The effectiveness of positive psychological reinforcement in developing self-confidence in youth football players

Khaled H. Abdullah[1], Karzan K. Khoshnaw[2], Taha Qder Omer[3]

[1] Assistant prof. School of Physical Education, Koya University, Koya, Erbil Kurdistan Region, Iraq.
https://orcid.org/0000-0002-5117-3759 khalid.hussein@koyauniversity.org
[2] School of Physical Education, Soran University, Soran, Erbil Kurdistan Region, Iraq.
https://orcid.org/0000-0002-9616-475X karzan.khdir@soran.edu.iq
[3] Erbil Institute of Sport Education, Erbil, Kurdistan Region, Iraq. taha.qadir3@gmail.com

Abstract

Aims: building a self-confidence scale in the football academies players and cognizing the effect of the positive support program in developing the self-confidence of the research sample. Identify the differences between the control and experimental groups' pre-and post-tests of self-confidence traits. **Method**: the researchers used the experimental designs of two groups, pre-test, and oost-test. The research population included players from football academies in the Kurdistan Region - Iraq for the year (2020-2021) from the male football academies in Koye, Zakho, Erbil, Sulaymaniyah, Soran, Taqtaq cities. The random method was applied to select the sample, and the sample of the study number was 250; experimental group 125 and control group 125 were divided randomly; the average age was 14-16 years and constitute the 90% of the whole community; the researchers built a self-confidence scale on 2 weekly units with 12 units for two months. **Results:** the (T) value of the control group is (5.007) less than the degree of probability (0.001), indicating that there are statistically significant variations between the two tests, pre, and post, with regards to the trait of self-confidence for the control group. The (T) value of the two groups was (2.05) less than the degree of probability (0.04), indicating that there were statistically significant differences between the two groups post-tests on the trait of self-confidence in favor of the experimental group due to the mean being more effective. **Conclusion**: according to the findings, the psychological program has a favorable influence on self-confidence in football school players. Furthermore, during the post-testing of the two groups of the research sample, there were statistically significant differences in favor of the experimental group.

Keywords: positive psychological reinforcement, self-confidence, youth football players.

Introduction

Sports psychology is one of the complementary and fundamental sciences used in football school training. It is used to academically and methodically prepare players by forming them psychologically, physically, and mentally so that young players can be appropriately raised to be ready and feed the clubs in the future(Doewes et al., 2020).

Numerous scientists and academics continue to be interested in and supportive of sports reinforcement in sports psychology. By contrast, a player's behavior is the primary pillar of their performance and brilliance (Dagar & Chauhan, 2020). Thus, sports exercise is an efficient way to care for and grow children balanced. Additionally, sports activity provides individuals with numerous beneficial directions in their behavior. Therefore, sports psychology seeks to resolve numerous sports problems to achieve the best results possible by preparing and developing the psychological component (Gomez et al., 2018).

Reinforcement is critical, as it is required for repetition to be successful (Mawase et al., 2017). Indeed, recurrence must occur under conditions that reward the correct or acceptable answer trainer plays a critical role in establishing favorable training circumstances on the playground. A coach's attitude and actions develop him as a role model for his players to follow (Yuan et al., 2019). During training, controlling the reward and punishment processes establishes an adequate framework for achieving training objectives and positive reinforcement. Hence, we refer to positive reinforcement, which is more effective than negative reinforcement (punishment) (Gomez et al., 2018).

Considering current football and the muscular effort exerted by players during matches, as well as the educator's psychological function and its significant impact on players, we've seen that a certain number of coaches place little emphasis on the psychological element of athletes (Ferguson et al., 2019). As a result, players must participate in and conduct numerous matches (intense competition), resulting in states that damage them physically and psychologically. However, the initial years of a player's existence are critical in developing their character and performing at their best throughout a match (Heelis et al., 2020).

During the formative years of a player's life, the most important influence and the prominent role of coaches and educators' various raising techniques appear to reflect on the formation of their qualities, psychological construct, self-concept, and capacity to excel and achieve (Herrera et al., 2020). Although additionally, players at this age require special attention to thrive, free of dispositions that impair their ability to perform their role and participate in sports competitions, and the development of positive personal characteristics dependent on their experiences. However, it is one of the most critical phases of growth since it is during this period that players learn abilities of all ages, kinetic art, and psychological domains (Drozdikova et al., 2021).

