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The effect of special exercises on selective attention for the performance of the "clinch" skill in wrestlers under 16 years of age

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Abstract

Drawing on his field experiences and a professional appreciation of wrestling, the researcher recorded that the athletes did not compete well. He thought that was because of their attention being distracted into the many variables a game pose. Thus, the researcher planned to formulate some exercises in order to enhance innate traits of the mind such as selective attention (one of important types of cognitive process) and skill performance in wrestler. It was aimed to develop these exercises and investigate their influence on selective attention and lifting skill performance in wrestlers younger than 16 years for this study. It was hypothesized that substantial disparities would exist between the post-tests of selective attention and lifting skill performance in the experimental and control groups. The researcher employed a two-equivalent groups design, consisting of an experimental group and a control group, for both pre-test and post-test assessments. Fourteen under 16-year-old wrestlers were studied. Pilorz tested selective attention and a lifting skill in a wrestling game with their participants. Following the main study and data analysis, the researcher concluded that his exercises were useful in increasing selective attention and wrestling performance. It works for either selective attention and skill of the wrestler.

Keywords: special exercises, attention, performance, clinch, wrestlers.

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Introduction

Wrestling is challenging because it is filled with an overwhelming speed and resistance and attention. Attention is always shifting during competitive play due to changing conditions and variables. It is conceivable that fatigue or any other pressure related reason might reduce a wrestler's focus. Hence, selective attention, regrouping the ability to select the right stimulus or cue among a set of competing ones. By this, such attention can be considered as the capacity to ignore sensory information and selectively concentrate on those that could better inform of the competitive situation. The significance of this study is that exercises can be selected to develop the wrestler technical, physical and psychological capability. Youth wrestling is all about being able to adjust to new conditions in finding those technical grips that allow competitors to hit the high level and cause opponents' problems, in route to winning (Abdul Zahraa & Farhan, 2022 ; Curby, Ali & Khudair, 2024).

The problem for this research grew out of the investigator's observations in the field and watching wrestling. He said the performance of the wrestlers was below average. The researcher thought that one explanation for this distraction is the presence of many variables during the game. Consequently, we designed specific exercises to train these cognitive factors such as selective attention (one of the most important cognitive functions) and wrestler skill performance. The study focused on the development of specific exercises and their impact on selective attention and lifting skills in wrestlers aged 16 and under. It was hypothesized that there would be statistically significant differences between the pre-tests and post-tests for the experimental and control groups in selective attention and the level of lifting skill performance (Amer Abdulhussain, el 2025 ; Hassan & Abdulkareem, 2026).

Additionally, the post-tests for selective attention and lifting skill performance would show substantial differences between the control and experimental groups. Hazem Abdul Karim's study was one of several in this field; he sought to quantify the extent to which college students use visual selective attention and to analyze any statistical differences in this area according to factors like gender, area of concentration, and severity of cognitive impairment. There was a negative correlation between visual selective attention and cognitive failures, according to the results of this study, which focused on undergraduates. Linda Mahmoud Al-Jumaili also conducted studies to demonstrate how various intensities of dummy machine exercises affected certain snatch over-the-chest holds performed by junior wrestlers. The most important finding was that dummy machine training at varying intensities influences the development of certain over-the-chest throwing (snatch) grips (Aslan, Aksoy & İmamoğlu, 2020 ; Hassan, & Abdulkareem, 2025).

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Methodology

The location for the trial The trial was held in the Al-Kadhimiya Sports Club for wrestling. The researcher utilized an experimental design comprising two groups (experimental and control), incorporating pre- and post-tests, with a sample of 14 wrestlers aged under 16. Participants were randomly allocated to two groups via a lottery: experimental and control, each including seven players. Prior to commencing the principal line, an equivalence evaluation of the research variables (i.e., selective motor attention and the carrying skill) was performed.

To do that a number of methods, devices and means were involved: performance rating form, internet-sources, observation and experimentation and the Rehacom cognitive system for estimation of selective attention level as well as computer testing facilities, video camera-recorder and wrestling mat. The experimenter completed a pool of exercises tailored to increasing level of wrestling skills and the players' selective attention, based on theory before the intervention was conducted.

