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The Influence of Educational Physical Activities on Augmenting Intrapersonal and Interpersonal Compatibility Dimensions Among Secondary School Students: Perspectives of Physical Education and Sports Teachers - A Case Study of Djelfa Secondary Schools

# The Influence of Educational Physical Activities on Augmenting Intrapersonal and Interpersonal Compatibility Dimensions Among Secondary School Students: Perspectives of Physical Education and Sports Teachers - A Case Study of Djelfa Secondary Schools

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## Abstract

The primary focus of this research is to investigate the psychological adjustment of adolescents within the context of the educational system's goal to cultivate responsible and altruistic citizens. This inquiry centers on the psychological characteristics of adolescents, encompassing their self-perception and social adaptability. To achieve a comprehensive understanding of adolescent psychological compatibility and the potential role of physical and sports activities in augmenting these dimensions, a specialized questionnaire was designed and administered to educators specializing in this field. This survey seeks to elucidate the viewpoints of experts in the domain, as previous research has indicated that engagement in physical activities and sports plays a significant role in promoting the emotional well-being of adolescents. Such activities provide adolescents with a constructive outlet for emotional expression, fostering a sense of accountability, self-fulfillment, and resilience. These experiences contribute to the restoration of self-confidence, improved peer relationships, and the cultivation of perseverance, all of which enable adolescents to navigate various challenges and setbacks with sportsmanship and adaptability.

**Keywords:** compatibility, adolescent, activity, physical, student

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## Introduction

Throughout the course of their daily existence, individuals inherently experience a persistent inclination toward social interaction and communication, given their fundamental nature as

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social beings. This inclination towards engagement with others, particularly during their formative years, is readily observable. It is a common observation that children frequently exhibit expressions of happiness and contentment when they are joined by their peers, and these interactions often transpire seamlessly and spontaneously, devoid of discernible hindrances or reservations.

As an individual progresses through life, their perceptual acuity and cognitive awareness of their environment undergo gradual expansion. This developmental journey is marked by the burgeoning self-discovery and the concurrent delineation of enduring personality traits that will accompany them throughout their lifespan. Consequently, their need for intellectual and psychological harmony intensifies, a requirement stemming from the amalgamation of personal and psychological attributes they have imbued. This harmonization is instrumental in fostering a state of self-reconciliation and amicability with others, facilitating contentment in the recognition and utilization of their capacities. Such adaptive processes aim to manifest in the form of healthy and normative behaviors, which are essential for navigating a turbulent and stress-laden environment within a society characterized by inherent diversity. It is within this juxtaposition that individuals find themselves facing two antithetical outcomes: either the successful establishment of a harmonious psychological and social equilibrium that contributes to the cultivation of a resilient personality and fosters adept interaction with their surroundings, or the potential consequence of an imbalance leading to psychopathological manifestations.

Behavioral psychologists posit that external environmental stimuli significantly influence psychological adjustment, impacting our behavioral responses. According to their perspective, individuals can be conditioned to exhibit specific behaviors, with learning being governed by a system of reinforcements and punishments. This perspective underscores the critical importance of comprehending how individuals adapt to their societal and personal circumstances during adolescence, particularly within the educational milieu. It is within the school environment that adolescents' characteristics and interactions with peers are prominently molded, primarily through their academic achievements and participation in physical and sporting activities. As *Plato* asserted in antiquity, "Good deeds provide us with strength and inspire others to do the same." The incorporation of physical activity into educational institutions undoubtedly aligns with this principle, as it becomes a positive endeavor integrated into the learning process. For both the physical education and sports instructor and the adolescent student, this presents an opportunity to engage in an educational exercise where a majority of the student's behavioral and emotional traits manifest. Within this context, the transparency of the student's personality is revealed to others through a series of actions and reactions that evolve in response to various circumstances and situations inherent to the learning experience.

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Educational physical activity, due to its distinctive nature in probing and illuminating facets of an adolescent's personality that may otherwise remain concealed, serves as a potent tool for uncovering and understanding the psychological dynamics of teenagers. This unique characteristic is particularly evident within the realm of sports, whether they are individual or team-based competitions, as they provide a platform for comprehending the teenager's psychological state. Furthermore, educational physical activity offers an avenue for employing pedagogical tools and methodologies that resonate with the adolescent, thereby reinforcing and endorsing positive behaviors, mitigating negative ones, and striving to minimize their recurrence. Among the array of characteristics influenced by the practice of educational physical activity, which manifests as observable behaviors, lies the crucial aspect of psychological compatibility. This compatibility encompasses both intrapersonal and interpersonal dimensions and is a multifaceted variable shaped by various factors, including familial upbringing, parental influence, peer group dynamics, and other external influences.