Many scientists and researchers are still interested in the issue of sports reinforcement and supporting it in the scope of sports psychology. Players' behavior represents the main cornerstone upon which their performance and excellence depend. Moreover, sports activity is an effective means for caring about and developing youngsters in balanced development (Mann & Narula, 2017).

Reinforcement is any action that leads to an increase in the occurrence of a specific response or its repetition, such as words of praise, encouragement, or material or moral rewards in a pattern or patterns of responses created by a person. In sports, an athlete plays in the furtherance of self-affirmation, which induces them to exert maximum effort even without spectators (Qureshi et al., 2018).

The significance of the research stems from the player support program and the positive means and directives by which we can prepare players with good psychological fitness who own sports clubs and effectively engage them in matches and club representations, as well as represent the original model of good sportsmanship according to the adage the good results in forming an excellent future player. The researcher prepared a program that uses reinforcement mechanisms to support the positive behavior of players, teach them teamwork and instill the values of the sporting spirit, such as self-confidence and non-hesitation or non-shyness, to provide what they have of physical capabilities through their self-confidence. Based on what proceeded, the researcher, through the program, circulated information and moral as well as material encouragement, and it is one of the means that moralizes players to show the behaviors desired within the team in matches and training, which helps to shape them correctly, mentally and psychologically.

Self-confidence is one of the traits that must be taught in the hearts of players so that their performance can be effective. The happy feeling of players and their integration into performance, internal motivation, self-satisfaction, and positive reactions push players to a high level of performance (Vealey et al., 2017). Therefore, the researcher directed the current study towards positive psychological reinforcement effectiveness by using different mechanisms to develop self-confidence among football school players. The research objectives are building a self-confidence scale in football among football school players and cognizing the positive support program's effect in developing the research sample's self-confidence. Furthermore, identify the differences between the pre and post-tests of self-confidence traits of the control and experimental groups.

Method

The research methodology

The researchers used the experimental method since it is the appropriate method for the nature of this research. Therefore, the researchers used the experimental design of the control group, the positive reinforcement program, and the experimental group. Population and sample of the study

included players from football academies in the Kurdistan Region - Iraq for the year (2020-2021) from the football academies in Koye, Zakho, Erbil, Sulaymaniyah, Soran, Taqtaq cities. The researchers used the random method to select the sample. The sample of the study number was 250, the experimental group 125 and the control group 125 were divided randomly. The average age was 14-16 years and constitute the 90% of the whole community. The researcher built a self-confidence scale on the research population. Then, the football academy players tested the applied sample, where the research sample was reached.

Equipment and materials used in the research

1. Scientific sources.
2. Expert opinions.
3. Preparing a program to enhance and develop the trait of self-confidence.
4. A scale of self-confidence.
5. Aboard to display the program units.
6. Data show to show documentaries.

Self-confidence scale-building steps

The researcher dealt with the self-confidence scale without fields, as shown. The researchers distributed expert and specialist opinion survey forms. Their number was up to 5 experts and specialists to determine the items' validity and the valid and invalid ones to support the researcher's work. The researchers chose the triple rating scale for the self-confidence scale, presented it to the experts and specialists, and provided substitutes of this proposed scale to express their opinions on the triple rating scale (yes-a little-no). The experts and specialists answered in favor of this type of rating scale, and the percentage of experts' consensus was 93%, and this confirms the validity of the rating scale in the measurement (3-2-1). The scale items were corrected by giving the appropriate weight based on a respondent's marking on the rating scale. The items were added in a positive direction, as three gradual responses were placed to reach the final point by specifying weights ranging (3-2-1) for each of the scale items.

Statistical analysis of the scale

a. The discriminatory power of scale items

The scale was applied to 250 players from football academies of Koye, Zakho, Erbil, Sulaymaniyah, Soran, Taqtaq cities. After collecting and checking the forms, the scores were entered. The researchers arranged the data in ascending order from lowest to highest and then adopted 27% of the forms with the lowest scores, which were called the lowest group, and 27% of the forms with the highest scores were named the highest group. After analyzing the results, extracting the discriminatory power of the items, passing the accepted items, and excluding the breakable items, all the items were acceptable, as shown in Table 2.

b. Internal consistency (the relationship of an item score with the total score)

The correlation between the score of each item of the self-confidence scale and the total score was extracted using the Pearson correlation coefficient of the scale. They were all morally significant compared with the probabilistic value at the significance level (0.05), and Table 3 shows this.

c. Scientific coefficients of the scale

1. Honesty

The researcher used apparent honesty by presenting the scale to a group of specialists in sports psychology to express their opinions on whether the scale measures the trait of self-confidence or not and that the best way to extract apparent honesty is to display the scale items to a group of experts to judge their validity in measuring what was set to measure.