Table 1. *The pre-test outcomes present the arithmetic means, standard deviations, and computed t-value for the research variables*

Variables	Unit of Measurement	Experiment Group		Control Group		Calculated t-value	Error Level	Significance
		M	SD	M	SD			
Selective Attention	Score	53.571	1.902	53.142	1.573	0.459	0.654	Random
Porter Skill	Score	7.571	0.534	7.285	0.487	1.044	0.317	Random

Significant < (0.05) at 12 degrees of freedom

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Tests Used in the Research

1- Selective Attention Test

- **Test Objective:** The ability to regulate behavioral impulses in the face of competing stimuli and to respond correctly under time constraints is a measure of selective attention. To maintain internal control over one's conduct, it is crucial to either avoid or moderate the reaction that an external stimulus could induce.
- Equipment and Assistance: RehaCom Cognitive System, specializing in laboratory psychometric testing.
- Test Description and Procedures: The ability to selectively respond to stimuli (either by reacting to them or by doing nothing) is the measure of selective attention in this exam. At irregular intervals, a focal point appears in the screen's center. On the screen, you can see stimuli that have lines running horizontally or vertically. The examinee is required to swiftly hit the (OK) button whenever a stimulus containing horizontal lines is displayed. Vertical lines must not elicit an emotional response from them. This test-taker is required to:
  - Look at the in the middle of the screen center point.
  - Press the (OK) button as quickly as possible when a stimulus with horizontal lines is displayed.
- Test Duration: (2) minutes, excluding the practice phase.
- Data Analysis and Recording: Two types of angular metrics are calculated:
  - An angular metric for the (reaction speed) variable: by calculating all average reaction times for the relevant stimuli.
  - The angular metric for the reaction control variable is determined by calculating the number of reactions to unrelated stimuli.
- Maximum test score: (100) and hypothetical mean: (50).
- Unit of measurement: score.

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2- Porter skill test in wrestling

The ability test of the porter was held through an assessment of skill performance level (10 points). The performance was judged by three wrestling specialists, and average score was determined.

Two pilot studies were conducted by the researcher with a sample of 2 wrestlers who did not participate in the main samples. The first proof-of-principle pilot study of training units and exercises was (date). The second pilot experiment (skills & selective attention test) was carried out on (date). The research sample, comprising both experimental and control groups, underwent pretesting with the research variables at Al-Kadhimiya Sports Club on (date) at (time). The testing conditions were controlled for time and location, and the tests were recorded for expert review and evaluation. The specific exercises were implemented with the experimental group over one month, with three training units per week for each research group, from (date) to (date). Each of these steps produced a set of (12) training units, all consisting of duration (90) minutes. The particular exercises were conducted at the middle of the training unit, supervised by the researcher and assisted by the support team. There were two parts to the training: practical and educational.

1. The preliminary segment lasted 20 minutes and encompassed organizing tasks and warm-up exercises.
2. The primary segment: The main section lasted 65 minutes and included the following activities:

- The educational aspect: This phase lasted 15 minutes and involved the coach explaining and demonstrating the specialized grips for each player.

- The practical aspect: This lasted 50 minutes and involved the players applying the grips according to the exercises they had prepared.

3. The concluding section: This lasted 5 minutes and included some cool-down exercises, educational instructions, and dismissal.

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After completing The post-test was delivered to the research sample about the research variables under the direct supervision of the researcher on (date). The researcher guaranteed that the post-tests were administered under identical conditions to the pretests regarding the support team, duration, location, instruments, and scoring methodology, as well as by the same evaluation committee. The subsequent statistical techniques were employed to analyze the data:

- Arithmetic mean.

- Standard deviation.

- T-test for dependent samples of equal size.

- T-test for independent samples.