In the context of this research paper, we embark on an exploration of a factor of commensurate importance to those previously discussed. Specifically, we delve into the role of educational physical activity within the educational institution, with particular emphasis on the domain of the physical education and sports instructor. These instructors are acknowledged as fundamental and indispensable entities within the educational sphere. Our inquiry is centered on understanding the impact of educational physical activity, as facilitated by these instructors, on the psyche of adolescents and the extent of its influence. *Does this physical activity affect the adolescent student's inter and intra-compatibility?*

### 2. The problem:

Building upon the aforementioned perspective on the subject matter, the formulation of the problem can be articulated as follows: Does physical activity and sports play a role in enhancing the dimensions of compatibility with oneself (inter) and compatibility with others (intra) among the study sample?

Two specific inquiries stemming from this overarching question can be framed as follows:

- -Does educational physical activity have a role in enhancing the dimension of inter-compatibility among the secondary school students under study?
- Does educational physical activity affect the enhancement of intra-compatibility in the study sample?

### 3. Hypotheses:

The general hypothesis can be formulated as follows:

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- Educational physical activity contributes to enhancing the two dimensions of compatibility among secondary school students, according to the perspective of teachers of physical education and sports.

The general hypothesis is divided into two parts, as follows:

- Educational physical activity has a role in enhancing inter-compatibility among secondary school students
- Educational physical activity has a role in enhancing intra-compatibility among the study group

### 4. The Significance of the study:

A society characterized by the collective well-being of its members, particularly in terms of psychological health, tends to exhibit heightened productivity and ongoing developmental progress. Mental health care, notably in developed nations, commences during early childhood, encompassing comprehensive attention to all facets of a child's well-being, with a particular focus on psychological aspects. This proactive approach takes into consideration and preemptively addresses the pivotal stage of adolescence, akin to a form of preventive healthcare. Amidst the prevailing challenges encompassing societal, cultural, and educational domains, it is indisputable that our youth stand in acute need of a life imbued with contentment and social acceptance. These challenges engender a looming peril and foreshadow potentially catastrophic consequences concerning the psychological well-being of both our children and society at large. Consequently, the significance of this topic lies in its role as a beacon, illuminating a critical dimension for those vested in the well-being of adolescents. This importance is further underscored by the adolescent's imperative need to regulate their emotions and adapt to both their internal and external milieu.

Psychological adjustment stands as a paramount feature that plays a pivotal role in mitigating the psychological toll that high school adolescents may encounter, given their heightened susceptibility to the influences of their environment. In this context, the role of educational physical activity emerges as a valuable tool through which certain adolescent behaviors can be monitored and altered during this delicate developmental stage. This process facilitates the adolescent's progression toward psychological stability and equilibrium, equipping them with the capacity to shoulder life's burdens while maintaining sound psychological health.

### 5. Objectives of the study:

In a broad sense, the study's overarching goal is to substantiate the role of educational physical activity in amplifying psychological adjustment among adolescents at the secondary education

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level. This will be accomplished by garnering insights from physical education and sports instructors, with a specific focus on:

- Studying the effect of educational physical activity on the behavior of secondary school students by making them self-compatible.
- Studying the effect of educational physical activity on the adolescent's acceptance of all his difficulties within the framework of their surroundings and groups.

### 6. Rationale of the study:

Several factors motivate the pursuit of this research endeavor:

1. Inclination and Interest in Psychological Topics, Especially Among Adolescents: The innate curiosity and fascination with psychological matters, particularly concerning adolescents, serve as a driving force.
2. Abundance of Scientific Material: The abundance of scholarly literature exploring the subject within the context of its relationship with various variables has underscored the relevance and timeliness of this research.
3. Understanding the Perspectives of Physical Education and Sports Teachers: The study seeks to gain insights from physical education and sports instructors, aiming to ascertain their understanding of the concept of psychological adjustment and to engage in meaningful discourse with them.
4. Multifaceted Effects of Educational Physical Activity: The multifarious impacts of educational physical activity across diverse domains have prompted an exploration of the critical developmental stage of adolescence.
5. Encouragement from Colleagues: Encouragement and support from colleagues who share an interest in psychological and educational topics have provided additional impetus for this inquiry.

### 7. Concepts and terminology:

#### 7.1. Compatibility:

The concept of compatibility encompasses diverse definitions, including Al-Gaddafi's characterization as "the set of psychological processes that enable an individual to navigate and surmount numerous demands and pressures" (Al-Gaddafi, 1998). It has also been described as "a material or social problem or psychological conflict" (Rageh, 1985). Additionally, Mustafa Fahmy elucidates compatibility as "an ongoing dynamic process aimed at altering an individual's

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behavior to foster a more harmonious relationship between the individual and their environment" (Fahmy, 1967). These varied interpretations collectively converge on a fundamental understanding of compatibility as the individual's acknowledgment of their reality and their endeavor to effectively engage with the myriad challenges and complexities that surround them.

