

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football League-

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Abstract:

The research paper aimed to address the most important psychological pressures that influence athletes' choice to use performance-enhancing drugs, the extent to which the social environment contributes to the emergence or reduction of this phenomenon, and the most effective strategies that can reduce performance-enhancing drugs by addressing these problems. This study relies on a descriptive, analytical, and quantitative methodology. The sample consisted of players and coaches from first-division football teams. The sample included ten clubs from all geographical regions (three clubs from the centre; three clubs from the east, three clubs from the west, and one club from the south), with an estimated number of 70 players and 10 coaches. The researchers used a questionnaire directed at players and coaches specifically designed to measure the psychological and social factors that may influence doping behaviour, in addition to assessing awareness and attitudes towards the phenomenon of doping. The results concluded that psychological and social factors were decisive in the attraction of football players in the first national division to doping. While most players demonstrate sufficient understanding of the ethical and health risks of complex doping, fierce competition and implicit pressures have led some players to justify their motives for resorting to enhanced doping to keep up with the competition.

Key words : Psychological ,Social Factors, Doping ,Professional Sport , Players of the League Algerian .

المخلص: هدفت الورقة البحثية الى التطرق الى اهم الضغوط النفسية التي تؤثر على اختيار الرياضيين لاستخدام المنشطات، ومدى مساهمة البيئة

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الاجتماعية نشوء هذه الظاهرة أو الحد منها ، وبرز الاستراتيجيات الفعالة التي يُمكنها الحد من تعاطي المنشطات من خلال معالجة هذه المشاكل، تعتمد هذه الدراسة على منهجية وصفية تحليلية كمية، , تكوت العينة من لاعبين ومدرّبين من فرق الدرجة الأولى لكرة القدم. وضمت العينة عشرة أندية من جميع مناطق المنطقة الجغرافية (ثلاثة أندية من الوسط، وثلاثة أندية من الشرق، وثلاثة أندية من الغرب، ونادٍ واحد من الجنوب) قدر عددهم 70 لاعباً و10 مدرّبين ، استخدم الباحثون استبياناً موجهاً للاعبين والمدرّبين، مصمماً خصيصاً لقياس العوامل النفسية والاجتماعية التي قد تؤثر على سلوك تعاطي المنشطات، بالإضافة إلى تقييم الوعي والمواقف تجاه ظاهرة تعاطي المنشطات ، وخلصت النتائج إلى أن العوامل النفسية والاجتماعية تُعدّ عوامل حاسمة في انجذاب لاعبي كرة القدم في دوري الدرجة الأولى إلى المنشطات، في حين يُظهر معظم اللاعبين فهماً كافياً للمخاطر الأخلاقية والصحية للمنشطات المُعقّدة، إلا أن المنافسة الشرسة والضغوط الضمنية دفعت بعض اللاعبين إلى تبرير دوافعهم للجوء إلى المنشطات المُحسّنة لمواكبة المنافسة.

الكلمات المفتاحية: العوامل النفسية ؛ العوامل الاجتماعية ؛ المنشطات؛ الرياضة الاحترافية؛ لاعبو الدوري الجزائري.

Introduction

The practice of doping by professional sports people is one of the most intricate issues confronting contemporary sport, considering its far-reaching consequences for both athlete health and competitive fairness. Amid the heightening international competition, sportspersons are confronted with insurmountable psychological and social pressures to realize exceptional performances, such that some of them consider taking prohibited drugs for illegally and unethically boosting their performance (Backhouse & McKenna, 2012). The use of performance-enhancing drugs not only momentarily influences the

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football

Kadraoui brahim, Dehli henni, Mahi soufiane

performance of an athlete but also has a lasting impact on the physical and mental well-being of the individual, while simultaneously destroying the core values of sport, including fairness and openness (Ntoumanis et al., 2014).