2. Validity of construct

It means the extent of the scale's capacity to detect a traitor any specific behavioral phenomenon. This type of honesty concerns the nature of the phenomenon measured by the scale, i.e., the extent to which it includes a particular trait. This type of honesty was materialized through two methods of extracting statistical analysis, namely (item discrimination and internal consistency).

Stability

The scale extracted stability using Cronbach's alpha method. It is one of the standard methods characterized by its consistency and reliability since it indicates the character of an individual's performance and the homogeneity between the items. After using Cronbach's alpha coefficient on the scores of the sample players, the value of the reliability coefficient was (0.98).

The pre-test of the self-confidence scale

The researcher did the pre-test of the self-confidence scale on Monday 23-11-2020 on a sample of 250 players from the football academies, and the selection was chosen deliberately. First, the researcher randomly divided the sample into two groups, experimental and control; thus, the number of players in each group was 125. Next, the self-confidence scale was distributed to the experimental and control groups sample then the researcher collected the forms to dump them ([View final form of the scale](#)).

The psychological reinforcement program

It is a group or series of activities and operations to be carried out to achieve some goal. The role of the program is to regulate the relationship between the purposes of the plan and its projects and implementation. After formulating the psychological reinforcement program, the researcher handed out the program to a group of experts in sports psychology. The experts confirmed the

validity of the prepared schedule. After testing the research sample and its experimental design and completing the program in its final form, the researcher performed the following procedures:

- Limiting the period of daily sessions to 20 minutes.

- Limiting the number of sessions to 12 at the rate of 2 sessions per week, on Sundays and Tuesdays.

- Determining the time of holding the program sessions before conducting the experimental group training units in agreement with the coaches of the football school.

- Implementation of all sessions in the football school in Koye city. The researchers cooperated with the school's coaches to implement the experimental group's program sessions; Table 4 shows this.

The post-test

After completing the psychological reinforcement program, the researcher conducted the post-tests of the self-confidence scale on the players of the control and experimental groups on Saturday 18/1/2021.

Statistical means

Statistical analysis

Data was entered in the SPSS software, and the results were analyzed using Mean, Standard division, and (T-test).

Table 1. Research community.

T	Football academies	N
1	Koye City Football academy	33
2	Zakho City Football academy	37
3	Erbil Governorate Football academy	50
4	Sulaymaniyah Governorate Footbal academy	57
5	Soran City Football academy	40
6	Taqtaq City Football academy	33
	Total	250

Table 2. Discriminatory power of the self-confidence scale.

Item	Value T	Probability	Significance	Item	Value T	Possibility	Significance	Item	Value T	Probability	Significance
1	13.000	0.00	signif	12	19.025	0.00	signif	23	18.028	0.00	signif
2	9.167	0.00	signif	13	20.254	0.00	signif	24	23.822	0.00	signif
3	11.000	0.00	signif	14	20.254	0.00	signif	25	23.822	0.00	signif
4	14.422	0.00	signif	15	20.254	0.00	signif	26	20.254	0.00	signif
5	16.527	0.00	signif	16	19.025	0.00	signif	27	19.025	0.00	signif
6	53.000	0.00	signif	17	17.207	0.00	signif	28	21.804	0.00	signif
7	23.822	0.00	signif	18	53.000	0.00	signif	29	21.804	0.00	signif
8	23.822	0.00	signif	19	16.527	0.00	signif	30	17.207	0.00	signif
9	14.475	0.00	signif	20	16.269	0.00	signif	31	14.470	0.00	signif
10	20.254	0.00	signif	21	14.605	0.00	signif	32	15.962	0.00	signif
11	18.028	0.00	signif	22	13.223	0.00	signif	33	37.498	0.00	signif

Table 3. Correlation coefficient of the scale items with the total score.