### 7.2. Inter-compatibility:

Psychological compatibility assumes a pivotal role in safeguarding the psychological well-being of individuals. A society that neglects the importance of psychological compatibility leaves a substantial breach in the structural integrity of that society. As articulated by Samin (1997), "A lack of attention to psychological compatibility... gives rise to disruptions in work, diminished productivity, waning interest in life, and a general lack of enthusiasm... These factors are detrimental to the cohesion of any societal entity." This underscores the profound significance of psychological harmony, which can be defined as a sense of contentment and acceptance that arises from an individual's adept management of their internal conflicts and impulses. It represents a deliberate process by which the individual seeks to establish a state of equilibrium and harmony in their interactions with the external environment, necessitating the provision of conducive conditions to facilitate this equilibrium. The individual, as a perpetual endeavor, strives to maintain a delicate balance between their internal dynamics and the external world, demonstrating an ongoing commitment to preserving this stability.

### 7.3. Intra-compatibility (with others):

Social harmony encompasses the state of tranquil coexistence that an individual experiences in their interactions with their society, ultimately contributing to a sense of equilibrium within their personality. As articulated by Dhaif and Masouni (2021), "Throughout their life, individuals seek opportunities to live in a state of balance that enables them to navigate life's challenges smoothly." In the absence of such harmony, especially among adolescents, a prevailing sense of tension and frustration often ensues, stemming from the disruption of balance between their internal world and external circumstances. This discrepancy, described by psychologists, manifests as a discord between the individual's ego and their external environment. Consequently, it can be deduced that an adolescent's social harmony is an awareness cultivated through the influence of their immediate surroundings, encompassing educators within the school, parents within the home, peer groups outside, or other pertinent factors within their environment.

### 7.4. Educational physical activity:

Physical and sporting activities conducted within educational institutions hold significant educational significance. They play a pivotal role in fostering the development of essential

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psychological and physical attributes, equipping adolescents with knowledge and insights related to the educational sports domain. These activities constitute an integral component of the educational process, as elucidated by Al-Tayeb (1999), who defines them as "that facet of general education that leads to the acquisition of certain behavioral tendencies by the individual." Educational physical activity, in essence, refers to structured and deliberate motor activities that students engage in under the guidance of subject teachers. These activities are designed to cater to their psychological, physical, and cognitive needs, thereby contributing to their holistic development within the educational framework.

### 7.5. Adolescence:

Adolescence represents a profoundly sensitive phase in an individual's journey of growth, marked by distinct characteristics that set it apart from other developmental stages. This distinctiveness arises from the inherent immaturity that typifies adolescents during this period. As described by El-Sherbiny (2006), it is a term used to depict a phase in which individuals are emotionally immature, possess limited life experiences, and are approaching the culmination of their physical and mental development. Adolescents in this phase exhibit heightened sensitivity and are prone to becoming easily agitated by various issues, often experiencing feelings of insecurity.

The challenges that adolescents may encounter during the secondary stage are manifold, often manifesting as a loss of reassurance and a deficiency in psychological security, as highlighted by Bouhamida and Bounoira (2023). Therefore, adolescence constitutes a transitional period marked by significant psychological, physiological, and structural transformations following the conclusion of late childhood.

### 8. Previous and related studies:

**8.1. The study of Issa Mahoubi (2022):** The study titled *"Practicing Sports Activities and Their Impact on Psychological Adjustment Among Intermediate Stage Students: A Field Study in Bordj Bou Arreridj, Algeria"* aimed to investigate the influence of sports activities on the psychological well-being of intermediate school students. The research employed a psychological adjustment scale devised by Dr. Ijlal Muhammad Siri and administered it to a sample of 60 intermediate school students, employing a descriptive research approach. The study's findings suggest a significant impact of sports activities on the level of psychological adjustment among these students. The research concludes that sports activities hold a crucial position in the lives of middle school students, facilitating the enhancement of their skills and the development of various facets of their lives, with a particular emphasis on psychological well-being (Issa, 2022).

**8.2. Study by Mehdi Mohammadi and Oudjia Hossam (2023):** The study titled *"The Contribution of Small Games to the Development of Psychosocial Adjustment Among*

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*Fourth-Year Middle School Students (15-16 years)*" aimed to investigate the efficacy of small games in fostering psychological development, particularly in terms of students' adjustment and feelings of reassurance. The research utilized a sample of 30 students of both genders, employing a descriptive research approach. The primary data collection tool was a questionnaire consisting of 30 questions directed at the surveyed students.