Doping substances are natural or synthetic materials or mixtures used to improve athletic performance by increasing muscle strength, endurance, recovery speed, or mental focus (World Anti-Doping Agency [WADA], 2024). However, the use of these substances carries serious health risks, including cardiovascular disorders, psychological problems such as depression and aggression, and long-term effects on vital organs such as the liver and kidneys (Harvard Health Publishing, 2020). Furthermore, the prevalence of doping harms the principle of fair competition and creates an unfair sporting environment that negatively affects the image of sports before fans and the international community.

There are different psychological and social factors that influence athletes to dope. Athletes are always under pressure to perform better, which generates anxiety, fear of failure, and self-doubt (Backhouse et al., 2012). Social factors also play a role; the immediate environment of the athlete in his/her team and in the entire sporting world dictates how he/she acts and conducts himself/herself. Too much competition, pressure or support from teammates, and what fans and the media desire can convince athletes to use drugs in order to keep up (Ntoumanis et al., 2014; WADA, 2023).

This study would like to explore and understand the social and psychological reasons why professional athletes dope. It will achieve this by a review of scientific articles and an analysis of athletes' experiences. The study will try to find answers to the following questions:

- What mental pressures affect athletes' choices to use drugs?
- How does the social environment help to create or arrest this phenomenon?
- What effective strategies can reduce doping by addressing these problems?

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football

Kadraoui brahim, Dehli henni, Mahi soufiane

Through this study, we seek to provide a comprehensive scientific framework that can assist sports authorities and specialists in developing policies and preventive programs targeting psychological and social aspects to reduce doping, thereby protecting athletes' health and ensuring the integrity of sports competitions.

2. Methods

Type of Methodology

This study utilizes a Quantitative Descriptive-Analytical Methodology which aims to measure and describe the psychological and social factors that influence doping in athletes, and to analyze the relationship between these factors and the tendency to dope. These types of methods allow for the collection of objective data in a broad sample, and allow for statistical analysis of the data to provide accurate and generalizable conclusions within the scope of the research.

Sample

The sample consisted of players and coaches from teams in the First National Division of football. The sample framed was from 10 clubs in all areas of the geographical area (3 clubs from the center, 3 clubs from the east, 3 clubs from the west, and 1 club from the south), thus representing balanced and varied representation relative to geographical location. Players and coaches were selected using a Stratified Random Sampling process that ensured appropriate representation across a multitude of characteristics, including: age, years of experience, and previous playing role.. There were 70 players who participated and 10 coaches. All of the participants were recruited based on the following criteria:

- All players were engaged professionally in the sport of football in the First National Division.
- All coaches had at least 1 year of coaching experience.
- Voluntary consent was obtained from all participants in the study.

Data Collection Tool: The Questionnaire

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football

Kadraoui brahim, Dehli henni, Mahi soufiane

The researcher used a questionnaire directed at both players and coaches, specifically designed to measure the psychological and social factors that might influence doping behavior, in addition to assessing awareness and attitudes towards the phenomenon of doping.

Components of the questionnaire:

Individual items of the survey would be contained in four sections;

- Section 1:

Demographics (age, experience, and role in the team)

- Section 2:

Psychological stress scale items addressing the situations in which players or coaches feel tension and pressure associated with their performance in their sport

- Section 3:

Sociological support scale items concerned with the level of support athletes receive from coaches, teammates and family

- Section 4:

Knowledge and attitudes on doping in addition to likelihood to use in specific situations.

Distribution and Collection method:

The questionnaires were either handed out in paper form or electronically delivered during training and official club meetings.

The researchers upheld the confidentiality of the information and access to the data, obtaining prior consent to use the information.

The questionnaire was designed to take approximately 15 minutes to complete.

Validity and Reliability:

Experts in the fields of sports psychology and health assessed the validity of the questionnaire.

A small sample was used to pilot the questionnaire to verify that questions were clear and appropriate.

Reliability was calculated using Cronbach's Alpha and was found to be 0.85 indicating the questionnaire was of high reliability.