Results

Table 2. *presents the arithmetic mean, standard deviation, and t-test outcomes for the Control and experimental group in both the pre- and post-tests*

Variables	Unit of Measurement	Control Group		Experiment Group		F-value	F-critical value	Calculated t-value	Error Level
		M	SD	M	SD				
Selective Attention	Score	53.571	1.902	60.857	1.902	07.28	2.751	7.005	0.000
Clinch Skill	Score	7.571	0.534	9.428	0.534	1.857	0.377	13.00	0.000

Significant < (0.05) at degrees of freedom (6)

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Discussion

Based on the researcher's results from the tables above, it is evident that both research groups learned motor skills and improved their selective attention (Khothier , 2025). This is because, when wrestling exercises are also used for the simultaneous development of physical (including motor response speed) and cognitive (including selective attention) characteristics in wrestlers, it affects players' psychological well-being in a way that encourages them to practice. The researcher believes that variety and innovation in the use of exercises and teaching methods are most suitable for creating excitement and enthusiasm, thereby achieving rapid learning and the acquisition of movements and athletic activities. The scholar considers that the practice of wrestling involves high physical, motor and cognitive demands on part of the practitioner (Kons, el. 2025). Gradual execution of certain exercises with the experimental group and the previous players experience added to the data stored in the motor system memory allowed for improvement of researched variables (Mahmood, 2025). As has been mentioned, "there are a number of factors which determine the development of motor skill, among them being repetition, perceptions, comparisons, mental capacities and previous experiences with movements and in addition effects of excitement or other agents that obstruct or facilitate learning such skills as well as the law where by practice becomes more perfect and difficult problems are solved more easily after a certain degree." Learning wrestling skills via cognitive-based exercises, such as selective attention may have a positive effect on players' psychology in terms of motivation to train (Martínez del Quel, 2019). The variety and innovation in exercise selection and teaching methods effectively create suspense and excitement, leading to rapid learning and mastery of sports movements and activities. A third is the physical, motor and attention skills that should have a wrestler when he performs holds. Thus, it is crucial to develop these capabilities in wrestlers as they are key factors for optimal performance (Shihap & Ahmed, 2025). Some exercices have facilitated more towards the memory and generalization in a changing photogram during play. The knight managed to pull off the decision of making the right hold at soon enough. This can be accomplished only by varying the exercises in a training session (Tariq & Bassim, 2015). So, mix up your workouts to see the greatest results. The researcher also presumes that the selected exercises were relevant to their physical conditions, and a given exercise may contribute several of the research entities. This helped the wrestler generalize the motor program for the skill, as "the exercises that the coach sets for one or more wrestlers are within specific rules to develop the wrestler physically, technically, and tactically, and to develop movement speed and basic skills that affect game plans. They rely on an atmosphere similar to that of matches, which depend on the sequence of movements." Accordingly, the first research hypothesis has been supported. Statistically, Both the experimental and control

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groups show statistically significant improvements on the post-test compared to the pre-test (Yahya, Rida & Abdulkareem, 2024).

Conclusions

1. The exercises created by the researcher shown efficacy in enhancing the athletes' lifting skill performance.
2. The activities created by the researcher shown efficacy in enhancing the players' selective attention.
3. The experimental group employing specific exercises surpassed the control group utilizing the standard strategy in the research variables.

Recommendations

1. Employing the specialized exercises created by the researcher during training sessions, given their beneficial impact on enhancing the research variables (technical grips and speed of motor responses).
2. Attention must be given to the speed of the response variable, as it is a critical factor on which wrestling relies.
3. Diversifying specialized exercises to enhance physical and motor qualities alongside the motor pathway of the skill.

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References

Abdul Zahraa, S. ., & Farhan, A. (2022). The Effect of Musculus Rhomboideus fibromyalgia Rehabilitation Program in Youth and Advance Freestyle and Greco – Roman Wrestlers. *Journal of Physical Education*, *34*(2), 155-171. https://doi.org/10.37359/JOPE.V34(2)2022.1264

Amer Abdulhussain, A., Sinan Atiyah, H., Hussain Jaber, O., Ridha Ghanim, M., Hashim Hammood, A., & Mohammed Saleh, Y. The Impact of Jesko's Strategy with Sequential Exercises on Learning the Skill of Dribbling in Basketball. *Annals of Applied Sport Science*, 0-0.

