

DIGITAL SOCIAL MEDIA FACTORS IMPACTING ON ATHLETES' MOTIVATION AND PERFORMANCE

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Abstract: This study aims to analyze the factors that positively or negatively influence athletes' engagement in essential activities such as training and competition. These factors have been extensively examined in previous research. Understanding and effectively utilizing these factors can provide coaches with valuable tools to sustain high levels of athlete motivation. Furthermore, fostering the enjoyment of athletic participation benefits society as a whole by enhancing the spectacle of sports and serving as a source of inspiration for others. Social support plays a pivotal role in shaping motivation levels. In contemporary contexts, fans can interact with athletes beyond the confines of the playing field through social media platforms. It is essential to investigate whether these "communication networks" can serve as effective intervention tools, providing coaches with innovative methods to augment their support and assistance. This study employs qualitative research to examine the perspectives of 32 adult athletes (aged 18 and above; mean age = 22.26 years; range = 18–44 years) on the influence of factors such as digital networks. While these new forms of communication offer opportunities to enhance motivation, they also pose the risk of transmitting negative messages that could undermine it. The findings of this research may serve as a valuable resource for coaches seeking to maintain optimal levels of motivation among their athletes.

Keywords: athlete, motivation, digital media, social media.

Introduction

According to Kavanagh et al. (2023) the relationship of professional athletes with social media is an important and equally neglected aspect of studies targeting the life, career and well-being of athletes. Wide scale recognition of an athlete can be obtained very quickly today through social media. But the effects of associating social media with performance of team sports is not a new topic, what is new is the way in which the "social environment" has been transformed.

Nowadays, social media platforms have replaced many other forms of communication and are increasingly present in our lives, virtual environments also representing a negative potential and impact on health, due to the time allocated to be used (in detriment of other activities) and through the way in which information is manipulated. Therefore, we confront a difficult and complex task to quantify the results of the effects on mental well-being.

Kovács et al. (2024) consider that the general factors representing the basis of working to achieve sport performance, namely "physical activity, sport motivation and commitment", present multiple variations under the influence of factors such as personal (micro-system level:

family, colleagues and coaches) which are over-represented in existing studies.

On the other hand, the macro-level factors (cultural, social and institutional influences) - although positively correlated with involvement in practicing a sport - are not sufficiently studied (Kovács et al. 2024), the digital environment represents a factor at both the "micro-" and "macro-" level.

Schmid et al. (2023) emphasize that professional athletes have certain particular behaviours imposed on themselves to manage their time to participate in training and competitions to the detriment of other personal interests. Personal interests can sometimes be put on the back burner; the virtual environment can be a way to make up for these shortcomings, with all the benefits and risks mentioned in related studies.

This aspect will determine the development of self-esteem and their athletic identity in relation with achievements and social recognition (Alfermann et Stambulova, 2007).

The athletic objectives of a team and the evaluation of the achievements obtained are intrinsically linked to motivation as well as the behaviour adopted by athletes during training and competitions (Levental et. al., 2023).

Achievements and especially their recognition at a social level are thus part of sports culture and life.

There is a known connection between recognition of achievements and participation in sports for long periods of time, these aspects becoming inspiration and motivation to overcome personal limits or maintaining the career level achieved.

Breaking personal records or team success, any recognition can be a way to maintain and increase passion for the sport practiced through the psychological impulse offered to an athlete.

Analysis of 73 studies published previous to the era of the more intensive use of digital devices (1990's to 2013), regarding the providers of significant social support for athletes aged 10-22 years, led Sheridan et al. (2014) to conclude that coaches were the most widespread providers of social, informational, emotional and self-esteem-enhancing support. The support from coach, parents and teammates is a significant factor in shaping young people's sports experiences in two ways, both as motivation (positive) and in terms of abandonment (negative) (Sheridan et al. 2014). In many instances, the time allocated to engage in real social relationships can be less, coaches or teammates, family members or very close friends being the people actively and truly present in the living environment, possess an influence on the motivation and mentality of an athlete. Nowadays, these lively and real human relations and interactions can be replaced by a click away and the internet access of an omnipresent intelligent device such as a Smartphone.

According to the evaluation carried out by Maciel et al. (2021) on the results of scientific publications that analyzed the social support available to an athlete, family members are most frequently identified "as the most prevalent social support providers, offering athletes unique forms of emotional, informative and tangible support from positive and negative." Also, according to the same study, coaches offer information and emotional support, with the athlete's teammates being especially an emotional support. (Maciel et al. 2021).