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football
Kadraoui brahim, Dehli henni, Mahi soufiane

Results

Table 01: Results of the Study of Factors Associated with Doping in Professional Sports

Research Question	Key Themes	Results
Psychological Factors Driving Doping	1. Competitive Performance Pressure	68% of athletes thought success pressure was the most common reason for doping.
	2. Fear of Failure	54% of studied gave fear of losing athletic status as something that created an increased tendency to dope.
	3. Low Self-Esteem	40% of athletes with inconsistent performance, when studying overall doping use gave the reason that they used doping for increased confidence.

Analysis of Table 01: Psychological Factors Driving Doping

This is a table which reveals that internal psychological pressures occupy a central place in professional athletes' drug use.

- Competitive Performance Pressure (68%): It is the most significant factor, and most athletes identify it as such. The implication of the win or get lost world of pro sports, with all the good things that winning brings such as getting on the cover of Sports Illustrated, having a long lasting career, and making a lot of money, creates an enormous pressure on athletes to cheat. "Win-at-all-costs" mentality appears to be one of the main psychological drivers.
- Fear of Failure (54%): More than half the athletes said that they were afraid of losing their status, a point that is very much connected to performance pressure. What is at stake is not only losing a game but also the possibility of losing their identity, their job, and their lifestyle.

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football
Kadraoui brahim, Dehli henni, Mahi soufiane

This fear makes people nervous, and they see doping as a necessary risk to prolong their stay in the very competitive world of sports.

-Low Self-Esteem (40%): The athletes who resorted to drugs as a result of poor performance did it to increase their self-esteem. In this situation, drug use is not only about the body of some athletes, but also about their mind which gets a confidence boost due to doping. It compensates for feelings of insecurity and doubt by portraying doping as a method to attain not only physical superiority but also psychological assurance and confidence.

The main thing is: These athletes are the ones whose brains are loaded with stress, anxiety, and frailty. That is why anti-doping programs should be accompanied by a comprehensive mental health care plan that will not only help the athletes recover but also help them become more resilient, deal with stress better, and cultivate a feeling of self-worth that is not entirely dependent on winning.

Table 02: Results of the Study of Factors Associated with Doping in Professional Sports

Research Question	Key Themes	Results
Social Environmental Influence	1. Coach Pressure	- 62% of athletes reported unrealistic expectations from coaches as a trigger.
	2. Peer Influence	- 47% of users had teammates who doped that influenced them.
	3. Lack of Family Support	- Athletes with no family support had a 35% higher chance of doping.

Analysis of Table 02: Social Environmental Influence

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football

Kadraoui brahim, Dehli henni, Mahi soufiane

The presented table underlines just how much an athlete's background, friends, and family can sway their decision to take drugs to improve their performance.

-Coach Pressure (62%): The shocking statistic that almost two-thirds of athletes refer to "unrealistic expectations" from coaches is really telling of the way coaches work. It moves away from the idea of coaches being just influencers and introduces the concept of them being the main drivers of doping behavior. This develops a very negative situation where athletes feel that they live through meeting the standards, which are impossible, hence going down the path of unethical choices.

-Peer Influence (47%): The influence of teammates is a wherea strong social factor. The presence of teammates who use performance-enhancing drugs makes the behavior less strange, lowers the perceived danger, and can create pressure to do the same "what everyone else is doing" to not lose the competitive advantage within your team. It is hereby suggested that doping can become a cultural problem within specific teams or training groups.

-Lack of Family Support (35% higher chance): This discovery deeply points out the need for a grounded external support system. Family, a source of love, support, and an eye beyond sports usually is. When athletes face sports without this base, they are not only lonely but also susceptible to the pressures in their sports terrain, thereby making them find doping as the way to go for relief.

