A Comparative Study of the Level of Sports Culture Among Secondary School Students Engaged in Educational Sports Activities and School Dropouts: The Case of Bodybuilding

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Abstract

This study investigates the level of sports culture among secondary school students engaged in educational sports activities compared to school dropouts, using bodybuilding as a model. A randomly selected sample of 20 participants—10 active students and 10 dropouts—was drawn from bodybuilding gyms in Tebessa. Employing a descriptive methodology and a structured questionnaire, the study analyzed differences across interest, knowledge, and continuity dimensions. Results showed minor variations in interest toward bodybuilding, with enrolled students displaying slightly higher engagement. A more pronounced difference emerged in the cognitive dimension, favoring students participating in educational sports. However, both groups demonstrated similar tendencies regarding the continuity of bodybuilding practice. Overall, the findings suggest that while schooling contributes modestly to knowledge acquisition, intrinsic motivation and personal interest remain key factors influencing sustained participation in bodybuilding.

Keywords: Sports culture; secondary school students; bodybuilding.

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1. INTRODUCTION

The contemporary world is witnessing profound transformations in the perception of physical activity and sports. Today, sport is no longer viewed merely as a recreational or physical pursuit; rather, it has evolved into a cultural and social phenomenon that reflects the prevailing patterns of thought and values within society (Eime et al., 2013). Sports culture is considered one of the core components of an individual's overall culture, as it relates to one's awareness of the importance of physical activity, knowledge of proper exercise practices, and attitudes toward sport as a lifestyle that contributes to physical, psychological, and social well-being (Whitehead, 2019).

Modern literature emphasizes that schools represent one of the most influential environments for shaping students' sports culture. Educational settings provide structured activities that cultivate athletic values, enhance physical fitness, and promote self-discipline (Uddin et al., 2020). However, individuals who drop out of school are often deprived of this systematic educational experience, which may lead to variations in their level of awareness and sports culture compared to students who remain enrolled and participate in educational sports activities. This disparity constitutes a form of cultural gap that may be reflected in patterns of participation, sporting inclination, and continuity in physical activity (Taks et al., 2014).

Bodybuilding serves as an exemplary model for examining such disparities. It is a sport that demands a combination of precise technical knowledge of exercises, nutritional awareness, and a high degree of self-discipline. Research in sport behavior indicates that regular engagement in self-motivated physical activities—such as bodybuilding—is closely associated with higher levels of intrinsic motivation and physical culture among individuals (Schwarzer& Renner, 2020). Nevertheless, research comparing students engaged in educational sports programs with school dropouts in the context of bodybuilding remains limited, particularly within Arabic educational environments.

This study draws on Bourdieu's (1986) theoretical framework of cultural capital, which posits that sports practices reflect a certain level of acquired culture shaped by educational and social institutions. From this perspective, comparing the level of sports culture between the two groups offers a scientific entry point for understanding the impact of education and school-based sports participation on youth's sports awareness.

From this main research problem, the following sub-questions arise:

- Are there differences in the level of inclination and interest in bodybuilding between secondary school students engaged in educational sports activities and those who have dropped out of school?
- Are there differences in the cognitive dimension of bodybuilding between secondary school students engaged in educational sports activities and those who have dropped out of school?
- Are there differences in the level of continuity in practicing bodybuilding between secondary school students engaged in educational sports activities and those who have dropped out of school?
- Based on these questions, the following main hypothesis was formulated:
- There are differences in the level of sports culture related to bodybuilding between secondary school students who participate in educational sports activities and those who have dropped out of school.

The following sub-hypotheses were also proposed:

- There are differences in the level of inclination and interest in bodybuilding between secondary school students engaged in educational sports activities and those who have dropped out of school.
- There are differences in the cognitive dimension of bodybuilding between secondary school students engaged in educational sports activities and those who have dropped out of school.
- There are differences in the level of continuity in practicing bodybuilding between secondary school students engaged in educational sports activities and those who have dropped out of school.

2. General Objective of the Study

The general objective of this study is to examine the differences in the level of sports culture related to bodybuilding between secondary school students who participate in educational sports activities and those who have dropped out of school. More specifically, the study aims to identify differences across the following dimensions: level of inclination and interest, level of cognitive understanding, and level of continuity in practicing bodybuilding among these two groups of students.