Yang et al. (2020) found that the use of digital devices in physical education (e.g. smartphones and wearable devices) facilitates physical education and can promote social aspects. Digital media are not only present in many aspects of our lives, but are also part of the culture of the society in which we live, communicate and interact with others (Araújo et al., 2021).

Knoke et al. (2024) conducting an analysis of the promotion of physical education for health in the digital environment, concluded that there is little research in this area, some reported results are promising and others contradictory, the positive ones being reported mainly in the area of fitness to promote well-being and health. But these applications are mainly accessed by young people due to lifestyles that have changed with the increase in digitization.

Kennedy & Funk (2023), through a series of interviews, analyzed the use of digital social networks in the lives of sports fans, in order to characterize social behaviours, namely the habitual and unconscious use, or in a passive consumer manner and not to generate new content for example by commenting on posts.

The idea that needs to be exploited also in future studies is the one of analyzing this issue from both directions, of the digital factors who can influence motivation and the athlete or how athlete can find online motivation (extrinsic or intrinsic) with the help of fans who follow his evolution. The figure 1. express the complexity of this processes that are not easy to be analysed on the sport field especially for large groups of individuals.

The problem and justification

Athletes motivation have a solid base, it is increased by the wins, by the achieved or improved performance (personal or by the team). The extrinsic motivation represents an important factor that can influence the results of a professional athlete, supporting his involvement in training and competition. It can have several forms and meanings at a purely personal level of the athlete and the team he is part of. Usually, coaches have knowledge and apply multiple ways to strengthen it (reward). *But what happens with young athletes and the digital environment of social networks? Can these influence the level of motivation? Where do athletes find psychological and motivational support to participate in activities related to the sport they practice?*

Performance and resilience in sport environment are based on a strong intrinsic motivation, but especially in young athletes. Motivation factor may have a dynamic character, with upside-downs that may become a destabilizing factor at the team level if it not reaches a satisfactory level for all teammates.

