

## **Mental Skills Academic Compatibility and Their Relationship to Skill Self-Concept in Female Students' Fencing Lesson**

Israa Razzaq Chafat<sup>1</sup>, Ali Nazar Mohi Mahdi<sup>2</sup>, Ahmed Hassan Ghdhaib<sup>3</sup>

<sup>123</sup>Faculty of Physical Education and Sports Sciences, University of Karbala, Iraq

[israa.r@uokerbala.edu.iq](mailto:israa.r@uokerbala.edu.iq)

Correspondensi Author

Email: [israa.r@uokerbala.edu.iq](mailto:israa.r@uokerbala.edu.iq)

Article History

Received: 03-05-2026;

Reviewed: 13-05-2026;

Accepted: 30-06-2026;

Published: 28-08-2026.

### **ABSTRACT**

*Mental skills are an important dimension in educational process, especially in field of sports, as they play a fundamental role in development. And mastery of motor skills, especially offensive and defensive fencing skills, as they are characterized by motor performance. Academic compatibility, on other hand, refers to student's appropriate behavior to confront all problems arising from satisfying and fulfilling social and psychological needs, establishes a set of constructive social relationships with colleagues and teachers and actively participates in cultural, social, and sports activities, while skill-based self is a cognitive process for current level of basic skills and continuity by performing all exercises with high spirits and morale, through an understanding of attractiveness of physical form and also ability to protecting human body and maintaining confidence in one 's outward appearance, and based on the researchers' belief in importance of mental skills and academic compatibility among female students in their overall academic journey. Skill-based self plays a role in learning and self-confidence in sports situations, the researchers urged further study of these variables and an understanding of their true nature through interviews and expert guidance, they found weaknesses in three measures: mental skills, academic adjustment, and especially skills-based abilities female students of physical education and sports science colleges this is a modest scientific attempt, a contribution to service of build community, the study aims to preparing measures of mental skills, academic compatibility, and self-skill in fencing lesson, identifying reality of mental skills, academic compatibility, identifying relationship between mental skills, self-skills, academic compatibility, and self-skills in a fencing lesson for the female students. Conclusions were members of sample enjoyed good levels in mental skills, academic compatibility, and self-skill, a significant correlation between mental skills and skill self, also between academic compatibility and skill self in fencing, there is a correlational relationship between mental skills and academic compatibility with skill self in fencing lesson for female students.*

**Keywords:** Mental skills; Academic compatibility; Self-skills.

# **Jurnal Pendidikan Kepelatihan Olahraga: Pejuang**

**Volume 2 Nomor 3 Oktober 2026**

**E-ISSN: 3090-1278**

## **ABSTRAK**

Keterampilan mental merupakan dimensi penting dalam proses pendidikan, terutama di bidang olahraga, karena memainkan peran fundamental dalam perkembangan. Dan penguasaan keterampilan motorik, terutama keterampilan ofensif dan defensif anggar, yang ditandai dengan performa motorik. Kompatibilitas akademik, di sisi lain, merujuk pada perilaku siswa yang tepat untuk menghadapi semua masalah yang timbul dari kebutuhan sosial dan psikologis yang memuaskan dan memenuhi kebutuhan sosial, membangun serangkaian hubungan sosial yang konstruktif dengan rekan kerja dan guru serta aktif berpartisipasi dalam kegiatan budaya, sosial, dan olahraga, sementara diri berbasis keterampilan adalah proses kognitif untuk tingkat keterampilan dasar dan kontinuitas saat ini dengan melakukan semua latihan dengan semangat dan moral yang tinggi, melalui pemahaman tentang daya tarik bentuk fisik serta kemampuan melindungi tubuh manusia dan menjaga kepercayaan diri terhadap penampilan luar, serta berdasarkan keyakinan peneliti akan pentingnya keterampilan mental dan kecocokan akademik di antara siswa perempuan dalam perjalanan akademik mereka secara keseluruhan. Diri berbasis keterampilan berperan dalam pembelajaran dan kepercayaan diri dalam situasi olahraga, para peneliti mendorong studi lebih lanjut tentang variabel-variabel ini dan pemahaman tentang hakikat sebenarnya melalui wawancara dan bimbingan ahli, mereka menemukan kelemahan dalam tiga ukuran: keterampilan mental, penyesuaian akademik, dan terutama kemampuan berbasis keterampilan. Mahasiswa perempuan pendidikan jasmani dan ilmu olahraga. Ini adalah upaya ilmiah yang sederhana, kontribusi untuk pelayanan membangun komunitas, studi ini bertujuan untuk mempersiapkan ukuran keterampilan mental, kompatibilitas akademik, dan keterampilan mandiri dalam pelajaran anggar, mengidentifikasi realitas keterampilan mental, kompatibilitas akademik, mengidentifikasi hubungan antara keterampilan mental, keterampilan diri, kompatibilitas akademik, dan keterampilan diri dalam pelajaran anggar untuk siswa perempuan. Kesimpulan adalah anggota sampel menikmati tingkat keterampilan mental yang baik, kompatibilitas akademik, dan keterampilan diri, korelasi signifikan antara keterampilan mental dan keterampilan diri dalam anggar, juga antara kompatibilitas akademik dan keterampilan diri dalam pelajaran anggar untuk siswa perempuan.