The significance of this study, both theoretical and practical, lies in its contribution to understanding students' needs by identifying the factors that influence their attitudes toward bodybuilding. This understanding can help provide adequate support, foster motivation, and develop strategies that encourage students to engage in sports more effectively.

Furthermore, the study seeks to promote students' overall health by encouraging participation in bodybuilding, which can enhance their physical fitness and general well-being.

3. Operational Definition of Terms

Sports Culture:

Culture can be defined as the sum of knowledge, experiences, and values accumulated within a society to promote intellectual and physical development.

According to Al-Shafie (2001), sports culture represents the enrichment of human experience through sports activities, leading to a deeper understanding and appreciation of the environment in which individuals live.

The researcher defines sports culture as the set of attitudes and knowledge related to a specific sport, observable through key dimensions such as inclination and interest, cognitive awareness (e.g., knowledge of exercises, rules, and terminology), and the degree of engagement and continuity in practice.

Bodybuilding:

Linguistically, bodybuilding refers to a physical activity aimed at developing and shaping muscles through advanced exercise techniques and structured nutritional plans. The focus is on improving muscle size, definition, and overall physical appearance.

Technically, bodybuilding is a sport involving intensive training and the use of resistance or weight exercises to increase strength and muscle mass. It often requires high protein intake and specific dietary control to support muscle growth. The sport is known for its global competitions, where participants display their muscular development and body symmetry.

The researcher defines bodybuilding as a form of physical training focused on enhancing muscle strength, size, and definition through systematic exercises targeting different muscle groups, aimed at improving both physical performance and body aesthetics.

Secondary School Stage:

Linguistically, the term secondary school stage refers to the educational period following primary education and preceding higher education. In many systems, this stage typically spans from grade 7 to grade 12.

Technically, secondary education—often called "high school"—represents a crucial developmental stage during which students acquire advanced academic skills and begin to determine future areas of specialization, whether academic or vocational.

The researcher defines secondary school stage as the educational phase between the end of primary school and the beginning of higher education, generally encompassing grades 7 through 12, during which students receive more advanced instruction across various subjects.

4 Review of Related Literature

Several recent studies have explored the relationship between sports participation, educational context, and adolescents' motivation toward physical activity.

Eime et al. (2019) conducted a large-scale study examining the social and psychological outcomes of youth participation in organized and non-organized sports. Their findings showed that structured physical education within schools contributes to developing teamwork, discipline, and social belonging. However, the researchers noted that motivation and continuity in sports practice are often sustained more by personal and social factors than by institutional frameworks alone (Eime, Young, Harvey, Charity, & Payne, 2019).

In another study, Ryan and Deci (2020), through the lens of Self-Determination Theory, emphasized that intrinsic motivation—driven by autonomy, competence, and relatedness—is a key determinant of consistent engagement in physical activity. They demonstrated that adolescents who perceive sports as self-chosen and personally meaningful are more likely to sustain regular participation, regardless of their school environment (Ryan &Deci, 2020).

Additionally, Chen et al. (2021) investigated the influence of cultural and social environments on adolescents' exercise behaviors across multiple countries. Their results revealed that factors such as peer encouragement, family attitudes, and media representations of body image play crucial roles in shaping participation patterns. The study concluded that social context can either reinforce or limit youth engagement in individual sports like bodybuilding, depending on cultural perceptions and available support systems (Chen, Zhang, & Yin, 2021).

Collectively, these studies suggest that while educational programs provide an essential foundation for sports awareness, the sustainability of physical activity among adolescents depends largely on intrinsic motivation and socio-cultural reinforcement—an intersection that the present study seeks to explore within the context of bodybuilding among secondary school students.

5- Methodological Procedures of the Study

5.1 Research Method and Instruments

The study adopted the descriptive–analytical method as the most appropriate approach to address the research problem, given its suitability for describing phenomena as they exist in reality and for analyzing relationships among variables to explain differences in the level of sports culture among the study groups (Creswell, 2014).

5.2 Pilot Study

The pilot or exploratory study represents a fundamental step in the scientific research process, as it guides the researcher and helps determine the appropriate direction for the study. Through this stage, the researcher can clearly identify the problem to be addressed, select the most suitable tools and methodology, and anticipate potential challenges and obstacles that may arise during the research process.

