

Social Approach of The Importance of Physical Sports Activities in Developing Social Relationships Among Secondary School Students: A Field Study of High Schools in Chlef Province - Age Group (15-18 Years)

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Abstract

This study examines the critical role of physical and sports activities in fostering and sustaining social relationships among high school students aged 15 to 18. Utilizing a descriptive analytical approach, the researcher gathered data from 83 students at Tariq Ibn Ziyad High School using structured questionnaires and Moreno's sociometric tests. The findings confirm that active participation in sports significantly builds positive social connections, with notable variations in relationship dynamics based on the students' gender and whether they participated in individual or team sports. Ultimately, the study recommends optimizing physical education classes to promote collaborative spirits, enhance social cohesion, and reduce isolation among adolescents.

Keywords: *Physical Activities, Social Relationships, Adolescents (or Secondary School Students), Physical Education, Sociometric Tests, Social Cohesion.*

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Introduction

Sport is universally considered one of the primary and most enduring human activities, as no human society—from ancient civilizations to the modern digital era—has been devoid of some form of sports, regardless of the extent of its socio-economic development or technological advancement. Humanity has recognized sports throughout its complex historical evolution, consciously and subconsciously employing it as an essential educational method that contributes significantly to the socialization, normalization, and construction of a balanced, well-rounded social personality.

Undoubtedly, there are profound mutual influences between sports and various societal forces, given that human nature is fundamentally social. A human being is intrinsically a social creature whose life, cognitive frameworks, and very existence are molded by the society and immediate communities in which they live and interact. This social molding happens through multiple, overlapping interactions between the individual and their society, where groups and teams representing diverse social cohorts are formed, often transcending socio-economic barriers. This is based on the foundational sociological premise that sport, as

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a macro-social phenomenon, is an unparalleled means of gathering individuals and generating within them powerful feelings of group unity, group loyalty, and collective cooperation.

Through the dynamic interaction that consistently occurs among students during physical and sports activities—which are inherently characterized by various forms of relationships, competitive tension, and cooperative connections leading to the establishment and development of lasting social bonds—this article attempts to highlight the various social relationships that emerge among students as a direct result of engaging in physical sports activities. The physical and sports education class is not merely a break from academic rigor; it is considered a vital, irreplaceable socio-educational space teeming with raw social interactions and high-stakes situations demanding cooperation, ethical competition, and non-verbal communication, thereby creating a highly suitable environment to study group dynamics and their evolution in real-time.

Problem Statement and Hypotheses

Every activity undertaken by an individual in a communal setting is essentially a social activity determined by underlying social motives, peer pressures, and intrinsic desires for belonging. Through these activities, a complex type of relationship is established between the individual and others. This relationship may be positive, leading to an acceptable, constructive form of interaction such as friendship and mentorship, or negative, resulting in exclusion or conflict. Sport is a unique activity characterized by the individual's intense, often physical, interaction with their environment and peers, serving as an essential component of the holistic educational and personality development process.

However, with the increasing digitization of adolescent life and the rising prevalence of sedentary lifestyles, the traditional role of sports in socialization is undergoing significant shifts. Accordingly, the core problem of this study crystallizes in the following main question: What is the precise role and quantifiable importance of practicing physical and sports activities in developing and maintaining social relationships among secondary school students in contemporary educational settings?

Hypotheses

General Hypothesis: Structured physical sports activity positively and significantly impacts the development, depth, and resilience of social relationships among secondary school students, acting as a primary vehicle for socialization.

Sub-Hypotheses:

1. Students organically form various types and forms of social relationships (e.g., leadership dynamics, collaborative partnerships, emotional support networks) amongst themselves through consistent practice of physical and sports activities.
2. The qualitative nature and structural strength of social relationships among students differ significantly according to the type of sport engaged in, with team sports fostering different relationship paradigms compared to individual sports.
3. Social relationships and peer selection criteria among students differ markedly according to their gender and their perceived proficiency or skill level in the given physical activity.

Objectives and Importance of the Research

The primary objective of this research is to empirically identify and categorize the various types and forms of social relationships that form and emerge among students through practicing physical and sports activities within the school environment. It seeks to ascertain the nuanced nature of direct and indirect social relationships, specifically isolating relationships centered on cooperation, brotherhood, harmony, and mutual tolerance, as opposed to purely competitive or antagonistic interactions.

The academic and practical importance of this research is manifold. Firstly, defining and understanding adolescent social relationships is crucial for educational psychologists, sociologists, and pedagogues aiming to comprehend the holistic formation of the human personality during the highly sensitive and volatile stage of adolescence. Secondly, the findings provide actionable data for school administrators and physical education curricula designers to restructure sports programs not just for physical health, but as deliberate tools for social engineering—combating bullying, reducing student isolation, and fostering a more inclusive school climate.

Theoretical Framework of the Study

Physical and Sports Activity

Physical and sports activity is widely considered one of the most refined forms of physical expression and a key, universally recognized trend in human sports culture. It is characterized academically as a complex social activity that effectively expresses the intersection of the individual's intrinsic psychological needs (such as mastery, autonomy, and relatedness) with broader societal requirements (such as teamwork, adherence to rules, and civic engagement). Physical activities are highly varied and encompass recreational pursuits for leisure, highly competitive frameworks for achievement, and utilitarian pursuits for health maintenance.