The study's conclusions highlight the significant and influential role of small games in enhancing students' self-esteem during their fourth year of middle school. This phase of education is instrumental in shaping various facets of a student's personality and nurturing a sense of self-satisfaction, thereby equipping them to become active and productive members of their social environment. Small games, when incorporated into physical education and sports lessons, facilitate students' integration within a group, enabling them to discern the nuances of the surrounding society. Consequently, these games promote adaptation to their social milieu and foster positive interactions with peers, fostering an atmosphere of enjoyment, recreation, and happiness among students (Mohammadi and Oudjia, 2023).

**8.3. Study by Boudlal Youssef and Hannous Boualem (2015):** *"The Role of School Sports in Achieving Psychosocial Adjustment"* is a master's degree dissertation conducted at Larbi Ben M'hidi University in Oum El Bouaghi. The research aimed to elucidate the significance of school sports in facilitating psychological and social adjustment among secondary school students. The study delved into the association between participation in school sports activities and the attainment of psychosocial adjustment. Employing a descriptive research approach, the research relied on a questionnaire as its primary data collection instrument, administered to a randomly selected sample of 100 students. The study's findings culminated in a notable conclusion. It was determined that engaging in sports activities plays a pivotal role in nurturing individuals with balanced and harmonized personalities. This development stems from the enhancement of their psychological compatibility, both internally and externally, along with the acquisition of psychosocial compatibility. These attributes empower individuals to effectively confront the challenges of life (Boudlal and Hanous, 2015).

**8.4. Boumaraf Nassima's study (2014):** The study investigated *"the influence of physical sports activity on the psychosocial adjustment of secondary school adolescents in Biskra."* The research focused on a select group of students from Sheikh Mohamed Khairuddin High School who consistently engaged in educational physical activities. The intentional sampling method was employed, with a deliberate selection of 30 male and female students, utilizing the descriptive research approach. The measurement of psychological adjustment was conducted using Zainab Choucair's assessment tool. The findings of the study revealed notable outcomes. It was evident that the practice of sports activity exerted a positive impact on the psychological, social, physical, and academic adjustment of the students. Sports activity served as a constructive



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outlet for adolescents to alleviate the pressures they encounter. Furthermore, the research indicated that engagement in sports activities had a social dimension, enabling students to overcome shyness and introversion, thereby enhancing their social interaction skills.

### 9. Comment on previous studies:

In summary, our study stands out from previous research efforts in several notable ways:

**Unique Target Group:** Unlike most previous studies that primarily focused on students, this research diverged by directing its attention toward a distinct group of physical education and sports teachers. While previous research examined the direct impact of physical activity on student psychological adjustment, this study underscores the vital role of teachers in shaping students' psychological health, with psychological adjustment being a pivotal component. Consequently, the research underscores the importance of acknowledging the teacher's significance within the educational process and their profound influence on the psychosocial development of secondary school students.

**Dual Emphasis on Compatibility Dimensions:** In contrast to many prior studies, which either treated psychological compatibility as a holistic concept within the context of other variables in the realm of sports or explored one dimension of psychological compatibility while neglecting the other, this study diverged by differentiating between the two principal dimensions of compatibility: intrapersonal (self or personal compatibility) and interpersonal (compatibility with others or social). This distinction provides a more comprehensive and nuanced understanding of the intricate dynamics of psychological adjustment among adolescents.

While our study shares similarities with previous research in terms of foundational concepts and research methodologies, it also serves to bolster and validate prior findings, thereby contributing to the cumulative body of knowledge in the field.

## II - Methodology and tools of the study :

### 1. Exploratory study:

Conducting a pilot study constitutes a fundamental and crucial methodological step that researchers undertake to validate and ensure the reliability and effectiveness of their research instruments. It serves as an initial examination that affords the researcher insight into the functionality and appropriateness of their tools, albeit on a preliminary basis.

In the course of this study, I initiated contact with a subset of the sample participants, specifically the physical education and sports teachers, commencing on January 1, 2022. During these interactions, I engaged in pedagogical and scholarly discussions pertaining to the subject matter under investigation. To facilitate this, I randomly selected ten educators from each of Al-Naim

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Al-Nuaimi, Masoudi Attia, First of November, and Taheri High Schools, all situated within the city of Djelfa. This initial contact proved instrumental in the collection of valuable data concerning the characteristics of the study's sample. Moreover, it provided critical insights and observations that pertained to the refinement of the research instrument. As a result of this pilot study, certain adjustments were made, particularly in the modification of certain ambiguous questions, as well as the clarification of wording in questions such as the fourth and sixth ones. Furthermore, the pilot study informed improvements in the method of sample selection, ensuring alignment with the unique nature of the research topic. The pilot study also contributed to elucidating and clarifying the research topic itself.