Kata Kunci: Keterampilan mental; Kecocokan akademik; Keterampilan diri.

## **INTRODUCTION**

Physical education and sports are among fields in an individual can express themselves expressed and released energy in form of motor skills. In various sports and physical education activities one aspect of these areas which are included in educational plans to achieve educational goals. Dueling, like other forms of combat remaining sports its performance depends on a set of functional competencies and also kinetic energy, where each activity physical it is closely linked to functioning of internal organs, through which athlete works hard seeks to access devices interior to a high level of adaptability all of this is reflected positively at level of physical fitness in general affects correct understanding of all training units and ability to continue training actively and

# **Jurnal Pendidikan Kepelatihan Olahraga: Pejuang**

**Volume 2 Nomor 3 Oktober 2026**

**E-ISSN: 3090-1278**

energetically at a high level. All of this leads athlete to desired goal of achieving high performance (Cao et al., 2024; Gamarra et al., 2022; Wang et al., 2023; Xiao et al., 2025).

Mental skills ability to visualize, self-confidence, dealing with anxiety, ability to focus attention, ability to relax, and motivation play a significant and prominent role in educational science, especially in sports field is developing and perfecting performance of motor skills helps learner to achieve a good mental state that prevents entry of negative and distracting thoughts and maintains focus, as well as process of developing learners' skills and abilities comes by focusing on educational process, which is represented by teaching methods and techniques, given their effectiveness in translating learned skill and developing mental and physical skills in learner employs mental skills educational and learning situations (Carpenter et al., 2013; Santos et al., 2019; Wang et al., 2023).

Good academic adjustment means that student can respond successfully to changes that occur in school environment, including ability to communicate with others through his proper interaction with teachers, specialists in sports field, and colleagues, which is reflected on him psychologically, so feels comfortable and happy, and situation may reach point where has an unbridled desire for creativity and qualification (Carpenter et al., 2013; Santos et al., 2019; Tang et al., 2025).

Concept of self is one of psychological concepts that must be available and important for every human being, as every person makes more effort to protect himself, and this motivation increases towards achievement and strengthening value of self, because athlete's value to key to motivation. Early athletic experiences are important to a large extent in formation personal confidence by themselves, also opposite, they feel less worthy of themselves to people. Those who have experiences of failure at an early age tend to have less self-confidence, here it is important to emphasize a crucial point each player becomes aware of areas where she is making mistakes in her performance. This highlights importance of study, as it will contribute to understanding mental skills, academic compatibility, and their relationship to skill-based self in fencing lesson for students.