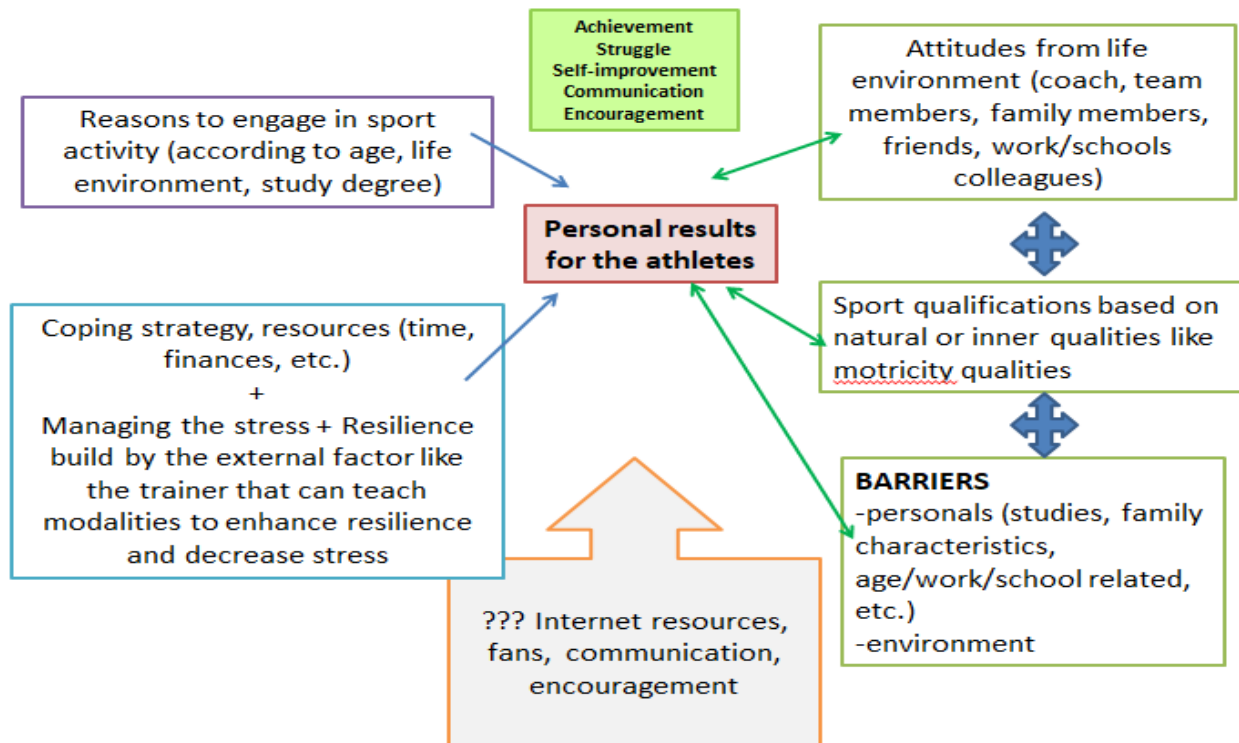


Figure 1. Schematics of factors influencing motivation and autodetermination for athletes (after Krasmik et al. 2024)

Objectives

The purpose of this study is to improve the knowledge and understanding of the experiences of athletes who practice team sports regarding various factors that have an impact on training.

The present research aims to identify the ways in which athletes from the sportsmen's basketball and handball teams of the one sport club from Oltenia region use social media and their influence on the motivation to participate in the activities required by the coach.

Materials and methods

The study included 33 athletes from urban environment, age over 18 (mean age 22.26, max=44, min=18), who voluntarily and anonymously participated in this study. All participants were active athletes of the team, but 2 (6.3%) of them had not participated in any match in the last month (according to figure 2).

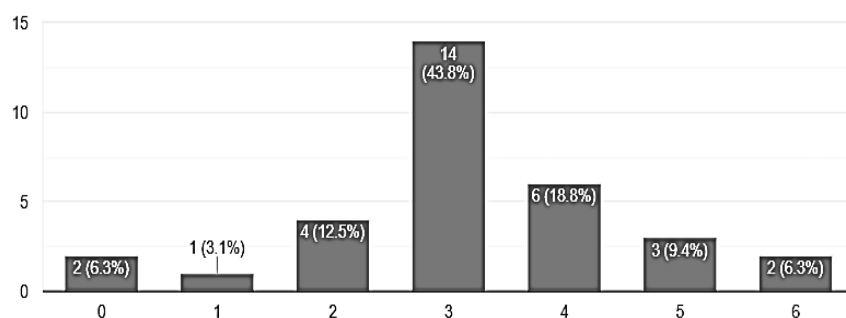


Figure 2. Distribution of game attendance in the last month

In order to find out the relationship between the motivation to participate in sports competitions and training, an attempt was made to identify the relationships of athletes with various factors based on a questionnaire.

The survey included questions regarding demographic data (age, gender, period of involvement in sports activities), the motivation to practice the sport they are involved in and the relationship between various factors that may influence the motivation to participate.

The questionnaire was designed by the authors of the study and was converted into a Google form and then distributed to the players of the men's handball and basketball teams from one sports club who were invited to complete the form during October-November 2024.

The analysis and interpretation of the results obtained was done using the xls program to obtain descriptive statistics results.

Results

The present study used a qualitative research method focused to gain an in-depth understanding of the participants and to identify different psychological pressures experienced during training and matches. When asked about the motivation felt by the athlete at the time of completing the questionnaire to continue their current sports activity (see figure 3), only 1 athlete responded that they felt very low motivation and the largest number of subjects (15, a percentage of 46.9%) responded that for them the motivation to be part of the team is the same as a year ago.

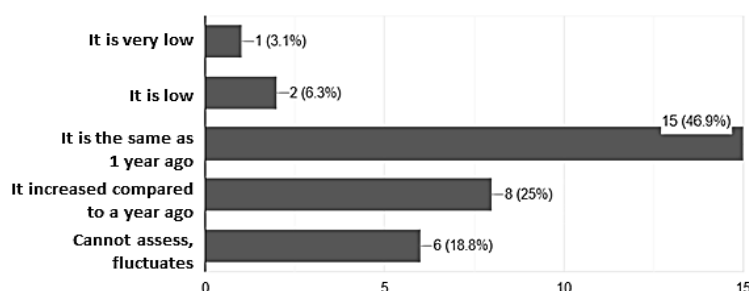


Figure 3. Graphical distribution of responses regarding the motivation to continue current sports activity. At the question regarding the sharing emotions related to the sport practiced with other friends known in the virtual environment, only 12 (37.5%) subjects answered that they like doing this and 8 (25%) consider that they partially like it compared to 3 (9.4%) who disagree with this behaviour (figure 4).