Physical activity fundamentally possesses physiological objectives related to developing organic capacities, cardiovascular health, and muscular endurance. However, these are inextricably linked alongside cognitive, psychological, and motor objectives. Engaging in sports significantly and positively influences emotional mood, effectively reduces symptoms of clinical and sub-clinical anxiety and depression, and actively fosters robust personality traits such as self-confidence, resilience, and personal responsibility. Furthermore, physical activity helps safely discharge latent negative energies and aggressions, channeling them into organized, positive frameworks strictly governed by established game rules and impartial refereeing, making it an exemplary medium for behavioral regulation and emotional intelligence development.

Social Relationships and Socialization Institutions

In sociological terms, social relationships are defined as recurrent, predictable, and expected behavioral patterns occurring between two or more individuals where one consciously or subconsciously influences the other. These relationships serve as the absolute foundation of social interaction and cohesion within any group. During adolescence, these relationships are profoundly influenced and sculpted by several key social institutions, notably:

The Family: The primary, foundational institution from which the adolescent initially acquires basic cultural norms, moral values, and initial attachment styles.

The School: A secondary but highly impactful institution that provides various structured cultural, academic, and sports activities. It acts as a microcosm of broader society, assisting the adolescent in gaining diverse social experiences and learning complex social navigation.

The Peer Group: Often the most influential institution during mid-to-late adolescence. It plays a pivotal role in the adolescent's life as they willingly participate in activities together, experience a profound sense of tribal belonging, and often substitute familial validation with peer validation.

Secondary Education Stage (Adolescence)

Adolescence is critically defined as the turbulent transitional period bridging the gap from childhood dependency to adulthood autonomy. It is universally marked by rapid, often overwhelming physical, psychological, cognitive, and emotional changes. During this specific developmental stage, strong tendencies toward personal independence, boundary-testing, and self-assertion rapidly emerge.

Simultaneously, practicing physical and sports education during this period helps achieve necessary neuromuscular coordination, preemptively addresses potential psychological deviations by providing healthy coping mechanisms, and significantly facilitates social integration. The physical education lesson uniquely represents a fertile, dynamic environment for forging positive, equitable relationships between a student and their peers, as well as establishing respectful, mentorship-based relationships between the student and the teacher. The intense, fluctuating emotions prevalent in this stage find a vital, socially acceptable outlet through structured sports competition, which practically teaches the adolescent how to manage their feelings under pressure, experience both victory and defeat gracefully, and fundamentally respect their peers and opponents.

Methodological Procedures of the Study

Method Used

The researcher deliberately utilized the descriptive analytical method due to its high appropriateness for the complex nature of the sociological problem at hand. This methodology aims not merely to observe, but to systematically describe, quantify, and deeply analyze the intricacies of social relationships among students. It allows the researcher to express these relationships both quantitatively (through statistical data and sociometric scores) and qualitatively (through interpreting the context of these relationships).

Research Sample

To ensure statistical reliability, the sample purposefully comprised 83 male and female students. These students were strategically distributed across three distinct classes of varying academic specializations and levels at Tariq Ibn Ziyad High School in El Hadjira (Chlef Province). This diverse sampling ensured that the findings were not skewed by the specific culture of a single academic track.

Research Tools

Structured Questionnaire: A highly calibrated tool designed to capture student preferences and social inclinations. It included two main evaluative criteria: the friendship criterion (aimed at identifying closest emotional peers and confidants) and the physical activity criterion (aimed at identifying preferred peers specifically for physical tasks, warm-up activities, and team exercises).

Sociometric Test (Moreno's Method): Originally designed by Jacob L. Moreno, this is a sophisticated psychological tool utilized for quantitatively measuring the complex network of social relationships—specifically vectors of interpersonal attraction and repulsion—among group members. By transcribing the students' confidential responses into a comprehensive sociometric matrix, the researcher was able to accurately calculate exact acceptance (popularity) and rejection (isolation) scores for every individual within the class ecosystem.

Presentation and Analysis of Results

In this critical section, we systematically review the empirical results of the field study obtained after successfully administering the dual-tool approach (the questionnaire and the sociometric test). The raw data was meticulously transcribed into comparative tables and complex sociometric matrices to reveal underlying social architectures.

Table (1): Distribution of the research sample by gender and specialization.

Class / Specialization	Males	Females	Total
Class 1 (Common Core Exp. Sci. 2)	15	13	28
Class 2 (Mathematics)	18	10	28

Class 3 (Exp. Sciences 2)	14	13	27
Total Sample Size	47	36	83

Analysis of Table 1: The distribution highlights a relatively balanced sample size across the three selected classes, providing a stable foundation for comparative analysis. The slight variance in male-to-female ratios mirrors typical enrollment demographics in these specific scientific tracks within the region.