Mental skills are an important dimension in educational process, especially in field of sports, as they play a fundamental role in development, mastering motor skills, especially offensive and defensive fencing skills, as they are characterized by performance dynamic, changeable nature of system requires a rapid response to circumstances. Variable in learning processes, teachers must plan well mastery of developing mental skills in field of fencing so that they can achieve required level in learning skills, as one of the most important processes is organizing a series of adaptations. Cognitive processes and their development training, goal is to achieve optimal results academic compatibility is a healthy student behavior, to confront all problems arising from satisfaction and fulfillment of social and psychological needs, this is achieved through building constructive social relationships with female colleagues and teachers and effective contribution their cultural, social, and sporting activities, while skill-based self is process of recognition at individual level, one's basic skills, as well as maintaining a high spirit in performing required exercises, are crucial, through an awareness of attractiveness of one's physical constitution and one's confidence by its external appearance and its ability to protection process body, student's awareness of level of ability skill and growth process of its muscles documented it. Situations that

# Jurnal Pendidikan Kepelatihan Olahraga: Pejuang

Volume 2 Nomor 3 Oktober 2026

E-ISSN: 3090-1278

require use all ability she possesses during exercises, as well as using this ability to learn new motor skills.

Believing in importance of mental skills and academic adjustment among female students in their overall academic journey skill-based self plays a role in learning and self-confidence in sports situations, which is what researchers were urged to study these variables and ascertain their true nature through interviews and expert guidance. They found weaknesses in three measures: mental skills, academic adjustment, especially skills-based abilities. Female students of physical education and sports science colleges this is a modest scientific attempt, a contribution to service of build community.

Research objectives to prepare measures of mental skills, academic compatibility, and self-skill, identifying reality of mental skills, academic compatibility, self-skill in fencing lesson, identifying relationship between mental skills, self-skills, academic compatibility, self-skills in a fencing lesson for female students.

Research hypothesis there are significant differences in mental skills and academic compatibility with skill-based self in fencing lesson, there is a correlation between mental skills and academic adjustment with skill-based self in female students fencing lesson.

## METHODS

### Research Methodology

The researchers followed descriptive approach using both survey and correlational methods, as these were suitable for research requirements. Community included third-year female fencing students from universities in Babylon Governorate Babylon, Al-Mustaqbal, Al-Qasim Al-Khadra, Al-Hilla for Academic year 2024-2025, their number is 90 female students .

### Field Procedures

To achieve objectives of current study, the researchers developed mental skills measures, academic adjustment, and self-skills, following procedures were carried out:

Procedures for preparing standards mental skills, academic compatibility, and self-skills: Defining purpose of measures: aim of developing research scales is to measure mental skills, academic adjustment, and self-skills among third-year students in faculties of physical education and sports sciences Universities in Babylon Governorate in fencing.

Selecting Research Measures: Mental skills scale: mental skills scale was adopted which British designed Stephen Bell, John Albinson Christopher Shambrook in sports psychology which was adapted, modified, and applied by Mohammed Hassan Alawi in sports activities, ability to relax, ability to focus attention, ability to cope with anxiety, self-confidence, and motivation for athletic achievement to measure mental skills of athletic performance 24 items, six alternatives. The researchers readapted scale to suit sample in terms of modifying items and correcting weights. Table (1) shows distribution of items and their orientations, validity of scale was determined by 12 experts and specialists, it was approved with a 100% approval rate.

**Table 1.** Distribution of items on mental skills scale

| Fields               | Positive paragraphs | Negative paragraphs |
|----------------------|---------------------|---------------------|
| Ability to visualize | 1-2-4               | 3                   |

# Jurnal Pendidikan Kepelatihan Olahraga: Pejuang

Volume 2 Nomor 3 Oktober 2026

E-ISSN: 3090-1278

|                                     |             |             |
|-------------------------------------|-------------|-------------|
| Self-confidence                     | 5-7         | 6-8         |
| Dealing with anxiety                |             | 9-10-11-12  |
| Ability to focus attention          |             | 13-14-15-16 |
| Ability to relax                    | 17-19-20    | 18          |
| Motivation for athletic achievement | 21-22-23-24 |             |

Academic compatibility scale: After reviewing previous literature and studies on academic adjustment, the researchers adopted a scale developed by Hamdi Abdullah Abdul-Azim, consisting of 70 items and four response options: strongly agree, agree, disagree, strongly disagree. Revised scale was presented to a panel of 12 experts and specialists, who approved all items except for following. 1.5 Item 5 of academic compatibility scale did not receive agreement of experts and specialists. (5, 8, 15, 22, 25, 29, 31, 32, 34, 41, 43, 53, 66, 61, 57), scale now consists of 55 items, taking into account aforementioned observations and modifications, as shown in table (2).