Aslan, H., Aksoy, Y., & İmamoğlu, O. (2020). The effect of sports on the attention levels of primary school students. *Turkish Journal of Sport and Exercise*, *22*(1), 122-126.

Curby, D. ., Ali, A. . ., & Khudair, G. . (2024). A Comparison of Some Important Biochemical Indicators According to Escalating Physical Effort till Fatigue for Elite Freestyle Wrestlers, 800m Runners, and 200m Freestyle Swimmers. *Journal of Physical Education*, *36*(1), 190-171. https://doi.org/10.37359/JOPE.V36(1)2024.2065

Hassan, M. F. A., & Abdulkareem, O. W. (2025). The Effect of Mental Training on Psychological Hardiness and Selected Personality Traits among Adolescent Male Volleyball Players. *International Journal of Exercise Science*, *18*(4), 1186.

Hassan, M. F. A., & Abdulkareem, O. W. (2026). Effects of an Integrated Balance and Muscle Tension Control Training Program on Kinematic Variables and Defensive Accuracy in Volleyball Players. *Journal of Sport Biomechanics*, *11*(4), 438-464.

Khothier , G. . (2025). Impact of ACTN3 Gene Polymorphism (R577X) on Physical Performance in Wrestlers of 74 kg Weight. *Journal of Physical Education*, *37*(3), 866-880. https://doi.org/10.37359/JOPE.V37(3)2025.2337

Kons, R., Bian, C., De Pauw, K., Theeboom, M., Schaillée, H., Detanico, D., & Roelands, B. (2025). Mental fatigue in Olympic combat sports: the unseen ongoing battle. *Frontiers in Sports and Active Living*, *7*, 1697860. https://doi.org/10.3389/fspor.2025.1697860

Mahmood, S. (2025). A Rehabilitation Program for Correcting Lateral Deviation Resulting from Lumbar Disc Injuries in Young Wrestlers. *Journal of Physical Education*, *37*(3), 1121-1130. https://doi.org/10.37359/JOPE.V37(3)2025.2376

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Mancebo, I. G. P., Rodrigues, A. I. C., & Machado, L. F. A Descriptive Study of Wrestling Practice in the Youth School Games in Rio de Janeiro. https://doi.org/10.9790/6737-08012327

Martínez del Quel, Ó., & Bennett, S. J. (2019). Perceptual-cognitive expertise in combat sports: a narrative review and a model of perception-action. RICYDE. Revista internacional de ciencias del deporte. 58(15), 323-338. https://doi.org/10.5232/ricyde2019.05802

Romanenko, V., Cynarski, W. J., Tropin, Y., Kovalenko, Y., Korobeynikov, G., Piatysotska, S., Mikhalskyi, V., Holokha, V., & Gaziyev, S. (2025). Methodology for Assessing Spatial Perception in Martial Arts. Applied Sciences, 15(6), 3413. https://doi.org/10.3390/app15063413

Shihap, A., & Ahmed , S. . (2025). The effect of special exercises on the speed of motor response and performance of the snatch skill for wrestling players under (16) years old. *Journal of Physical Education*, *37*(2), 545-558. https://doi.org/10.37359/JOPE.V37(2)2025.2265

Tariq, U., & Bassim, H. (2015). The Effect of Special and Training- Competition Exercises on the Development of the Throws Standing Techniques for Junior Judokas. *Journal of Physical Education*, *27*(1), 235-253. https://doi.org/10.37359/JOPE.V27(1)2015.534

Yahya, S. Z., Rida, B. K. A., & Abdulkareem, O. W. (2024). The effect of a laser device on some biomechanical variables of the rotational phase in the achievement of 100 m freestyle swimming for the Iraqi team (16-18 years old). *Scientific Journal of Sport and Performance*, *3*(4), 507-512.