Furthermore, the pilot study enables the researcher to broaden their understanding of the topic by gathering comprehensive preliminary information, allowing for more accurate decision-making and analysis in later stages. It also provides an opportunity to refine research interests and determine which aspects of the topic warrant deeper investigation.

In general, the pilot study is essential for the success of any scientific research, as it helps define the correct course of action while saving time and effort throughout the study's progression. The main objective of this phase is to define the research problem precisely. In addition, it aims to:

- Deepen the researcher's understanding and conceptual framework.
- Assist in identifying key research variables and formulating hypotheses.
- Help in refining the title of the study.
- Determine related topics and dimensions relevant to the research problem.

In the present study, a pilot exploration was conducted to collect previous or similar studies addressing the same theme. Field visits were also carried out to two bodybuilding gyms in the municipality of Tebessa, where several athletes were interviewed, and preliminary questionnaires were distributed. The purpose of this exploratory phase was to clarify key concepts related to the feasibility and practical execution of the research.

5.3 Research Population and Sample

The research population consisted of secondary school students who regularly participate in educational sports activities, as well as school dropouts who practice bodybuilding in fitness centers within the municipality of Tebessa.

Due to the difficulty of accessing the entire target population, a simple random sample of 20 participants was selected, equally divided into two groups:

(10) enrolled students actively engaged in educational sports activities;

(10) school dropouts participating in bodybuilding at local gyms.

The questionnaires were distributed manually, following a clear explanation of the study's objectives and assurance of confidentiality and anonymity of all responses.

5.4 Data Collection Instrument

The questionnaire is one of the primary tools used for collecting information about the research problem. It consists of a series of structured questions designed for the study sample to answer, allowing the researcher to gather quantifiable data relevant to the research objectives.

In this study, the questionnaire served as the main instrument for data collection. It was designed specifically for bodybuilding athletes, who represent the core sample of this research, with the purpose of identifying the attitudes of secondary school students toward bodybuilding.

The questionnaire consisted of closed-ended questions, where respondents were required to select one appropriate answer by marking an "X" in the corresponding box. It was structured around three main dimensions:

- The first dimension included 5 questions focused on inclination and interest in bodybuilding.
- The second dimension contained 7 questions addressing the cognitive aspect of bodybuilding.
- The third dimension comprised 6 questions related to continuity in practice.

The questionnaires were distributed manually in printed form to the participants for completion.

5.5 Statistical Tools and Data Processing

After data collection and analysis, the results were processed and interpreted using SPSS (Statistical Package for the Social Sciences), version 26. This software is among the most widely used tools in educational and social research due to its accuracy, ease of data entry, analytical efficiency, and capacity to generate numerical indicators.

6- Presentation and Analysis of Results

6-1 Dimension of Inclination and Interest in Bodybuilding

The first hypothesis aimed to determine whether there were differences in the level of inclination and interest in bodybuilding between secondary school students engaged in educational sports activities and those who had dropped out.

Statistical analysis revealed slight differences between the two groups: 90% of the enrolled students involved in educational sports activities provided positive ("Yes") responses, compared to 82% among dropouts.

This suggests that students participating in educational sports activities show a slightly higher level of interest in bodybuilding, with a difference of approximately 8%. However, this difference was not statistically significant, indicating that general interest in bodybuilding is relatively widespread among both groups, with a modest advantage favoring the students engaged in school sports activities.

6-2 Cognitive Dimension of Bodybuilding

The second hypothesis tested the existence of differences in the cognitive dimension of bodybuilding between the two groups.

Results revealed more pronounced differences compared to the previous dimension: 60% of the active students gave positive responses, compared to 45% among the dropouts.

This finding can be interpreted to mean that participation in educational sports activities within school institutions contributes to enhancing students' cognitive level through structured instruction and organized practices that strengthen their understanding of the scientific principles of physical fitness, nutrition, and training.

Accordingly, school dropouts demonstrated a relative deficiency of 15% in the cognitive dimension compared to their enrolled counterparts, confirming the critical role of the educational framework in shaping sports culture among youth.

6-3 Continuity in Practicing Bodybuilding

The third hypothesis examined differences in the level of continuity in practicing bodybuilding between the two groups.

Results showed a notable similarity in responses: 78% of enrolled students and 72% of dropouts reported consistent engagement.

Although the difference of 6% is relatively minor, it indicates that the tendency to maintain regular participation in bodybuilding represents a stable behavioral pattern across both groups. This reflects the shared influence of personal motivation and the desire for physical development, regardless of educational status.