Subsequently, on January 10, 2022, I received the completed questionnaire papers from the participants, thereby finalizing this important preparatory phase of the study.

### 2. Fields of study:

**1.2. Spatial field:** The study was conducted on a sample of Djelfa secondary schools

**2.2. Temporal scope:** The research project spanned approximately five months, commencing in January 2022 and concluding in June of the same academic year.

**3.2. The human field:** Physical education and sports teachers in Djelfa high schools constituted the study sample

### 3. Study steps:

Every research endeavor is characterized by its unique methodology and approach to data treatment and analysis. Methodology in the context of scientific research is defined as "the set of processes and steps that the researcher follows to accomplish their research objectives" (Zarawati, 2012). In this study, I opted for the descriptive methodology as it aligns with the specific objectives and aims of the research, which is to provide an in-depth portrayal of the characteristics and measurements of the sampled items. The descriptive approach, in essence, is characterized by its systematic and precise depiction of facts within a particular domain of knowledge in an objective and accurate manner (Boudaoud, 2010). This methodological choice was made to ensure that the research goals were effectively met, allowing for a comprehensive examination and measurement of the sample's characteristics.

### 4. Study population and sample:

#### 4.1. Study population:

The research population encompasses all physical education and sports teachers employed in high schools across Djelfa. The size of this population varies from one high school to another,

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with some schools having as many as four teachers in this domain, while others have only one physical education teacher. This variability is contingent upon the educational allocations linked to the student enrollment figures at each institution. It is important to note that the research also includes physical education and sports teachers who are under temporary contracts with the relevant ministry.

### 4.2..Sample:

Upon gaining a comprehensive understanding of the research population and its characteristics through the exploratory study, the selection of research participants was conducted using a random sampling method. From the research population, a sample of 50 physical education and sports teachers was randomly selected, as detailed in Table 01.

**Table 1: the sample characteristics**

|                   |    |
|-------------------|----|
| Males             | 40 |
| Females           | 10 |
| Intern teacher    | 12 |
| Permanent teacher | 38 |
| the total         | 50 |

### 5. Data collection tools:

#### 5.1. Questionnaire:

The selection of a questionnaire as the primary data collection instrument was based on its practicality and ease of distribution and retrieval. Prior to utilization, the questionnaire underwent a thorough evaluation process, encompassing both its form and content, conducted by a panel of expert referees. Subsequently, I made necessary modifications to the questionnaire, incorporating the valuable feedback provided by the referees. The finalized questionnaire comprised a total of 20 questions, equally distributed into two distinct categories: self-compatibility and compatibility with others, with each category consisting of 10 questions. To cater to the research objectives, a combination of closed and semi-open questions was employed, chosen in accordance with the specific aims of each question. This choice was particularly fitting given the nature of the research topic, which necessitated the utilization of this methodological approach. Moreover, it is worth noting that this question format allows for a more precise quantitative estimation of the data collected.

#### 5.2. .Interview:

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To facilitate the selection and oversight of sample procedures, unstructured interviews were undertaken. These interviews involved key stakeholders, including the district's physical education and sports inspector, high school principals, and physical education and sports teachers. The primary objective of these interviews was to gain a comprehensive understanding of the field-specific intricacies and gather pertinent insights.

### 5.3.. Psychometric properties of the questionnaire:

#### 5.3.1. Vality:

To ensure the integrity of the data collection instrument, I employed the internal consistency method. This entailed calculating the correlation coefficient between the cumulative score of the statements and each individual statement. In this instance, the Pearson correlation coefficient was computed, yielding a value of 0.698. According to the analysis conducted through the SPSS program, this value signifies an acceptable level of questionnaire validity.

#### 5.3.2. reliability:

In this research, the assessment of respondents' consistency in their responses to the test statements was conducted using *Cronbach's alpha* method. This analysis was carried out utilizing the statistical software SPSS, and the resulting Cronbach's alpha coefficient was computed to be 0.801. This value signifies a high level of stability and reliability in the responses provided by the respondents to the test statements.

### 6. Statistical tools:

The following statistical tools were used:

- Arithmetic average - Ka2 factor
- Percentage - Pearson correlation coefficient

### III - Presentation, analysis, and discussion of the results:

#### 1. Presentation, analysis, and discussion of the results of the first hypothesis:

The initial hypothesis posits that educational physical activity plays a role in augmenting self-compatibility among secondary school students. To assess the hypothesis's validity, a set of ten questions was formulated for each axis. In this context, we present three of these questions for analysis and subsequent discussion within this axis as follows:

**The third question:**

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- Does the student display remorse when deviating from your guidance and recommendations during the engagement in specific individual or group physical activities?

