolescents? Results of the MoMo study. *PLoS One*, 10: e0142544. [PubMed]
- Braumüller, B. (2020). Young adults' perceptions of the relevance of interaction on social online networks for sports activities. *Eur J Sport Soc*, 17: 231–249. [Crossref]
- Hou, Y., Xiong, D., Jiang, T., Song, L., & Wang, Q. (2019). Social media addiction: Its impact, mediation, and intervention. Cyberpsychology: *Journal of Psychosocial Research on Cyberspace*, 13(1). [Crossref]
- 20. Nakaya, A. C. (2015). Internet and social media addiction. *Webology*, 12(2), 1-3.
- 21. Jin Q. (**2014**). Exploration on the relationship between sports media, sports viewing and sports reconsumption awareness taking the football audience in Yanbian area as an example. *J Beijing Sport Univ*, 37: 28–35.
- 22. Raustorp, A., Spenner, N., Wilkenson, A. et al. (**2020**) School-based study showed a correlation between physical activity and smartphone and tablet use by students aged eight, 11 and 14. Acta Paediatr; 109: 801–806. [**PubMed**]

This journal is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License (CC BY 4.0)