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The Impact of a Positive Self-Talk Program on the Skill Performance Level of Members of Tarif Cycling Club

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Abstract

The study aimed to identify the impact of a positive self-talk program on the skill performance level of members of the Tarif Cycling Club. The researcher used the experimental method with equivalent groups design. The study population consisted of male cyclists from the Tarif Cycling Club, and a purposive sample of (n=8) players was selected, divided into an experimental group (4 players) and a control group (4 players). Additionally, the positive self-talk program consisting of (6) sessions over two weeks was applied to the experimental group members. Afterwards, data were collected during post-test assessments of the players' performance levels. For statistical data analysis, the researcher used the Statistical Package for the Social Sciences (SPSS) to calculate mean values, standard deviations, and conducted the independent t-Test and the Paired-samples T-test. The study's key findings showed statistically significant differences at the significance level ($\alpha \leq 0.05$) between the pre-test and post-test measurements for both the experimental and control groups, favoring the experimental sample that used the positive self-talk program. The researcher recommends the necessity of using positive self-talk programs for cyclists and practitioners of cycling in Jordan due to their positive impact on the performance level of the players. and this achieves one of the sustainable development goals of the United Nations in Iraq which is (Good Health).

Keywords

Positive self-talk, skill level, cycling

Introduction:

In recent years, the methods and approaches used by coaches and sports management worldwide have diversified, aiming to acquire the best skills and techniques to reach the highest levels in the sports field. The psychological factor in modern training methods cannot be overlooked due to its impact on the performance level of athletes from all sports and levels. The importance of using applied psychology techniques on athletes has been proven to significantly enhance performance, boost self-confidence, and reduce anxiety and stress during competitions. Abdullah Al-Kandari noted that "in order for an athlete to achieve the desired goals by maximizing their energy through the synergy of physical and

mental fitness components towards solving the motor problem or achieving better performance, it is essential to utilize both physical and psychological aspects to control skills in play situations and reach the required level, thus achieving excellence in the sports field" (1). Al-Shaimaa Salman mentioned that self-talk "takes on a positive nature when it moves towards self-preservation by developing oneself and reducing the stress of situations faced by the individual by expecting accurate information that helps adopt positive self-perceptions, approach the surrounding world, recognize shortcomings and the possibility of improvement, and strive to confront personal desires, which enables the individual to regulate and develop themselves"

(2). Amr El-Saeed noted that positive self-talk "is considered one of the effective methods that may contribute to improving self-confidence among athletes in various sports activities. Regular practice of positive self-talk provides athletes with a greater opportunity to discover their abilities and skills, highlight them, and attempt to develop and enhance them, thereby gaining confidence in themselves and their self-worth" (3). Atwa Othman mentioned that "self-talk - as a form of thinking - plays an important role in the field of sports and physical exercise. When an athlete or a physical activity participant thinks, they are in fact engaging in self-talk, whether it is silent or audible. This results in perceptions and emotional beliefs. Positive self-talk consists of positive descriptive phrases that the athlete declares internally, generating a sense of emotional and mental continuity to continue performance and manage the pressures of expected competition" (4). Hind Farid explains that "self-talk does not require specific words or carefully chosen phrases, as it is an internal dialogue between the individual and themselves, not audible to the outside world and understood without the need for translation. The skill of positive self-talk is one of the important mental skills that positively influence the achievement of excellence and outstanding performance in sports activities, especially when pressures increase and focus on performance or control of emotional states is required. It also contributes to enhancing self-confidence and boosting the positive image of an individual's own traits and perceptions" (5). Ayed Zureigat points out that positive self-talk "is considered one of the mental skills that contribute to enhancing an individual's self-confidence and creates a sense of control in various situations by eliminating negative thoughts, perceptions, or emotions and transforming them into positive aspects. The process of changing an individual's thinking or self-talk from negative to positive aspects requires what is called 'thought stopping,' which involves stopping negative thoughts and converting them into positive ones. The skill of

self-talk is used to correct bad habits, focus attention, and increase self-confidence" (6). Omar Al-Kurdi and Mohammad Ismail believe that "positive self-talk plays an important role in improving psychological resilience and the ability to withstand stress, tension, and fatigue. It is one of the cognitive strategies used by players, which describes what they tell themselves to enhance their thinking power and direct their behaviors and actions" (7). Mai Afifi mentioned about the strategy of positive self-talk that "it is important to understand how the mind works and how it affects performance, and how the mind is controlled. The direction of self-talk becomes positive when it enhances self-worth with the purpose of influencing emotions and thoughts to improve performance accuracy. This is achieved by identifying personalized positive self-statements for each individual, which lead to positive effects in reducing stress levels, transforming negative thoughts into positive ones, and enhancing performance accuracy" (8).