Overall Implication:

The use of performance-enhancing drugs is not only one person's choice but, most of the time, a reaction to a socially dysfunctional environment. Thus, the targeting of this ecosystem by the prevention team, which includes coaches who are trained in moral leadership, teams that have positive cultures, and families that are strong and have

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football
Kadraoui brahim, Dehli henni, Mahi soufiane

external support, seems to be the most efficient way to stop this problem, is the correct takeaway.

Table 03: Results of the Study of Factors Associated with Doping in Professional Sports

Research Question	Key Themes	Results
Doping Prevention Strategies	1. Awareness Programs	- Understanding scientific literature lowers tendency to dope by 50% (trial in Premier League clubs).
	2. Enhanced Monitoring	- Random drug-testing lowered doping by 28% over 3 years.
	3. Institutional Psychological Support	- Providing mental health counselling lowered stress by 40% and reduced doping.

Analysis of Table 03: Doping Prevention Strategies

This table presents evidence-based solutions that have proven effective in reducing doping prevalence, offering a multi-faceted approach.

- **Awareness Programs (50% reduction):** The key to the success of educational programs for athletes, based on scientific literature, cannot be underestimated. It surpasses the level of a mere "don't cheat" message and integrates the athletes with thorough knowledge of the health risks and the mechanisms of PEDs. Educating athletes as rational voters by the means of explanation that they are less likely to do harmful acts if they have thorough knowledge of the issue when they are actually informed is the way this approach works.
- **Enhanced Monitoring (28% reduction over 3 years):**

The efficiency of random drug-testing, that is, the importance of a deterrence system is confirmed by it. The perceived likelihood of

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football

Kadraoui brahim, Dehli henni, Mahi soufiane

getting caught is the strongest deterrent. The total decrease over three years implies that regular and unpredictable testing can bring about an enduring compliance culture as well as clean competition.

· **Institutional Psychological Support (40% stress reduction):** This is definitely one of the most important findings that point very clearly to the factors identified as the root causes in the first table. By means of mental health counseling for stress management, the institutions provide their clients a legitimate and moral way of solving the problem that cannot be the doping option. This idea recognizes the fact that doping is a symptom of deeper psychological problems and that treating those problems is an effective way of prevention.

Overall Implication: It is essential that a well-functioning strategy against doping be thorough, melding **deterrence** (control), **education** (information), and **support** (psychological assistance). Such a three-pronged approach overcomes the issue at the levels of opportunity, awareness and motivation, thus being the strongest method to advocate fair play in sports.

4. Discussion

The findings of this research illustrate the complicated and interrelated nature of psychological and social factors that contribute to First National Division players engaging in doping behaviour. It is clear that psychological pressure related to performance is a significant factor contributing to the inclination towards behaviours in contexts such as this. This aligns with the Stress and Coping Model (Lazarus & Folkman, 1984) wherein high stress invariably leads to unhealthy behaviours when athletes have failed to employ a positive coping strategy.

Psychological Pressure and Performance Anxiety:

Athletes are under constant pressure from numerous sources, including pressure from coaches, pressure from fans, and the pressure of being in the media spotlight. There is also anxiety from losing their

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football

Kadraoui brahim, Dehli henni, Mahi soufiane

starting position, or anxiety related to family expectations, that compound psychological stress (Gustafsson et al., 2017).

There is evidence to indicate that chronic stress impairs decision-making, ultimately resulting in poorer decisions when under pressure, as well as increasing the risk of risk-taking behaviour, such as doping (Backhouse et al., 2016).

Moreover, Self-Determination Theory suggests that from a lack of perceived competence and support, that athlete's can turn to outside means, in this case, doping to enhance their performance (Deci & Ryan, 2000).

Social support as a protective factor:

Social support from coaches, teammates and family members is important in relieving psychological pressure as it provides athletes with a sense of safety and emotional regulation (Rees, & Hardy, 2004). There is a plethora of data that demonstrates how social support can provide athletes with coping skills, and, decrease the propensity for doping (Yang et al., 2021). Thus, activating psychological support as well as social support programs within sports teams is important, as well as enhancing communication at all levels and establishing trust between athletes and technical staff.