Item	Value R	Probability	Significance	Item	Value R	Possibility	Significance	Item	Value R	Probability	Significance
1	0.77	0.00	signif	12	0.85	0.00	signif	23	0.90	0.00	signif
2	0.65	0.00	signif	13	0.81	0.00	signif	24	0.94	0.00	signif
3	0.61	0.00	signif	14	0.80	0.00	signif	25	0.91	0.00	signif
4	0.82	0.00	signif	15	0.84	0.00	signif	26	0.92	0.00	signif
5	0.85	0.00	signif	16	0.91	0.00	signif	27	0.70	0.00	signif
6	0.88	0.00	signif	17	0.92	0.00	signif	28	0.83	0.00	signif
7	0.89	0.00	signif	18	0.88	0.00	signif	29	0.87	0.00	signif
8	0.70	0.00	signif	19	0.89	0.00	signif	30	0.91	0.00	signif
9	0.87	0.00	signif	20	0.93	0.00	signif	31	0.73	0.00	signif
10	0.86	0.00	signif	21	0.89	0.00	signif	32	0.75	0.00	signif
11	0.77	0.00	signif	22	0.60	0.00	signif	33	0.84	0.00	signif

Table 4. Number of sessions, their topics and the date of their implementation.

T	Date	Week	Session contents
1	6/12/2020	First week	Be familiar with and introduce the program
2	8/12/2020	First week	Recognize the importance of change and identify the positive qualities
3	13/12/2020	Second week	3- Take someone like the coach as a role model and share your thoughts with them
4	15/12/2020	Second week	Write down everything about your ideas and discuss them with the coach
5	20/12/2020	Third week	Devote regular time for yourself to review events, your actions, and those of your teammates, even if it was only ten minutes
6	22/12/2020	Third week	Take walks as a way to discuss ideas with yourself
7	27/12/2020	Fourth week	Surmount negative thinking patterns through self-talk.
8	29/12/2020	Fourth week	Consider the big image, the desired goals of training, and reflect on the level you reach and learn ways to relax
9	3/1/2021	Fifth week	Steer clear of causing harm to teammates and avoid anger. Whether you are angry at yourself or another player, apply mental relaxation to relieve negative feelings
10	5/1/2021	Fifth week	Strengthen the relationship with the coach and players and hone your communication skills.
11	10/1/2021	Sixth week	Build your optimism. Optimism lies in learning to think positively about the future.
12	12/1/2021	Sixth week	Help build and develop acclimatization skills. Talking to them can also be of use.

Table 5. Differences between the pre-and post-tests of the control and experimental groups for the trait of self-confidence.

T	Self-confidence	Pre		Post		T	Probability	Significance
		Mean	SD	Mean	SD			
1	control group	53.800	8.323	60.400	5.053	5.007	0.001	Sig.
2	experimental group	60.600	2.913	67.500	9.663	2.322	0.045	Sig.

The differences between the post-test of the control and experimental groups concerning the trait of self-confidence.

86

Table 6. Mean, standard deviation, and T-value for the experimental and control groups.

Variable	Control post-		Experimental post-		T	Probability	Significance
	Mean	SD	Mean	SD	2.05	0.04	Sig.
Self confidence	60.400	5.05	67.500	9.66			

Results

Through the results, we obtained in Tables 5-6, it was found that there are differences between the pre-test and the post-test as for the trait of self-confidence, and this signifies that the trait of self-confidence was developed for the players through the curriculum followed in the positive psychological reinforcement of players via lectures given to players.

According to the results of Table 5, the (T) value of the control group is (5.007) less than the degree of probability (0.001), indicating that there are statistically significant variations between the two tests, pre, and post, with regards to the trait of self-confidence for the control group. Moreover, it was discovered that the value of (T) for the experimental group is (2.322) under the degree of probability (0.04), indicating that there are statistically significant variations between the pre and post-tests of the experimental group in the trait of self-assurance.

Following the results of the post-tests in Table 6, the (T) value of the two groups was (2.05) less than the degree of probability (0.04), indicating that there were statistically significant differences between the two groups' post-tests on the trait of self-confidence, in favor of the experimental group due to the mean being more effective.