**Table 02: the student's acceptance of his teacher's directions**

| Answers   | Males | Females | percentage% | Ka2   | significance level |
|-----------|-------|---------|-------------|-------|--------------------|
| no        | 9     | 1       | 20%         | 0.768 | 0.05               |
| Yes       | 31    | 9       | 80%         |       |                    |
| the total | 40    | 10      | 100%        |       |                    |

## *Analysis of Table 02:*

From the table above, it is evident that a total of 40 physical education and sports teachers, including 9 females, expressed the belief that students experience regret when they fail to adhere to their instructions, constituting 80% of the respondents. Conversely, 10 individuals held an opposing view, indicating that the students do not express remorse when they deviate from their duties and instructions. Among this group, one was a female professor, accounting for 20%.

To investigate whether gender had an impact on these responses, a test for independence, specifically the chi-squared test ( $\chi^2$ ), was employed. The calculated  $\chi^2$  value was found to be 0.768, with one degree of freedom and a significance level of 0.05. Upon comparing the calculated  $\chi^2$  value to the critical  $\chi^2$  value, it became evident that the null hypothesis, which posits that there are no significant differences in the responses based on the gender variable, should be accepted. Consequently, the alternative hypothesis is rejected based on the statistical decision.

Nb: ( $\chi^2$ )= k2

## *Analysis of the fourth question:*

Do students exhibit sportsmanship principles in their interactions with each other when they experience losses?

**Table 3: The extent of acceptance among students when they receive defeat**

| Answers | Males | Females | percentage% | $\chi^2$ | significance level |
|---------|-------|---------|-------------|----------|--------------------|
| no      | 3     | 2       | 10%         | 1.39     | 0.05               |
| Yes     | 40    | 5       | 90%         |          |                    |

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|           |    |   |      |  |  |
|-----------|----|---|------|--|--|
| the total | 43 | 7 | 100% |  |  |
|-----------|----|---|------|--|--|

## *Analysis of the third table:*

It is evident from Table 3, which expresses the extent to which the teenage student accepts loss. The results indicate that 45 teachers believe that their students demonstrate tolerance towards each other when they face losses, constituting 90% of the respondents. Among these, five female teachers share this perspective, while the remaining five teachers, making up 10% of the total, do not hold the same view. Two of these teachers are male professors who do not share the belief in students' tolerance. To assess whether gender played a significant role in shaping these responses, a chi-squared test ( $\chi^2$ ) was employed. The calculated  $\chi^2$  value, which is 1.39, was compared against a significance level of 0.05. The test results supported the hypothesis, leading to its acceptance, as the calculated  $\chi^2$  value did not exceed the threshold for significance at the 0.05 level.

## **Seventh question :**

Does the student feel angry when he is punished by being removed from the group for engaging in group physical activity?

**Table 06 the extent to which he takes personal responsibility for his mistakes**

| Answers   | Males | Females | percentage% | Ka2  | significance level |
|-----------|-------|---------|-------------|------|--------------------|
| no        | 30    | 05      | 70%         | 1.82 | 0.05               |
| Yes       | 10    | 05      | 30%         |      |                    |
| the total | 40    | 10      | 100%        |      |                    |

## *Analysis of Table 06:*

Table 6, assesses the teenage student's response to being separated from the group, it reveals that 35 professors affirm the student's contentment and acceptance of being removed from the group, representing a 70% agreement. Among these, five female professors share this viewpoint. Conversely, 15 professors, accounting for 30% of the total, express an opposing perspective, with five of them being female professors. To investigate whether these responses were influenced by gender, a chi-squared test ( $\chi^2$ ) was conducted. The analysis supported the null hypothesis, leading to its acceptance, as the calculated  $\chi^2$  value of 1.82 did not exceed the significance threshold at the 0.05 level.

As indicated in Table 2, the observation of regret in a student during physical activity following a violation of their teacher's instructions suggests that the student possesses the ability and internal

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strength to acknowledge their mistake and engage in self-critique. This regret serves as a psychological reaction through which the student endeavors to amend their behavior in subsequent instances of engaging in educational physical activity. Some psychologists contend that admitting one's mistakes represents an ideal response, as it demonstrates an individual's alignment with themselves initially. In contrast, individuals who refuse to acknowledge their mistakes are viewed as psychologically fragile and tend to perceive confession as a psychological breakdown. As one source notes, "Admitting a mistake and apologizing for it explicitly or indirectly are common responses when committing a mistake... Some individuals possess what is referred to as a fragile ego, believing that facing the truth would be psychologically devastating, and their defense mechanisms prevent them from doing so" (Wansh, 2018). Consequently, when students are allowed to engage in physical activity and receive guidance from their subject teachers, they frequently attain a state of internal harmony, particularly during the phase of self-expression and reaction to various situations.