Self-skills scale: scale prepared by the researchers Ahmed Muayyad Hussein Ali was used, consists of 22 items and includes five answer options: always, often, sometimes, rarely, Never, revised scale items were presented to a group of 12 expert specialists, all 22 items of Self-Skills Scale were approved, taking into account mentioned observations and modifications as shown in table (2).

**Table 2.** Mentioned observations and modifications

| Scale                                                                                              | Se<br>c. | Paragraph number                                                                                                                                                              | Parag<br>raphs<br>digit | Agree | Don't<br>agree | Calculat<br>ed Chi2 | Sig.<br>type |
|----------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------|----------------|---------------------|--------------|
| Acade<br>mic<br>compat<br>ibility                                                                  | 1        | 2, 4, 6, 9, 10, 12, 13, 14, 16,<br>17, 20, 21, 23, 24, 28, 33,<br>35, 36, 38, 39, 42, 45, 46,<br>47, 48, 49, 50, 51, 52, 54,<br>55, 56, 58, 59, 60, 62, 64,<br>65, 68, 69, 70 | 41                      | 12    | Zero           | 12                  | Sig.         |
|                                                                                                    | 2        | 1, 7, 11, 18, 26, 30, 37, 40,<br>44, 63, 67                                                                                                                                   | 11                      | 11    | 1              | 8.33                | Sig.         |
|                                                                                                    | 3        | 3, 19, 27                                                                                                                                                                     | 3                       | 10    | 2              | 5.33                | Sig.         |
|                                                                                                    | 4        | 8                                                                                                                                                                             | 1                       | zero  | 12             | 12                  | Insig.       |
|                                                                                                    | 5        | 66, 61, 53, 32, 25                                                                                                                                                            | 5                       | 8     | 4              | 1.33                | Insig.       |
|                                                                                                    | 6        | 57, 43, 41, 34, 34, 31, 29, 22,                                                                                                                                               | 9                       | 5     | 7              | 0.33                | Insig.       |
| Skill<br>self                                                                                      | 1        | 1, 4, 5, 6, 8, 9, 11, 12, 13, 14,<br>16, 17, 19, 20, 21                                                                                                                       | 15                      | 12    | Zero           | 12                  | Sig.         |
|                                                                                                    | 2        | 2, 7, 10, 15, 18, 22                                                                                                                                                          | 6                       | 11    | 1              | 8.33                | Sig.         |
|                                                                                                    | 3        | 3                                                                                                                                                                             | 1                       | 10    | 2              | 5.33                | Sig.         |
| Value of Chi <sup>2</sup> (3.84) below significance level of (0.05) and at a degree of freedom (1) |          |                                                                                                                                                                               |                         |       |                |                     |              |

## Pilot Testing of Scales

The researchers conducted a pilot study on a randomly selected sample of third-year students at College of Physical Education and Sports Sciences, University of

# Jurnal Pendidikan Kepelatihan Olahraga: Pejuang

Volume 2 Nomor 3 Oktober 2026

E-ISSN: 3090-1278

Babylon and University of Al-Mustaqbal, number of students is 10, On Thursday, October 25, 2024, in order to achieve several goals, which are checking clarity of instructions, clarity of scale items, and their accuracy. Identifying time taken to answer items on scales. Identifying errors that the researchers may have made before conducting main experiment. This experiment revealed that instructions for scales and their items were clear to sample, and that time taken to answer three scales ranged between 15-25 minutes, and with that measurements are ready for application.

Psychometric properties of scales

Validity of Measures: The researchers relied on authenticity of content. This type of validity was verified when three criteria were presented to a group of 12 expert and specialist gentlemen in field of Sports Psychology, then questionnaire forms were collected, their data were extracted, and statistical work was carried out on them, as shown in Table (2).

Measurement Reliability: Reliability was calculated using split-half method to apply this method, scale items were divided into odd and even items, and variance of odd and even items was calculated and subjected to a coefficient. When comparing calculated value of mental skills items, which was (0.84), calculated value of academic adjustment items was (0.74), and calculated value of self-skill items was (0.83) at a significance level (0.000), which are high reliability coefficients, indicating homogeneity of odd and even items. These scores mean reliability for half of test.

