

Analysis of Cognitive Mechanisms Regulating the Use of Dietary Supplements and Performance-Enhancing Substances in Young Iraqi Weightlifters

Salih Mahdi Mukheef Fatlawi¹, Hamid Zahedi^{2*}, Ali Shaboot Ibrahim³, Rokhsare Badami⁴




¹ PhD Student, Department of Motor Behavior, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran

² Assistant Professor, Department of Sports Medicine Research, Najafabad Branch, Islamic Azad University, Najafabad, Iran

³ Assistant Professor, Department of Physical Education and Sports Sciences, University of Baghdad, Baghdad, Iraq

⁴ Professor, Department of Motor Behavior, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran

* Corresponding author email address: hamidzhd@yahoo.com

E d i t o r	R e v i e w e r s
Luis Felipe Reynoso-Sánchez  Department of Social Sciences and Humanities, Autonomous University of Occident, Los Mochis, Sinaloa, Mexico felipe.reynoso@uadeo.mx	Reviewer 1: Masoud Mirmoezi  Department of Physical Education and Sport Sciences, Islamic Azad University, Central Tehran Branch, Tehran, Iran. Email: massoudmirmoezi@live.com Reviewer 2: Mohammad Reza Khodabakhsh  Department of Psychology, Neyshabour Branch, Islamic Azad University, Neyshabour, Iran. Email :hodabakhsh@ut.ac.ir

1. Round 1

1.1 Reviewer 1

Date: 07 October 2024

Reviewer:

The introduction is clear, but the relationship between different cognitive mechanisms (e.g., attitudes, subjective norms, perceived behavioral control) and the use of performance-enhancing substances could be more explicitly defined. Consider briefly introducing the Theory of Planned Behavior (TPB) or a similar model to provide theoretical grounding for the study.

There is a good mention of the existing literature; however, adding more recent studies or international comparisons would provide a stronger justification for the study's relevance. For example, exploring how performance-enhancing substance use among Iraqi athletes compares with other countries or sports communities could add depth to the introduction.

The participant demographics are described well, but more detail on how participants were selected (e.g., convenience sampling, random sampling) would add clarity. Additionally, a justification for the sample size (e.g., why 324 participants are sufficient) would help the reader assess the robustness of the results.

It would be helpful to clarify how the questionnaires or scales used to measure attitude, subjective norms, perceived behavioral control, and intention were validated in the context of Iraqi athletes. If any adaptations were made to fit the local context, this should be stated.

Theories like the Theory of Mind and TPB are well-introduced, but more detail on how they directly connect with the study's results would provide greater clarity. For instance, how does the Theory of Mind offer new insights into the cognitive processes behind performance-enhancing substance use among athletes?

There is a strong connection to societal influences on behavior, but it would be helpful to discuss how Iraqi cultural and sports environments specifically shape attitudes and behaviors toward performance-enhancing substances. The focus on peer and coach pressures is valuable, but more discussion on the unique pressures faced by Iraqi weightlifters would enrich the findings.

The limitations of the study (e.g., potential biases, lack of diversity in the sample, regional focus) are not explicitly discussed here. A brief mention of these limitations, along with suggestions for future research (such as examining the role of media and peer groups more deeply), would make the conclusion more balanced and forward-thinking.

Authors revised the manuscript and uploaded the updated document.

1.2 Reviewer 2

Date: 08 October 2024

Reviewer:

The rationale behind the study is well-established, but it could benefit from a brief mention of the broader implications of substance use among athletes in Iraq. This would help the reader understand why focusing on Iraqi weightlifters is particularly important. What is the significance of this issue in the local context? Are there specific cultural or societal pressures unique to Iraqi athletes?

You provide a thorough description of the structural equation modeling (SEM) procedure. However, a brief mention of the software used for this analysis (e.g., Smart PLS) would be beneficial for readers unfamiliar with SEM or the specific tools used. Also, it would be helpful to explain why SEM was chosen as the best method, especially for the context of this study.

The results are well-organized and easy to follow. The tables and figures provide valuable information, but consider revising Table 1 to include additional details on skewness and kurtosis interpretation. For instance, how do these measures of skewness and kurtosis reflect the nature of your sample and its suitability for SEM? Also, clarify whether the “moderate variability” mentioned in relation to the standard deviation means acceptable variability or if it might suggest issues with measurement reliability.

The interpretation of Table 2 and Figure 1 is good, but it would help to more explicitly explain the relationship between AVE, composite reliability, and the overall model validity. For instance, how do these metrics contribute to the model's fit, and why are they particularly important in SEM?

While assumptions like sample size and multicollinearity are addressed, it would be useful to mention the possible limitations or biases in your sample. For instance, did participants come from specific regions or gyms that might skew results?

The discussion does a good job of interpreting the results in light of previous literature. The mention of factors such as attitudes, subjective norms, and perceived behavioral control is well-aligned with the Theory of Planned Behavior (TPB). However, consider more explicitly tying these findings back to the TPB framework. For example, how do the results inform or challenge existing theories of behavior change in athletes?

There is a good discussion of how attitudes and subjective norms influence behavior, but it would be useful to provide more practical recommendations for addressing the issue of performance-enhancing substance use. For example, how could these findings inform anti-doping programs or coach education in Iraq? Are there specific strategies that could mitigate these behaviors based on the study's results?

Authors revised the manuscript and uploaded the updated document.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.