Discussion

The researcher agrees that sufficient and diverse information inclusive of their desires, tendencies, and affiliations must be collected about athletes through discussion with them, observation and study in various situations, and the use of appropriate psychological tests and measures. In addition, a coach is also interested (Vaske, 2019).

The researcher believes a coach must understand what a player is going through and not meet their weakness and failure by reprimanding and admonishing them (Çoban et al., 2020). They must, per contra, instill the team spirit in them and try to rescue the player tending to look introverted by establishing social relations with their teammates, caring for them, and strengthening trust with them, trying to make these relations be characterized by mutual trust and appreciation of the rest of the players for the player who always feels pessimistic and isolated (Zhu & Yzer, 2021). It also confirms that social relations are a prerequisite for any social activity (Dalen & Seippel, 2021). They are essential in accomplishing the goals that an individual aspires to (even on a personal level) and in achieving psychological confidence through the fields that support social interaction and satisfy

the needs of affiliation and self-affirmation so that cooperation and interdependence may be materialized within the group (Emanuel et al., 2018).

Furthermore, players should relax mentally and psychologically and distance themselves from external stimuli as training and competition require more nervous burden and extra reflection. Players may react positively to this burden by modifying the energy discharge they exert and their ability to perform (Junli et al., 2021). Here the role of a coach becomes necessary to control the issue, as we find this happening in most football matches. Try to calm players, promote favorable traits, urge players to respect others, give lessons about virtuous qualities and characteristics, and exemplify from among respected personalities in the sports community and their social acceptance and commendation by all and instill player's self-confidence in them (Singh et al., 2017). Thus, a trainer helps build a player's personality and make them a social character (Singh et al., 2017). In addition, this method gives players more safety and protection, enables them to comprehend the trainer's instructions appropriately, perceive themselves and their problems, and develop their capabilities and skills to acquire perfection in their personalities (Greenlees et al., 2021).

Conclusions

For this purpose, the researcher developed a scale of self-confidence that can be used as an indirect assessment tool by football professionals to evaluate their players' abilities. According to the findings, the psychological program has a favorable influence on self-confidence in football school players. Furthermore, during the post-testing of the two groups of the research sample, there were statistically significant differences in favor of the experimental group.

Acknowledgements

References

Çoban, O., Baykan, E., Gürkan, O., & Yildirim, M. (2020). The analysis of football players' percentages of shot on target and levels of self-confidence in different leagues. *African Educational Research Journal, 8*(3), 586-596. https://eric.ed.gov/?id=EJ1274471

Dagar, R., & Chauhan, S. K. (2020). *Sports psychology and sociology*. Friends Publications.

Dalen, H. B., & Seippel, Ø. (2021). Friends in sports: social networks in leisure, school and social media. *International Journal of Environmental Research and Public Health, 18*(12), 6197. https://doi.org/10.3390/ijerph18126197

Doewes, R. I., Purnama, S., Syaifullah, R., & Nuryadin, I. (2020). The effect of small sided games training method on football basic skills of dribbling and passing in Indonesian players aged 10-12 years. *International Journal of Advanced Science and Technology, 29*(3), 429-441. http://sersc.org/journals/index.php/IJAST/article/view/5620

Drozdikova-Zaripova, A. R., Biktagirova, G. F., & Latypov, N. R. (2021). How to help foster teens form a positive self-concept in sports and exercise activities. *Journal of Human Sport and Exercise, 16*(3proc), S1136-S1150. https://doi.org/10.14198/jhse.2021.16.Proc3.30

Emanuel, A. S., Howell, J. L., Taber, J. M., Ferrer, R. A., Klein, W. M., & Harris, P. R. (2018). Spontaneous self-affirmation is associated with psychological well-being: evidence from a US national adult survey sample. *Journal of Health Psychology, 23*(1), 95-102. https://doi.org/10.1177/1359105316643595

Ferguson, H. L., Swann, C., Liddle, S. K., & Vella, S. A. (2019). Investigating youth sports Coaches' perceptions of their role in adolescent mental health. *Journal of Applied Sport Psychology, 31*(2), 235-252. https://doi.org/10.1080/10413200.2018.1466839

Gomez, J., Bradley, J., & Conway, P. (2018). The challenges of a high-performance student athlete. *Irish Educational Studies, 37*(3), 329-349. https://doi.org/10.1080/03323315.2018.1484299