Study Problem:

Through the researcher's experience in cycling and observing the ongoing physical and skill training programs for cyclists at Tarif Sports Club, it was regularly noted that despite these regular training schedules, some weaknesses became apparent during local and international competitions. Discussions with the athletes revealed that the training methods lack the application of sports psychology, which leads to subpar performance during competitions despite high physical readiness. This shortfall can lead to psychological vulnerability against opponents, an absence of mental presence, the intrusion of negative thoughts, and consequently, feelings of surrender when entering competitive environments and a lack of self-confidence. This highlights the importance of the study in implementing a positive self-talk program as follows:

- Shed light on positive self-talk programs and their application to cyclists, as they serve to improve

players' performance in competitions and training.

- Draw the attention of coaches and those responsible for the sport of cycling to the necessity and importance of using applied psychology programs on athletes, such as positive

The researcher employed an experimental approach for the study sample due to its suitability and the nature of the study. The study population consisted of cyclists from cycling clubs in Jordan, estimated to number (50) players. A purposive sample was selected from Tarif Club players,



self-talk.

This study aimed to:

1. The differences between the pre-test and post-test levels of skill performance of members of the Tarif Cycling Club (control and experimental groups).
2. The differences in the post-test level of skill performance of members of the Tarif Cycling Club (control and experimental groups) according to the variable of the mental imagery program.

Study Questions:

This study aimed to answer the following questions:

1. Are there statistically significant differences between the pre-test and post-test levels of skill performance of members of the Tarif Cycling Club (control and experimental groups)?
2. Are there statistically significant differences in the post-test level of skill performance of members of the Tarif Cycling Club (control and experimental groups) according to the variable of the positive self-talk program?

Study Domains:

Temporal Domain: This study was applied to the sample between March and April 2023.

Spatial Domain: The study was conducted in Amman, Jordan.

Human Domain: The study was carried out on male cyclists from the Tarif Sports Club.

Method and Procedures:

restricted to the male category, consisting of (8) players divided into (4) experimental group members and (4) control group members. The researcher used a positive self-talk program taken from a study by Saddam Aliwa (9), which consisted of (6) sessions, four face-to-face sessions and two remote sessions (Appendix 1). The following tools were used to collect study data: a computer specifically for cycling, type "Garmin" (Appendix 2), a laptop, a form for recording player data and measurement results, ink pens, and notebooks for players during program sessions, a rubber mat, and a camera to document the players' performance during tests.

An exploratory visit was made to the Tarif Club, and coordination was arranged with the club management to facilitate performance testing and the use of the club's hall and grounds for the application of the study program sessions. This also included explaining the procedures for the pre-test and post-test measurements, scheduling them, ensuring the readiness of the bicycles, and the availability of safety measures and necessary equipment. This equipment includes rear lights on the bicycles, helmets, gloves, and glasses to be worn during the performance tests.

Testing Player Performance and Stability of the Measurement Tool:

1. The players' power output will be measured using dedicated cycling computers, a device widely

used by cyclists. This tool has been employed in various studies, including those by Alfred

Nimmerichter (10) and Hana Charvátová (11), to verify its reliability in producing credible results.

(Illustrative image)



2. The players will use the same type of bicycle commonly used in official races (a road bike).

3. A unified course was selected for conducting the test, characterized by consistent levels of elevations and slopes.

(Illustrative image of the course and distance)

4. A standardized distance was chosen (the players will cover the same distance) measured precisely at 10 kilometers.

The researcher conducted pre-test assessments on the study sample by setting a distance of 10 kilometers, ensuring that there was a 30-second time gap between each player. The players were instructed not to follow each other or form groups during the test distance, remaining solo until the completion of the distance. This was done to ensure that the player's performance was not influenced by any external factors, positively or negatively. The average energy expended by each player was measured individually using the computers mounted on the bikes, and the players' data were recorded on a preliminary results sheet. The researcher chose to measure player

performance based on the energy expended (watt/kg) and did not consider time as a performance metric to minimize the influence of external factors that could affect the players' results during the tests, such as external temperature and wind speed. Particularly since the performance tests were conducted on outdoor roads rather than indoors, this approach simulates the competitive environment typical of this sport. The study sample was divided into two groups (control and experimental) based on equivalence and homogeneity between them. The positive self-talk program was applied to the experimental group of (4) players for a week, consisting of 6 sessions, with (4) face-to-face meetings and two remote sessions.