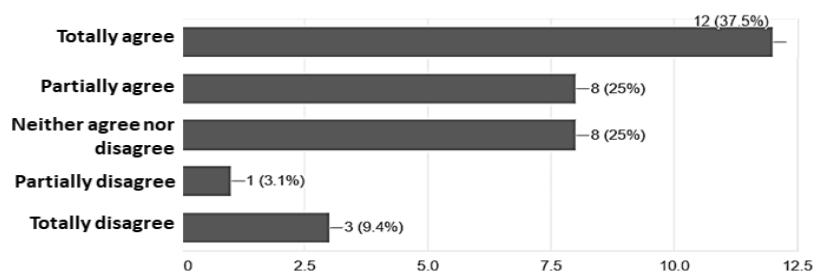


Figure 4. Graphical distribution of responses regarding the sharing emotions related to the sport practiced. Subjects participating in this study reported that they preferred spending time with friends when they experienced emotional problems after competitions (9 subjects – 28.1%).

In the same amount, 8 subjects (25%) prefer to reflect on the achieved performance or to distract them and stop thinking about sports and the competitions results and do other activities (8 subjects- 25%). None of the respondents consider necessary the discussion with an psychologist, only 1 (3.1%) respond that he prefer to talk with the trainer and 6 (18.8%) prefer to spent time with the teammates.

Analysing the answers to some questions of the questionnaire (table 1), an attempt was made to identify the average value at the group level. When it comes to teams, such as handball or basketball, with more than 10 or 15 players, coaches may have a difficult task in identifying the level of motivation for each athlete.

Table 1. Statistical analysis of digital media related to motivation

Factors that can be used by the trainers to enhance the motivation of the team	Average score	Interpretation according to Linkert scale values and suggestions to relate with those values
The motivation to continue the current sports activity	3.97	The level of motivation for the group is not at maximum values (5 being excellent). It can be important for the trainer to do this type of survey periodically in order to determine the team status. Identifying the level of motivation, periodically, can be a turning point in customizing the approach or discussions related to the each athlete situation.
Following sports-related accounts on social media	4.68	The frequent use of internet to follow sports-related accounts can be a way that can be used by the trainer in order to enhance the motivation

Use of YouTube or media channels to train and get inspired in sports activity	4,15	These values indicate a fairly high preference of these subjects to use digital means for inspiration. Coaches can use this feature by using multiple digital means (groups, apps) to increase communication and adhesion between teammates.
Fans on social media contribute to the motivation to play and participate in competitions	2,68	These factors are low represented in the subjects' preferences, for the subjects that answer to this questionnaire is not an intervention key for the trainer.
The subject like to share emotions related to the practiced sport with other friends he know in the virtual environment	2	This score of the intensity of the subject's position regarding the use and communication of athletes' emotions in the online environment does not represent a characteristic behaviour of this group of athletes.
Think proudly about personal sporting activity, performances and abilities	4,16	Despite the fact that the average value of the group did not reach maximum values (that is 5), it demonstrates that most athletes still think about this aspect of their work, therefore, coaches could help athletes achieve this goal with impact on motivation
Does he think he could be a promoter of the sport he practices among people his age through social media.	3,97	This factors is in the agree range, promoting the work and results can be a way to stimulate the personal achievement and motivational level of the team (like hole) and at personal level.
Tracking personal performance on social media motivates and increases the desire to participate	4	This aspect can also be used in the case of athletes analysed for the established objective of increasing motivation. Increasing the visibility of achievements, even at a local level, can be a major aspect for some of the subjects.
He doesn't worry about negative comments on social media if he doesn't play very well.	4	Although the average values for these 2 factors (negative comments and fans encouragements) do not demonstrate an attitude of total indifference or of very high importance. These answers rather demonstrate the existence of sensitive points that can influence self-esteem in the case of the analysed subjects. Coaches and athletes can analyse these situations and constructive discussions can decrease feelings of frustration or dissatisfaction, the athlete must be armed with tools to counteract these situations.
If he had more fans (on the field and online) to encourage him, he would feel more motivated to participate in the competition.	3,53	
Because of social media, before the match I worry that there will be negative comments if I don't play very well.	3,78	This factors is in the agree range for the analysed subject group, this being a good point for trainer intervention to enhance the motivation and discuss about the possibility to have a bad or good score at the end of the game.