Greenlees, I., Parr, A., Murray, S., & Burkitt, E. (2021). Elite youth soccer players' sources and types of soccer confidence. *Sports, 9*(11), 146. https://doi.org/10.3390/sports9110146

Heelis, W. J., Caron, J. G., & Bloom, G. A. (2020). The experiences of high-performance coaches in the management of difficult athletes. *Psychology of Sport and Exercise*, 51, 101751. https://doi.org/10.1016/j.psychsport.2020.101751

Herrera, L., Al-Lal, M., & Mohamed, L. (2020). Academic achievement, self-concept, personality and emotional intelligence in primary education. Analysis by gender and cultural group. *Frontiers in Psychology*, 10, 3075. https://doi.org/10.3389/fpsyg.2019.03075

Junli, L., Tianyuan, L., & Jinglan, S. (2021). The Impact of self-confidence, self-motivation and competitive state anxiety on attentional control in athletes in China. *Revista de Psicología del Deporte*, *30*(1), 31-48. https://www.rpd-online.com/index.php/rpd/article/view/287

Mann, A., & Narula, B. (2017). Positive psychology in sports: an overview. *International Journal of Social Science, 6*(2), 153-158. https://doi.org/10.5958/2321-5771.2017.00017.5

Mawase, F., Uehara, S., Bastian, A. J., & Celnik, P. (2017). Motor learning enhances use-dependent plasticity. *Journal of Neuroscience, 37*(10), 2673-2685. https://doi.org/10.1523/JNEUROSCI.3303-16.2017

Qureshi, A. H., Nakamura, Y., Yoshikawa, Y., & Ishiguro, H. (2018). Intrinsically motivated reinforcement learning for human–robot interaction in the real-world. *Neural Networks*, 107, 23-33.

Singh, M. R., Kumar, M. D., & Kumar, P. (2017). Self Confidence–a boost to enhance the performance of sports persons. In *UGC Sponsored 2nd National Conference On Latest Trends in Health and Physical Education 14th-15th Feb*. http://www.ijhpecss.org/Internationaljournal-15.pdf

Vaske, J. J. (2019). *Survey research and analysis*. Sagamor-Venture.

Vealey, R. S., Chase, M. A., & Cooley, R. (2017). Developing self-confidence in young athletes. In *Sport psychology for young athletes* (pp.94-105). Routledge.

Yuan, C., Hua, Y., & Zhu, J. (2019). The role of reinforcement in multiple response repetition error correction and treatment preference of Chinese children with autism. *Journal of Autism and Developmental Disorders, 49*(9), 3704-3715. https://doi.org/10.1007/s10803-019-04086-x

Zhu, X., & Yzer, M. (2021). Understanding self-affirmation effects: the moderating role of self-esteem. *British Journal of Health Psychology 26*(4), 1016-1039. https://doi.org/10.1111/bjhp.12517

The Self-confidence scale in its final form

T		Yes	A Little	No
1	I am an independent player in my decisions.			
2	I can achieve the goals I set.			
3	I feel energetic and active while training.			
4	I have enough ability to defend my position in the arena.			
5	I help my teammates to defend their position in the arena.			
6	I can express my opinion.			
7	I make the right decisions in critical times while playing.			
8	I don't run away when facing an opponent.			
9	I feel happy when helping my teammates.			
10	I think my playing in the arena is correct.			
11	I am happier with my teammates, not when I am alone.			
12	It's hard to control my emotions.			
13	I don't worry when entering the stadium.			
14	I don't get angry, even for the simplest reasons.			
15	I am not afraid of failure when given a task.			
16	I feel anxious when dealing with new situations.			
17	I constantly face difficult situations.			
18	I speak fluently without hesitation in talking to my teammates.			
19	I express my opinions with no shame.			
20	I express my opinion quite easily.			
21	I feel psychologically comfortable in normal situations.			
22	My heart rate increases when talking to the coach.			
23	I rely on myself in facing and solving my problems.			
24	I can solve others' problems.			
25	I adapt quickly to heads-up.			
26	I look forward to a better future.			
27	I don't care about my problems.			
28	I don't trust others.			
29	I don't give up on my stuff.			
30	I enjoy the spirit of communication and understanding others.			
31	I am confident that God will help me.			
32	I execute the instructions as they are.			
33	I regain my balance again after my injuries.			