Table (2): Summary model of sociometric scores results (Class 1 - Males).

Student Code	Sociometric Score	Attraction Level Observations
Student (D)	28 points	Highest selection (Leadership/Stardom)
Student (S)	23 points	Strong social position / High attraction
Student (M)	21 points	High attraction / Active participation
Student (J)	17 points	Moderate attraction
Student (N)	4 points	Weak attraction (Relative isolation)

Analysis of Table 2: This sociometric extract clearly demonstrates the hierarchical nature of adolescent male social structures within a sports context. The significant point gap between Student (D) and Student (N) quantifies the stark reality of social stardom versus social isolation in the classroom setting.

Discussion and Interpretation of Results

Through a rigorous academic discussion of the extracted results, it becomes undeniably apparent that social relationships among adolescent students are complex, multi-layered, and founded on various intersecting criteria. While academic level, baseline living standards, and neighborhood proximity initially formulate casual acquaintances, the results of the sociometric test conclusively proved that the practice of physical and sports activities strongly and uniquely contributes to solidifying deep interpersonal attraction and healthy competition among individuals.

A striking gender dichotomy was observed in the criteria for peer selection. For males, their selections of one another in the sociometric matrices were highly, almost exclusively, correlated with observable physical abilities, athletic prowess, and high performance in team games. In the male dynamic, a student possessing distinctly high athletic skills is structurally elevated to become the natural leader or the pivotal, central figure (the 'star') within the classroom hierarchy, commanding respect and dictating social flows.

Conversely, the female demographic presented a highly distinct sociological pattern. A substantial, statistically significant correlation was observed between the friendship criterion (emotional closeness) and the physical activity criterion. Unlike males who prioritize athletic utility, girls overwhelmingly prefer practicing sports activities with their pre-existing closest peers (adhering strictly to the principle of established friendship). This dynamic actively bolsters their collective competitive spirit and significantly enhances their inherent desire to engage in sports, doing so within an environment that they perceive as psychologically supportive and socially secure, free from the harsh meritocracy observed in male groups.

Conclusions and Recommendations

Conclusions

Gendered Social Criteria: There is a profound, quantifiable difference in the fundamental criteria used for group evaluation, peer acceptance, and teammate selection between female and male adolescents.

The Role of Competition: The element of structured competition is not detrimental; rather, it plays a highly prominent and constructive role in determining the ultimate strength, resilience, and durability of social relationships among students, particularly within the framework of team sports which require synchronized cooperation.

Psychological Relief: Beyond physical health, consistent engagement in physical and sports education effectively and measurably contributes to alleviating acute psychological stress, reducing academic anxiety, and vastly enhancing overall social harmony within the school ecosystem.

Recommendations

Curriculum Enhancement: Formally incorporate extensive modules on sports sociology and adolescent group dynamics in the foundational academic training and continuous professional development of physical education teachers.

Pedagogical Shift: Actively emphasize and prioritize team-based, cooperative group activities over purely individualistic pursuits to intentionally hone non-verbal communication skills, mutual reliance, and conflict resolution among students.

Diagnostic Tools: Mandate the periodic, confidential use of sociometric scales by school counselors and PE teachers to proactively identify socially isolated or rejected students early in the academic year, allowing for targeted, compassionate integration strategies before behavioral issues arise.

Resource Allocation: Significantly increase funding and logistical resources for diverse inter-school and intra-school sports competitions to foster broader community identity and provide varied avenues for students of all skill levels to experience teamwork.

References

- Al-Basati, Amre-Allah Ahmed. (2001). *Socialization through Sport*. Dar Al-Maaref, Cairo.
- Al-Hassan, Ihsan Mohammed. (2005). *Sports Sociology*. Dar Al-Wael, Amman.
- Al-Khouly, Amin Anwar. (1996). *Sports and Society*. World of Knowledge Series, Kuwait.
- Allawi, Mohammed Hassan. (1986). *Sports Psychology*. Dar Al-Maaref, Egypt.
- Allawi, Mohammed Hassan. (1998). *Psychological Preparation for Athletes*. Dar Al-Fikr Al-Arabi, Cairo.
- Al-Samerrai, Said Anwar. (1992). *Sport and Politics: A Sociological Perspective*. Dar Al-Hikma, Baghdad.
- Al-Shati, Suleiman. (2008). *Physical Activity and Mental Health in Modern Society*. Center for Research and Studies, Kuwait.
- Ibrahim, Marwan Abdel-Majid. (2002). *Scientific Foundations of Sports Psychology*. Dar Al-Thaqafa for Publishing and Distribution, Amman.
- Khaled, Mustafa. (1995). *The Phenomenon of Sports Fanaticism: A Sociological Analytical Study*. Dar Al-Maaref, Alexandria.
- Mansour, Abdel-Majid. (2004). *Introduction to Sports Sociology*. Dar Al-Shorouk, Amman.
- Oweisi, Khairuddin. (1997). *Sports Sociology*. Dar Al-Fikr Al-Arabi, Cairo.
- Rateb, Osama. *Walking Sport, an Approach to Achieving Psychological and Physical Health*.