Therefore, it can be concluded that interest in practicing bodybuilding constitutes a common factor between both groups, albeit with varying degrees of organization and regularity.

7- Discussion and Interpretation of Results

The findings of the study revealed that students' attitudes toward bodybuilding—across its three dimensions (interest and inclination, cognitive aspect, and continuity of practice)—are not substantially influenced by the schooling variable. The recorded differences between students participating in educational sports activities and those who had dropped out of school were relatively minor, not exceeding 8% across most dimensions.

This outcome suggests that individual and social factors may play a more decisive role than formal educational factors in shaping attitudes toward bodybuilding practice. This interpretation aligns with the findings of Oja et al. (2022), who emphasized that the differences between adolescents engaged in organized and unorganized sports are primarily linked to the level of personal motivation rather than the institutional framework itself. Similarly, Spruijtenburg et al. (2022) found that the main determinant of adolescents' participation in sports activities is intrinsic interest and motivation, rather than school or academic affiliation—supporting the current study's conclusion that differences between the two groups are modest.

On the other hand, the study results indicate that students engaged in educational sports activities possess a relatively higher cognitive level than their counterparts who have dropped out. This can be explained by the role of educational institutions in providing structured knowledge and guidance on exercise, nutrition, and physical safety, thereby enhancing sports culture (Uddin et al., 2020). Nevertheless, this influence does not appear to be decisive across all dimensions, suggesting that sports awareness is not entirely dependent on formal

education. It is also shaped by personal experiences and informal sources of knowledge, such as the media and social networks (van Sluijs et al., 2021).

Recent literature further emphasizes that family and community culture significantly influence adolescents' attitudes toward sports participation. Knoester et al. (2022) demonstrated that a supportive family environment encouraging physical activity increases the likelihood of consistent participation, regardless of educational status. This finding resonates with the results of the present study, which showed a comparable level of continuity in bodybuilding practice between students and dropouts, suggesting that social and cultural support remains a crucial factor in sustaining sports engagement among youth.

From a psychological perspective, Schwarzer and Renner (2020) argue that self-efficacy and intrinsic motivation are among the most significant determinants of sustained health-related behaviors, including physical activity. Accordingly, both enrolled and dropout secondary school students may possess strong internal motivations to engage in bodybuilding—driven by self-actualization, improvement of physical appearance, and enhancement of psychological well-being. This could explain the limited differences observed between the two groups.

Finally, these findings are consistent with Whitehead's (2019) perspective that adopting physical activity as a lifestyle stems primarily from individual awareness of its value, rather than institutional or educational affiliation. Hence, it can be concluded that school attendance exerts only a limited influence on students' attitudes toward bodybuilding, while intrinsic motivation, family culture, and social environment play a more definitive role in shaping sports culture among adolescents.

8- Conclusion

This study, which explored the level of sports culture among secondary school students engaged in educational sports activities and those who had dropped out of school in the context of bodybuilding, highlights that this sport represents more than a mere physical activity. Rather, it serves as an effective means to promote overall health, develop self-discipline, and foster sports awareness among youth.

The findings revealed generally positive attitudes toward bodybuilding among both enrolled and dropout students, with slight differences favoring those participating in educational sports activities, particularly in the cognitive dimension. This outcome can be attributed to the educational and supervisory role played by school institutions in reinforcing proper knowledge and practices related to physical fitness and healthy nutrition.

Moreover, the results indicated that personal and social factors—such as intrinsic motivation, peer influence, and societal perceptions of body image and health—significantly contribute to shaping adolescents' attitudes toward this sport. Consequently, bodybuilding emerges as a lifestyle choice rather than a temporary recreational activity.

It can thus be concluded that youth sports culture is formed through the interaction between formal education, personal motivation, and social environment. This underscores the need for educational institutions to strengthen their sports programs to encompass both educational and psychological dimensions, particularly in individual sports that demand high levels of self-discipline, such as bodybuilding.

In conclusion, the study recommends the following:

- Enhancing sports culture within educational institutions through curricula that support health and nutritional education.
- Encouraging structured physical activity among both enrolled students and dropouts through open community-based programs.
- Expanding future research to include larger samples and additional variables—such as psychological motivation and social environment—to gain a deeper understanding of the factors influencing sports culture among adolescents.

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