In order to obtain reliability of entire test, the researchers applied Spearman-Brown equation, and it appeared that value of Spearman-Brown reached (0.91) for mental skills, (0.85) for academic adjustment, and (0.91) for skill self, which are high values that indicate reliability of scales.

Applying the three standards: After completing statistical analysis of three scales, they were applied to application sample of 90 female students on 1/11/2024 with help of assisting work team.

Statistical methods

To extract results, the researchers used Statistical Package for Social Sciences SPSS, statistical methods are Spearman's coefficient Brown, Mean, Standard deviation. Simple correlation coefficient (Pearson), Law of (t) for independent samples, Coefficient (f), Chi<sup>2</sup>.

## RESEARCH RESULTS

Presenting, analyzing, and discussing results of mental skills, academic adjustment, and self-skill measures among sample

**Table 3.** Results of means and standard deviations for mental skills measures, academic adjustment, and self-skills

| No. | Scale                  | Mean   | Standard deviation |
|-----|------------------------|--------|--------------------|
| 1   | Mental skills          | 15.72  | 3.62               |
| 2   | Academic compatibility | 155.91 | 17.34              |
| 3   | Self-skill             | 91.98  | 11.43              |

Table (3) shows means and standard deviations of mental skills, academic adjustment and self-skill scales among sample members, results showed that mean of mental skills scale is (15.72) and a standard deviation of (3.62), results of same table

showed that mean of academic adjustment scale is (155.91) and a standard deviation of (17.34). As for results of self-skills scale, mean of scale skill level is (91.98) and standard deviation is (11.43).

Presenting results of correlation among variables, its analysis, and discussion

To achieve third objective, the researchers extracted Pearson's correlation coefficient values between mental skills and academic adjustment, between mental motivation and skill-based self, and between academic adjustment and skill-based self, individuals in sample are as shown in Table (4).

**Table 4.** Values of Pearson's correlation coefficient and partial correlation coefficient among variables

| No. | Variables                              | Pearson correlation coefficient value | Sig. level | Sig. type |
|-----|----------------------------------------|---------------------------------------|------------|-----------|
| 1   | Mental Skills X Academic Compatibility | 0.87                                  | 0.000      | Sig.      |
| 2   | Mental skills X Self-skill             | 0.74                                  | 0.001      | Sig.      |
| 3   | Academic compatibility X Self-skill    | 0.82                                  | 0.001      | Sig.      |
| 4   | Partial correlation coefficient values | 0.67                                  | 0.001      | Sig.      |

Table (4) shows Pearson correlation coefficient between mental skills and academic adjustment (0.87) at a significance level of (0.000), which is less than significance level of (0.05), indicating a statistically significant correlation between these two variables, same table also shows Pearson correlation coefficient between mental skills and self-efficacy (0.74) at a significance level of (0.001), which is less than significance level of (0.05), indicating a statistically significant correlation between these two variables, same table showed that Pearson correlation coefficient for academic adjustment and self-skills was 0.82, with a significance level of 0.001, which is less than significance level of 0.05. This indicates a statistically significant correlation between these two variables, same table also showed that partial correlation coefficient among variables among participants was 0.67, with a significance level of 0.001, which is less than significance level of 0.05. This indicates a statistically significant correlation among variables.

## DISCUSSION

Discussion of results regarding reality of mental skills, academic adjustment, and self-skills

Based on results presented in table (3), sample demonstrated a good level of mental skills, as evidenced by high mean score. The researchers attribute this result to fact that third-year female students in College of Physical Education and Sports Sciences at universities in Babylon Governorate possess good mental skills as a result of accumulated experience they gained during their years of study in fencing, acquisition of skills is better as a result of practice and training, and number of educational units participates in. According to variable of academic level they are in, which is characterized by similarity in structure of skills preparation in fencing lesson, as they follow same methodology and method in process of learning basic skills and complex motor phrases and practicing them, in addition to attention to psychological aspect

# **Jurnal Pendidikan Kepelatihan Olahraga: Pejuang**

**Volume 2 Nomor 3 Oktober 2026**

**E-ISSN: 3090-1278**

during educational units by working to instill a spirit of encouragement and working to mobilize psychological energy and enthusiasm of students, ability to controlling their behavior, working on self-discipline, self-confidence, focus, and utilizing all Mental skills in a picture positive to align with learning and training situations and changing conditions of fencing skills.