Examining Table 2, it becomes evident that the student, while under the watchful eye of their teacher during physical activity, demonstrates a willingness to accept defeat. They introspect and take responsibility for their contribution to the loss. This behavior stands in contrast to many football events, including those among adults, often characterized by detrimental psychological behaviors such as aggressive play, agitation, and other undesirable conduct. In contrast, the responses from physical education and sports teachers indicate that teenage students' acceptance of defeat in a competitive physical activity reflects their expanding psychological capacity. It signifies their readiness to shoulder external pressures and gradually adapt to them, all while working towards overcoming these challenges as swiftly as possible.

This behavior underscores the adolescent's growing capacity for self-compatibility and their ability to harmonize with themselves. Engaging in physical activity plays a pivotal role in cultivating this trait, as it provides the teenager with numerous sequential opportunities to develop these skills, particularly in group football activities. This stands in contrast to the relatively limited opportunities for such growth in their daily life experiences.

As depicted in Table 06, it becomes evident that when a student receives disciplinary action from their teacher, they respond in a positive manner, accepting the punishment with satisfaction and compliance. This behavior underscores the concept of self-compatibility, which is grounded in the acknowledgment of one's mistakes and the willingness to bear the consequences of those mistakes. In contrast, an inflated ego can hinder an individual from admitting their mistakes. As Mahmood (1999) notes, "The conflict between the ego and the external environment stems from a deficiency in self-compatibility. The more inflated the ego, the more resistant it becomes to accepting and embracing criticism." From an educational standpoint, this behavior is undesirable.

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Engaging in educational physical activity guides teenagers toward accepting their mistakes and being willing to face the consequences. This includes disciplinary measures, especially when punishment is administered equitably among students during physical activities. The principle that every student who commits an error is subject to punishment encourages greater attentiveness and respect for all decisions made by the referee or teacher.

### 2. Presentation and discussion of the results of the second hypothesis:

The hypothesis posits that educational physical activity contributes to enhancing compatibility with others among secondary school students. To assess the validity of this hypothesis, we will focus on the analysis and discussion of three selected questions, beginning with question 12:

Question 12:

- Do students collaborate and share solutions for educational and learning situations related to physical activities among themselves?

**Table 11 the extent of students' participation with each other in solving educational difficulties and situations**

| Answers   | Males | Females | percentage% | Ka2  | significance level |
|-----------|-------|---------|-------------|------|--------------------|
| no        | 30    | 05      | 70%         | 1.37 | 0.05               |
| Yes       | 10    | 05      | 30%         |      |                    |
| the total | 40    | 10      | 100%        |      |                    |

#### *Analysis of Table 11:*

Based on the data presented in the table, it is evident that physical education and sports teachers who believe that students actively engage with their peers in various educational situations amount to 35, including 5 females, representing a 70% agreement rate. Conversely, there are 15 instances where teachers believe that students do not participate in these situations, including 5 females, constituting a 30% agreement rate. To determine whether gender plays a role in this outcome, we conducted a Chi-squared test for independence, yielding a value of 1.37 at a degree of freedom of 01 and a significance level of 0.05.

Upon examination, we found that the calculated Chi-squared value is lower than the tabulated one. Consequently, it becomes evident that the null hypothesis, which posits that there are no statistically significant differences in responses due to the gender variable, holds true. In other



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words, there are no discernible differences in responses based on gender. As a result, the statistical decision suggests accepting the null hypothesis while rejecting the alternative hypothesis.

Question fifteen:

-Do students engage in excessive individual play while performing a group physical activity?

**Table 14 the extent of preference for individual play over group play**

| Answers   | Males | Females | percentage% | Ka2       | significance level |
|-----------|-------|---------|-------------|-----------|--------------------|
| no        | 40    | 05      | 90%         | 0.21<br>1 | 0.05               |
| Yes       | 03    | 02      | %20         |           |                    |
| the total | 43    | 7       | 100%        |           |                    |

### *Analysis of table 14*

The data in the table above reveals that physical education and sports teachers who believe that students do not resort to individual play as a method while engaging in group physical activities amount to 45 instances, including 5 female teachers, constituting a 90% agreement rate. To investigate whether gender has any impact on this outcome, a Chi-squared test for independence was conducted, resulting in a value of 1.37 at a degree of freedom of 01 and a significance level of 0.05.

Upon analysis, it became evident that the calculated Chi-squared value is lower than the tabulated one. Consequently, it reaffirms the null hypothesis, which asserts that there are no statistically significant differences in responses attributable to the gender variable. In other words, there are no notable variations in responses based on gender. Thus, the statistical decision advises accepting the null hypothesis while rejecting the alternative hypothesis.

Question nineteen:

-Does selfishness prevail in including skilled elements in physical activity among students when the freedom of choice is left to them in forming their teams?