Discussions

The results presented in Table 1 provide a simple analysis of the responses given by some professional athletes, in a concise and easy way. Coaches do not have complex statistical tools at their disposal. Recently, Krasmik et al (2024) highlighted the urgent need for interventions that increase the level of motivation for specialists dealing with teams of athletes: coach working together with psychologist to achieve the desired results. Their study identified the level of motivation and classified the level of resistance, but highlighted the need for strategies and other variables to be used in the intervention to support athletes who may demonstrate low motivational values although they have reached an important potential in their sport performance.

Conducted before the digital boom, the study of Clancy et al. (2017) analysing six questionnaires,

highlighted that psychometric assessment tools that conceptualize athlete's motivation may not capture some variables that are difficult to be tracked and quantified. From our point of view, the usage of digital devices, as tools to increase knowledge, as alternative methods of communication, as motivational factors, are not being evaluated by scales in the sports field. We know that the digital-virtual environment poses dangers for the mental health of each user, can increase anxious behaviours and even the way of relating to the external environment, a disturbing factor for an athlete who must be focused and resilient during training and competitions, both to achieve good results and to avoid injuries and states of discomfort.

A periodic survey could, however, identify particular situations and make the coach's work easier, which also involves maintaining

motivation at a fairly high level for satisfactory results, as a basic condition for sports performance under the influence of external factors (which the coach does in our case) that can modulate internal ones.

Motivational landmarks from the external environment (extrinsic) such as "digital fans" which can have an important role (possibly will have an increasing role) can be transformed into intrinsic factors if the athlete wants to become more active in this environment. The responses to such a phenomenon can have a double role (negative and positive), therefore, in the future, the coach should introduce this aspect into the motivational training.

It is difficult to quantify the knowledge of the existence and the level of psychological pressure experienced by an athlete on the field and in real life. But it is necessary for the athlete, coach and teammates to know how these pressures affect performance during training and games, as well as how these pressures should be countered in the future.

The virtual environment represented by social networks is part of each of our lives, although sometimes used as a means of communication and entertainment, its effects can also be found on a professional level through the influence they could have on motivation.

Athletes can find elements of inspiration for their training work and for motivating themselves to achieve competitive performances. Specialists emphasize that in social media places where elements of inspiration are found, there can also exist unrealistic standards in case the success in the media becomes a way of self-reporting and quantifying one's own success.

According to the definition of Swar and Hameed (2017), social networks are those "*websites and tools that facilitate interactions between users through the internet*". Recent studies draw attention to how interactions between users in the online environment and between users and the real, social environment have changed and will change through human behaviours that are shaped especially by the extensive use of these tools.

The recent study of Hatamleh et al. (2024) highlights that "the potential of social networks will stimulate increased feelings of duty and responsiveness to the needs of society" which will generate a motivation to "be fashionable", these aspects require further quantification in sport area and possibly new strategies will be identified to use these tools in a positive way for the well-being of athletes.

Social media is not a safe environment for solving individual emotional problems if it is not used carefully and only as a tool.

Conclusions

It is difficult to make specific predictions about the impact of social media-related stress on athletic performance. Future studies should investigate the presence of the digital media factor and the theme of motivation in athletic performance to investigate how the athlete is affected by it and to help practitioners managing the emotional factor. The high-performance environment is inherently stressful, and therefore it is important for athletes to have a professional, reliable and caring service to support them throughout their time in a world-class performance program.

Given the significant impact of social media in today's society, it is crucial to assess the potential adverse effects and to develop strategies to protect athletes from these potential threats.

The present study was aimed help coaches and athletes to identify and develop an awareness of the many types of psychological pressure induced by the use of digital tools that may exist among their teammates and that can influence the degree of motivation and athletic career. These factors and psychological pressures must be addressed in a personalized and individualized manner by coaches, who must not forget the impact of negative social media content that can lead to higher levels of stress reactivity in players who are more afraid of this type of evaluation, resulting in lower performance or motivation scores compared to participants who are less afraid. Motivation, in all aspects of life and also on the field, is influenced through the media, by the public.

Nowadays and especially among young people, the digital tools have become the main tools that support communication and the development of social networks. Digital platforms fulfil the dual function of social communication and entertainment, providing news and scientific or empirical information at a wide level.

In the same time, it is a known fact that many opinions present on social media contain some negative connotations such as hate speech or negative aspects can be demotivating and may diminish self-esteem, therefore even a successfully and very good athlete can be criticized, harassed or negatively evaluated, factors which increases the level of anxiety and stress that may impact his athletic career.

We may conclude that motivation is the driving force behind an athlete's dedication to training and

performance, helping him to overcome easily all the negative factors present in social media that he may confront during his career.

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