This leads to better performance of skills and duties, and complete face, increases experiences enjoyed by female students. This is due to large number of assignments and competitions in educational units, variation in their difficulty and importance, and their acquisition Important psychological abilities, including mental skills, which are condition qualifies its owner accomplish creations avenue, multiple methods stimulate is amazing condition, or solve problems presented in ways different, as well as being one of important concepts with a significant impact so learn motor skills and their training, as they are linked to level of performance and consequently academic achievement, and what is achieved with its presence, it is important to direct attention to certain activities that attract students' interest, along with perseverance and continued effort in a better way.

Mental skills are of great educational importance as they represent both an end and a means at same time. This is consistent with what was mentioned about stimulating students ' motivation to make them practice and cognitive activities outside scope of work studies and my life are my future. Researchers believe that intellectual skills play a crucial role in enhancing students' performance and productivity across various academic fields and activities. This places a significant responsibility on teachers and those involved in educational process to maintain continuity of students intellectual skills throughout their studies.

Like other members of society, students have inclinations, motivations, and needs that they strive to fulfill , and their adjustment depends on degree to which these needs are met. Researchers attribute high scores of sample on academic adjustment scale in fencing lesson to fact that students possess superior and more mature intellectual abilities. They value themselves and exhibit more conservative and balanced behavior compared to their peers in lower grades. This is due to accumulation of experiences gained throughout their years of study, enabling them to achieve good academic adjustment.

Academic adjustment is considered a key factor in achievement and success, and for it to occur, there must be psychological and social adjustment, characterized by balance, emotional, calm, and encouraging educational atmosphere, suitable environment for study that provides students with opportunity to learn, grow and succeed. This is what was referred to in academic adjustment: a state that appears to be a continuous dynamic process undertaken by students. To understand study curricula and success in them and working to achieve harmony between them and school environment and its basic components, teachers, colleagues, cultural, social and sports activities, as well as study curriculum materials and academic achievement.

Results in Table (4) showed that sample possessed a good level of self -skill. The researchers attribute this result to student's awareness and appreciation of own good level of motor skills in fencing lessons, level of proficiency and readiness of students in various motor skills that collectively constitute basic motor skills of fencing is crucial. Fencing is a game characterized by its many changing situations, high levels of

psychological pressure during matches, and rapid and intense changes. This can significantly impact students' skill performance and consequently, their academic achievement in this subject.

The researchers attribute high level of skill proficiency demonstrated by third-year students sample in fencing to its inherent challenge, students' individual skill capabilities, their educational and training status years of study, skill development process, structure of educational process followed at Colleges of Physical Education and Sports Sciences in Babylon Governorate, instructors employ a set of well-planned and scientific practical steps in teaching and training basic fencing skills, diversifying their performance according to varied and changing situations inherent in game, we find that instructors of this subject are a major factor in developing students skills and helping them reach a good level in this performance, and this requires student to possess good physical abilities. This is what has been done. Referring to it in skillful self it is considered one of psychological characteristics and traits that are closely related to traits Physical and bodily Without it that player 's performance becomes weak.

Discussion of results of Pearson correlation among three variables of sample

Results presented in Table (4) show a significant correlation between intellectual skills and academic adjustment among sample. Researchers attribute this relationship to fact that process of academic adjustment begins with a specific motive or desire that drives student and directs behavior toward achieving goal. When student is hindered from reaching goal and motive is not satisfied, she undertakes numerous tasks and various actions to try to overcome this obstacle and reach goal. Upon reaching goal that satisfies motivation, process of academic adjustment is completed.

This aligns with previously mentioned view that academic adjustment is ultimate outcome of dynamic and constructive relationship between student and academic environment, which influences, student's progress and academic and personal development are considered among the most important indicators of this relationship, including diligence in academic achievement, satisfaction and acceptance of school standards and compliance with them, and carrying out what is required in an organized and coordinated manner.