**Table 20: The Behavior of Selfish Students When Selecting Teammates**

| Answers | Males | Females | percentage% | Ka2 | significance level |
|---------|-------|---------|-------------|-----|--------------------|
| no      | 38    | 07      | 90%         |     |                    |

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|           |    |    |      |      |      |
|-----------|----|----|------|------|------|
| Yes       | 02 | 03 | 20%  | 1.37 | 0.05 |
| the total | 40 | 10 | 100% |      |      |

## *Analysis of table 20:*

From the table above, it is evident that physical education and sports teachers who believe that students do not engage with their peers in the game comprise 35 instances, including five female teachers. This represents a 70% agreement rate. In contrast, the number of teachers who hold the belief that students do participate amounts to 15 instances, with five of them being females, accounting for a 30% rate.

To investigate whether gender plays a role in this outcome, a Chi-squared test for independence was conducted, yielding a value of 0.32 with one degree of freedom and a significance level of 0.05.

Upon examination, it is apparent that the calculated Chi-squared value is lower than the tabulated one. As such, the null hypothesis, which suggests no statistically significant differences in responses based on the gender variable, holds true. This implies that there are no notable variations in responses based on gender. Consequently, the statistical decision advises accepting the null hypothesis while rejecting the alternative hypothesis.

The findings presented in Table 11 underscore the teenager's ability to actively engage, assist, and motivate their peers in resolving educational and practical situations encountered during physical activities. This behavior reflects a capacity for smooth adaptation to others through understanding, as previously indicated by Youssef and Hanous (2015) and Al-Zayadi (1964). Secondary school teenagers, as observed by their teachers, exhibit a sense of cooperation during physical activity with their peers. The majority of students contribute to overcoming challenges encountered during practice, showcasing a cooperative spirit.

Students' participation in assisting their peers in overcoming difficulties, such as providing encouragement after a failed attempt at a challenging exercise like long jumps or shot put, highlights the educational value of these behaviors. Furthermore, this behavior demonstrates that educational physical activity has a positive impact on fostering compatibility with others. It encourages students to support their more skilled classmates, particularly when dealing with complex or demanding educational scenarios. This recommended educational behavior is further reinforced by physical education and sports teachers, ultimately becoming an integral part of the teenager's personality.

The results obtained from Table 14 clearly illustrate that secondary school students possess a strong sense of group cohesion and camaraderie when engaging in group play with their peers

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during physical activities. This is reflected in their integration within the group, effective communication with team members, a sense of satisfaction, and an enhanced state of harmony within their social environment. These behaviors align with the concept of social adjustment, which involves adapting to the social environment, integrating into it, and meeting its requirements (Bahi, Hassan, and Heshmat, 2002).

Regarding Table 20, the responses from physical education and sports teachers indicate that secondary school students do not exhibit selfishness when it comes to dividing and selecting group members. Instead, the results suggest that students are inclined to share with others and aim to contribute to their happiness and satisfaction. This cooperative approach results in a group that competes and interacts on the basis of equal opportunities for everyone. Such behavior is highly valued, especially among adolescents, as it reflects their ability to empathize with others, placing themselves in their peers' shoes and understanding their feelings. Achieving social harmony, as Bahi, Hassan, and Heshmat (2002) suggest, requires individuals to accept others as they accept themselves and to be capable of empathy and understanding.

### IV - Conclusion:

In conclusion, it can be deduced that educational physical activity plays a significant role in enhancing both self-compatibility and compatibility with others among secondary school adolescents, as indicated by the opinions of physical education and sports professors. This finding aligns with the research conducted by Mahdi Mohammadi and Awagia Hossam, titled "The Contribution of Small Games," which concluded that small games have a substantial and positive impact on improving self-esteem and shaping various aspects of personality among fourth-year middle school students. These games also help alleviate negative behaviors like anger, reduce anxiety and tension, and channel students' energy (Mohammadi and Awaja, 2023).

Similar studies, such as the one conducted by Issa Mohoubi titled "Practicing Sporting Activities and Their Impact on the Degree of Psychological Adjustment Among Middle School Students," have yielded results that are consistent with the findings of this research. Mohoubi's study concluded that sporting activities significantly contribute to enhancing psychological adjustment among middle school students, influencing various aspects of their lives, particularly the psychological dimension (Issa, 2022). Educational physical activity, as emphasized in numerous studies, undeniably plays a pivotal role in shaping an individual's psychological attributes, especially during adolescence.

Engaging in educational physical activity bestows individuals with a range of personality traits that are essential for mental health. These traits encompass qualities such as inner peace, emotional resilience, self-control, a sense of responsibility, and the ability to accept defeat and

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work towards improvement (Al-Houri, 2017). This highlights the critical role of physical activity in fostering psychological well-being and personal growth, particularly among adolescents.

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