- The positive self-talk program used:

Session Number	Session Content	Session Location	Performance Method	Session Time
1	Explanation of the concept and importance of positive self-talk with oneself among the players in the research sample.	Tarif Club headquarters	Through a personal meeting between the researcher and the players.	30minutes

2	Internal dialogue with oneself through positive thoughts.	Tarif Club headquarters	Being in a quiet place and internally repeating positive and motivational phrases.	10-15 minutes
3	Speaking positively to oneself with positive words and phrases aloud.	Remotely	Talking to oneself in front of a mirror out loud.	5-10 minutes
4	Internal dialogue with oneself using positive thoughts and words.	The researcher chose a public park based on the players' preference	Thinking of the most positive words that the player uses during competition, then repeating them in front of everyone.	30minutes
5	Positive internal dialogue with oneself using positive thoughts.	In a public park based on the players' preference	The player should mention the most important goals they have achieved and what they dream of accomplishing in the future.	Open time for each player
6	Listening to some phrases of positive self-talk.	Remotely	Through a pre-recorded audio, which the player listens to before performing the post-test.	2-5 minutes

After completing the application of the program, the researcher conducted a post-test for both the experimental and control groups, recording the results on the final test sheet for each player individually. The researcher used the Statistical

Package for the Social Sciences (SPSS) to obtain mean values, standard deviations, and conducted the independent T-test and the Paired-samples T-test.

Results:

Table .1 Application of the Independent Sample t-Test to identify differences between the mean values in the pre-test performance levels of the members of the Tarif Cycling Club for both groups (control and experimental) (n=8).

Variable	Group	Measurement	Arithmetic Mean	Standard Deviation	Degrees of Freedom	T-Value	Level of Significance
Skill Performance Level	Experimental	Pre-test	3.61	0.55	3	233.3	*0.045
		Post-test	3.81	0.46			
	Control	Pre-test	2.93	0.60	3	-0.912	0.429
		Post-test	2.97	0.61			

Table .2 Results of the Paired Samples Test for paired samples to identify differences between the mean values in the pre-test and post-test measurements of skill performance level for members of the Tarif Cycling Club for both the control and experimental groups (n=8).

Variable	Group	Arithmetic Mean	Standard Deviation	Degrees of Freedom	T-Value	Level of Significance
Skill Performance	Experimental	3.81	0.46	6	2.195	0.071
	Control	2.97	0.61			

Level for the
Post-test

Table .3 Results of the Independent Sample t-Test to identify differences between the mean values in the post-test measurement of skill performance level for members of the Tarif Cycling Club (control and experimental groups) according to the variable of the positive self-talk program (n=8).

Variable	Group	Measurement Unit	Arithmetic Mean	Standard Deviation	Degrees of Freedom	T-Value	Level of Significance
Skill Performance Level	Experimental	Watt/kg	3.61	0.55	6	1.664	0.147
	Control		2.93	0.60			

Discussions:

Table (1) shows that the experimental group, which applied the positive self-talk program, demonstrated improved performance. Despite the control group also showing improvement in performance as indicated by the mean post-test scores, the experimental group's mean score was higher. This suggests the positive impact of the self-talk program on the experimental sample. The results of the study are consistent with the findings of Zureiqat (6), Al-Salman (2), and Al-Kandari (1), who noted that positive self-talk is effective in enhancing both the physical and mental performance levels of athletes and positively influences athletic efficiency. There was also a noticeable impact on the mental level and an enhancement of focus among the players, as observed by the researcher. The players in the experimental group demonstrated persistence and resilience during the post-test measurements. This finding also aligns with the study by Afifi (2019) (8), which stated that such interventions improve performance levels in athletes. Notably, Afifi's study specifically focused on the sport of cycling. Table (3) indicates that there are statistically significant differences at the significance level ($\alpha \leq 0.05$) between the control and experimental groups in the post-test measurement of skill performance level for members of the Tarif Cycling Club (control and experimental groups) according to the variable of the positive self-talk program. The mean score for the experimental