Self-esteem skill a clear and accurate understanding of student's activities and evaluation of skill performance across various abilities constitutes self-evaluation. This is a realistic view of work process aimed at correcting errors in skill performance. If these aspects are objectively considered, they will help reach. Better skill performance on field Individual, and this is consistent with what was indicated in skill self-esteem is a picture of person's concept and perception of their motor skills through exercise and also matches, which may be positive or negative, and is an expression of motor skills that player possesses that are specific to that game. In addition to being an expression of competence and readiness to perform skills in training and competition according to personal perspective.

The researchers attribute significant correlation between mental skills and self-skill in fencing among sample to fact that student's motivation is greatly affected by level of confidence in abilities and potential; if lacks conviction firmly held belief that it if possess capabilities to achieve performance and goal you seek, then will not exert effort necessary to achieve goal, for student who does not believe that. The ability and

# **Jurnal Pendidikan Kepelatihan Olahraga: Pejuang**

**Volume 2 Nomor 3 Oktober 2026**

**E-ISSN: 3090-1278**

readiness that enable to perform skills better will decrease motivation and, consequently, contribution to educational units.

The researchers believe that skill-based self it is one of characteristics and psychological traits that are associated it is strongly linked to physical and bodily attributes, and without them, student's performance becomes weak, class has become student's psychological skill-based self is one of important aspects in educational units based on presented results, a significant correlation was found between academic adjustment and self-awareness of skills among sample. The researchers attribute this relationship to fact that academic adjustment begins with a specific motivation or desire, also to student's self-awareness of skills and appreciation of fencing related motor skills and level of proficiency, and readiness with regard to various motor skills that together constitute basic motor skills in this game, which is characterized by being a game that includes many playing situations that are accompanied by psychological pressures that are characterized by their intensity and rapid change, which affects skill performance.

Student's performance and subsequent academic achievement in this subject are attributed by the researchers to high level of fencing skills possessed by female students in sample due to their individual abilities and skills, their educational and training status years of study, skill development process, structure of educational process followed at stage, and practical and scientifically sound steps taken by teachers in teaching and training basic fencing skills, we find that teachers of this subject represent a key factor in developing students' skills and reaching level good at this performance.

Discussion of results of partial correlation among three research variables of sample

In order to achieve ultimate goal of research by identifying correlations among variables, it was necessary to determine type of correlation between skill-based self and both mental skills and academic adjustment among third-year female students in Colleges of Physical Education and Sports Sciences at universities of Babylon Governorate. Since research includes two main variables mental skills and academic adjustment, it was necessary to determine their relationship to other variable skill-based self.

Partial correlation coefficient was used partial correlation coefficient is used when problem being studied by the researchers includes two independent variables and one dependent variable, so that it is reduced to a single numerical coefficient that clarifies relationship between two independent variables and dependent variable. It is particularly useful in psychological, educational, and social research, since correlation problems in these fields are problems of partial correlation, relying on partial correlation coefficient between two independent variables and dependent variable to extract value of this coefficient, it was necessary to identify implicit relationships among variables to reveal final value of coefficient value of partial correlation. Pearson correlation coefficient between mental skills and academic adjustment, mental skills and self-skills, and academic adjustment and self-skills was found to be 0.67, indicating a correlation among variables.

## **CONCLUSIONS AND RECOMMENDATIONS**

Measures of mental skills, academic compatibility, and self-skill were developed for fencing lesson for third-year female students in Colleges of Physical Education in

# **Jurnal Pendidikan Kepelatihan Olahraga: Pejuang**

**Volume 2 Nomor 3 Oktober 2026**

**E-ISSN: 3090-1278**

universities of Babylon Governorate, members of sample have good levels in mental skills, academic compatibility, and self-skill in fencing lesson for female students. There is a significant correlation between mental skills and skill self, also between academic compatibility and skill self in fencing lesson for female students. There is a correlational relationship between mental skills and academic compatibility with skill self in fencing lesson for female students.

Necessity engaging students in awareness seminars to enhance their mental and self- skills to benefit from it in their academic journey. Continuously emphasizing importance of students' academic compatibility, given its significant role in achieving students' future goals. Teacher must pay attention to psychological preparation of students in order to control level of mental skills, academic adjustment, self-efficacy, and to ensure they are at a good level during lectures, whether educational or theoretical. Taking into account all results of this study and utilizing them when developing educational curriculum for lesson fencing in faculties and departments of physical education and sports science at other universities. Knowledge levels mental skills, academic compatibility, self-skills female students in colleges and departments of physical education and sports sciences have experience in team and individual sports.