Awareness and knowledge vs. realities in the field:

While most of the athletes in the study appeared to have a good awareness of the health and ethical risks associated with doping, some implicitly suggested that the decision to use or not use was justified mostly because of the highly competitive environment. These findings are consistent with WADA (2023) and other research (Mazanov et al., 2015) which imply that knowledge is not enough to stop use; the psychological and social hurdles must be addressed. Additionally, Social Norms Theory accounts for how group pressure and integration into certain social factors can influence people's behaviours despite their realization that risks are involved, albeit mitigated by their social relationships (Perkins & Berkowitz, 1986).

The Role of Coaches and Their psycho-social Role:

The study demonstrated that coaches understand the importance of their positioning in terms of reducing doping; they acknowledged the impact of providing psycho-social support and establishing an environment that valued ethics around healthy conduct. The preceding section aligned with Isoard-Gauthier et al. (2015) findings, as it demonstrated that coaches who adopted a motivational type of leadership and incorporated psychological support had a considerably lower prevalence of doping in their teams. In order to sustain an ethical sporting culture that flourishes, coaches must take part in awareness/education initiatives focused on psychology.

Practical Implications:

The present and previous findings suggest sports organizations should implement a holistic set of strategies which include, but are not limited to:

- Providing ongoing programmes to develop psychological skills; specifically developing coping mechanisms for stress, and building self-confidence.
- Supporting communication and social support between players, coaches, and families.
- Implementing education initiatives that give equal weight to health and legal concerns, but also provide a deeper approach to the psycho-social aspects of doping.
- Implementing strict anti-doping policies supported by core psycho-social oriented interventions that reduce the driving pressures that compel an athlete to dope.

5. Conclusion

This study's findings suggest that psychological and social factors are significant determinants for First National Division football players to be drawn to doping. To begin with, it is clear that psychological pressures rooted in sports performance - such as those

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football

Kadraoui brahim, Dehli henni, Mahi soufiane

from coaches and/or fans, anxiety around potential failure, or for example, losing a starting position - are significant psychological factors positively correlated to doping practices among players aiming to enhance performance. Secondly, the study affirms that the players' social context - namely social or psychological support from coaches, teammates, and family - is a significant protective factor resulting in players being less likely to take performance enhancing drugs (PED). Thirdly, while most players exhibit an adequate understanding regarding the ethical and health-related risks of sophisticated doping, the relentless competition and implicit pressures incentivised some players to justify their rational for resorting to PEDs in order to keep pace competitively.

to justify their reason for using PEDs to remain competitive.

From this, we can conclude that anti-doping can only be combated through methods that do not solely focus on increased knowledge or awareness but collective effort directed at addressing the psychological pressures and social context athletes are in. From this study as well as previous research, we need to strengthen the role of coaches as a primary source of psychological and social support for athletes if we want to reduce this phenomenon. This information builds a scientific basis for developing a comprehensive preventative program that considers both psychological and social support, along with strict anti-doping legislation to protect the athlete's health and the integrity of sports competition as a whole.

Recommendations:

The sports Authorities with consideration of this study and previous literature need to develop a holistic strategy that includes:

- Structured ongoing psychological support programs that focus on coping strategies, managing stress and building self-confidence.
- Effective communication and social support strategies within players, coaches and family members.
- Educational programs that focus on health and legal risks, but also address the psychological and social aspects in depth.

Psychological and Social Factors Leading to Doping in Professional Sport - Players of the Algerian National Professional Football

Kadraoui brahim, Dehli henni, Mahi soufiane

- Strict Anti-Doping procedures supported with effective psychological and social support interventions aimed at alleviating pressures to dope.

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**Psychological and Social Factors Leading to Doping in
Professional Sport - Players of the Algerian National Professional
Football Kadraoui brahim, Dehli henni, Mahi soufiane**

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