group was (3.81), while the mean score for the control group reached the significance level ($\alpha \leq 0.05$). There are differences in the mean scores, where the experimental group performed better than the control group in the pre-test measurement, indicating the effectiveness of using positive self-talk as a means to improve the skill level among the cyclists of the Tarif Club. The researcher attributes this to the impact of applying the positive self-talk program on the experimental group. The findings of this research are consistent with the results of previous studies mentioned. It was noted that the mean score for the control group in the pre-test was (2.93) and in the post-test (2.97), indicating a very slight improvement in the control group. This improvement is attributed to the fact that the entire study sample underwent continuous training, which leads to performance improvement among all participants. However, what was observed in the experimental group was that the positive self-talk program made a more significant and clear difference in the performance level of the players. This improvement is attributed to the application of the positive self-talk program on the experimental group members.

Conclusions:

In light of the study's results, the researcher was able to conclude the following:

1. There is a positive relationship between the use of positive self-talk programs and the performance level of cyclists.
2. The use of positive self-talk programs positively impacts the performance of players, enhancing it.

Recommendations:

1. It is essential to implement positive self-talk programs for cyclists due to their impact on players' performance levels.
2. It is necessary for psychological training programs to be an integral part of the comprehensive training regimen for players, in addition to skill and physical training, to achieve full balance for the players and avoid focusing solely on the physical aspects while neglecting the psychological side.

Author's declaration:

Conflicts of interest: None

We confirm that all tables and figures in this article are ours and written by the researchers themselves.

Ethical-Clearance: this manuscript approved by local ethical committee of physical education and sport sciences college for women on (March /2024)

Author's contributions:

All contributions of this study were done by the researcher (A.M.) who get the main idea and work on writing and concluding also with number of experts, Anas Mohammed Kaid in Statistics, Aida Al-Awameleh in revision, Inaam Ghalib in translating, Ali Makki in proofreading

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اثر برنامج للحديث الذاتي الايجابي على مستوى الاداء المهاري لمنتسبي نادي طريف لرياضة الدراجات الهوائية انس محمد خير رشيد كايد الجامعة الاردنية / كلية علوم الرياضة - الاردن

هدفت الدراسة التعرف الى اثر برنامج للحديث الذاتي الايجابي على مستوى الاداء المهاري لدى منتسبي نادي طريف لرياضة الدراجات الهوائية. واستخدم الباحث المنهج التجريبي في تصميم المجموعات المتكافئة، وتكون مجتمع الدراسة من لاعبي نادي طريف للدراجات الهوائية فئة الرجال، وتم اختيار مجموعة عمدية مكونة من (ن=8) لاعبين تم تقسيمهم الى مجموعة تجريبية (4) لاعبين ومجموعة ضابطة (4) لاعبين. كذلك تم تطبيق برنامج الحديث الذاتي الايجابي المكون من (6) جلسات لمدة اسبوعين على افراد العينة التجريبية، وبعد ذلك تم جمع البيانات خلال اختبارات القياس البعدي لمستوى اداء اللاعبين. ولمعالجة البيانات إحصائياً استخدم الباحث برنامج الرزم الإحصائية للعلوم الاجتماعية للحصول على المتوسطات الحسابية والانحرافات المعيارية و اختبار (ت) ((Independent t- Test واختبار (ت) للعينات المرتبطة (Paired- samples T test) وظهرت اهم نتائج الدراسة وجود فروق ذات دلالة احصائية عند مستوى الدلالة ($\alpha \leq 0.05$) بين القياسين القبلي والبعدي بين المجموعة التجريبية والضابطة و لصالح العينة التجريبية التي استخدمت برنامج الحديث الذاتي الايجابي. ويوصي الباحث بضرورة استخدام برامج الحديث الذاتي الايجابي على لاعبي وممارسي رياضة ركوب الدراجات الهوائية في الاردن لما لها من تأثير ايجابي على مستوى اداء اللاعبين. وهذا ما يحقق احد اهداف التنمية المستدامة للامم المتحدة في العراق (الصحة الجيدة).

الحديث الذاتي الايجابي، المستوى المهاري، الدراجات الهوائية.

الكلمات المفتاحية