## **REFERENCES**

- Abdul-Moneim Ahmed Al-Dardir : Statistics Parametric Nonparametric testing of hypotheses in psychological and educational research, Cairo, Alam Al-Kutub, 2002.
- Ahmed Muayyad Hussein Al-Anzi: Building a Skill Self Scale for Handball Players in the Northern Region of Iraq, Journal of Sports Education Sciences, Issue 4, Volume 4 , 2011.
- Cao, S., Liu, J., Wang, Z., & Geok, S. K. (2024). The effects of functional training on physical fitness and skill-related performance among basketball players: a systematic review. *Frontiers in Physiology*, 15. <https://doi.org/10.3389/fphys.2024.1391394>
- Carpenter, S. K., Lohse, K. R., Healy, A. F., Bourne, L. E., & Clegg, B. A. (2013). External focus of attention improves performance in a speeded aiming task. *Journal of Applied Research in Memory and Cognition*, 2(1), 14–19. <https://doi.org/10.1016/j.jarmac.2012.11.002>
- Gamarra, M., Dominguez, A., Velazquez, J., & Páez, H. (2022). A gamification strategy in engineering education—A case study on motivation and engagement. *Computer Applications in Engineering Education*, 30(2), 472–482. <https://doi.org/10.1002/cae.22466>
- Hamdi Abdullah Abdul-Azim: Encyclopedia of Psychological Tests and Measures . Part Two, Egypt, Giza, Awlad Al-Sheikh Library for Heritage, 2012.
- Mohammed Mahmoud Al - Hila: Motivation, the neglected factor in instructional design , Jordan , Student Magazine , Issue 2 , 2000.
- Muhammad Ahmad al-Qazwini: Practical Application in Fencing, Cairo, Dar al-Fikr al-Arabiyya, 2017.
- Muhammad Hassan Alawi; Encyclopedia of Psychological Tests for Athletes , 1st Edition: (The Book Center for Publishing, Cairo , 1998).

# **Jurnal Pendidikan Kepeatihan Olahraga: Pejuang**

**Volume 2 Nomor 3 Oktober 2026**

**E-ISSN: 3090-1278**

- Omar Fadel Al-Badri : The concept of self and its relationship to speed of motor response among fencing players. Master 's thesis, University of Baghdad, College of Physical Education , 2000.
- Robert B. Baker and Yohden Sirk: A Guide to Applying the University Life Adjustment Scale, (translated by Ali Abdel Salam), Cairo. Egyptian Renaissance Library, 2002.
- Santos, J., Maia, L., Petrica, J., Serrano, J., Batista, M., & Honório, S. (2019). Attention in physical education classes: Differences between different individual modalities. *Journal of Human Sport and Exercise*, 14(Proc1), 37–46. <https://doi.org/10.14198/JHSE.2019.14.PROC1.05>
- Tang, X., Kang, T., Liu, Y., & Li, N. (2025). Students' impression management styles and school adjustment: the mediating role of self-esteem and the moderating role of age. *Frontiers in Psychology*, 16. <https://doi.org/10.3389/fpsyg.2025.1550213>
- Wang, X., Soh, K. G., Samsudin, S., Deng, N., Liu, X., Zhao, Y., & Akbar, S. (2023). Effects of high-intensity functional training on physical fitness and sport-specific performance among the athletes: A systematic review with meta-analysis. *PLoS ONE*, 18(12 December). <https://doi.org/10.1371/journal.pone.0295531>
- Xiao, W., Bu, T., Zhang, J., Cai, H., Zhu, W., Bai, X., Zhang, L., & Geok, S. K. (2025). Effects of functional training on physical and technical performance among the athletic population: a systematic review and narrative synthesis. *BMC Sports Science, Medicine and Rehabilitation*, 17(1). <https://doi.org/10.1186/s13102-024-01040-y>
- Zakaria Ahmed Al-Sherbini and Naguib Mahfouz Abu Bakr Balfaqih: The Academic Adjustment Scale for Secondary School Students in the Emirate of Fujairah , Cairo, Anglo-Egyptian Library, 1998, p. 7.