

Relaxation and Psyching-Up in Sport: Anxiety Management Using Psychological Techniques

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Abstract

The purpose of the study was to find out the effect of a four-week rehabilitation program on the anxiety of Handball players of Iraq. **The Sport Competition Anxiety Test - (SCAT)** was used to collect the data. A multi-stage sampling technique was adopted. At the onset, the handball players belonging to Iraqi Central Handball Federation, Baghdad, Al Shorta Stadium, Baghdad, Albaladiyeh club, Basra were selected purposively. Finally, fifty (50) subjects were selected randomly from the mentioned centers. Since the present study was experimental, the one-group pretest-posttest design was used to complete the study. The paired t-test was used to analyze the data using SPSS version 21. The results revealed a significant difference in the scores of pre and post-tests.

Keywords: Anxiety in sportspersons; rehabilitation program; Handball in Iraq; relaxing exercises; breathing exercises

Introduction

Anxiety is an emotional response characterized by a subjective experience of tension, apprehension, nervousness, and worry, linked to the autonomic nervous system (**Spielberger, 1979**). A transient anxiety disorder would then be composed of two parts: a mental (cognitive) component consisting of negative self-evaluation or pessimistic expectations regarding success (Martens, Vealey, & Burton, 1990). In the context of sports, two factors contribute to a sense of threat and, as a result, anxiety: (a) "uncertainty about the outcome," i.e., the importance of obtaining extrinsic and intrinsic rewards; and (b) "the importance of the outcome," i.e., the importance of obtaining extrinsic and intrinsic rewards (Marchant, Andersen, & Morris, 1998), (Martens, Vealey, & Burton, 1990).

Anxiety impacts athletic performance, and the effort to understand this phenomenon has resulted in a large body of research. The following are some of the theories that have been proposed to explain the anxiety–performance relationship: the

"multidimensional anxiety theory of performance," which proposes a negative linear relationship between cognitive state anxiety and athletic performance, as well as an inverted-U relationship between somatic state anxiety and performance (Martens, Vealey, & Burton, 1990); the "catastrophe model of anxiety and performance," which states that the relationship between physiological arousal and performance will take the shape of an inverted-U or a slightly distorted bell-shaped curve, with a catastrophic drop in performance, depending on whether cognitive anxiety is low or high (**Cox, 2012**); (**Hardy, Parfitt, & Gaynor, 1991**) and the "individual zones of optimal functioning—IZOF," which states that each athlete has a unique zone of (facilitative) anxiety in which he or she performs best, with this zone being either at the upper, middle, or lower end of the pre-competitive state anxiety continuum (**Hanin, 2007**); (**Weinberg & Gould, 2006**).

The so-called "psychophysiological approaches" are beneficial for producing antagonistic effects to the state of worry, such as reduced muscle tension, heart rate, blood pressure, and increased alpha waves (Cacioppo,

Tassinari, & Berntson, 2007). The most well-known of these approaches are relaxation techniques, characterized as methods for people to consciously reduce muscle and psychological tension (Pineschi & Pietro, 2013).

Athletes who have honed their relaxation skills can use them in various situations. Relaxation can be used to relieve localized muscle tensions, facilitate the recovery process when the time between two exhausting activities (training sessions or competition stages) is short, deal with insomnia prior to important events, temporarily store energy to use at the right time, and optimize the cool-down period after sports practice, in addition to its usual application in anxiety management during competitions.

Even though each relaxation technique has its quirks, three universal principles apply to all of them: (a) Relaxing breathing, (b) concentrating on the present moment and body sensations, and (c) reducing muscle tone. The relaxation technique necessitates focusing on the current moment: Individuals must focus on their current physical sensations and interior thoughts. The here-and-now emphasis exacerbates anxiety since anxious thinking is future-oriented and characterized by concerns about consequences (Hazlett-Stevens, 2008).

At any one time, breathing is the only physiological activity that can be directly controlled (Choque, 1998). Breathing control in relaxation is focused on the use of "abdominal (or diaphragmatic) breathing," which is slow, rhythmic, and deep" (Le Scanff, 2003). This style of breathing contrasts from "thoracic (or chest) breathing," which is characterized by an irregular, rapid, and shallow breathing pattern and is connected with stressful conditions (Davis, McKay, & Eshelman, 2000). Another critical feature of abdominal breathing is using a paced rhythm in which exhalation lasts three, four, or five times longer than inhalation in the case of relaxation—this is known as relaxing abdominal breathing (Perreaut-Pierre, 2000).

The researcher being a Handball player, felt that there is a need to implement a rehabilitation program based on meditation, breathing exercises, and counseling to cope with the anxiety in the Handball players. Therefore, he took a study entitled "Relaxation and Psyching-Up in Sport: Anxiety Management Using Psychological Techniques."

Methodology

The present study was experimental. Therefore, the one-group pretest-posttest design was used. The data about this study were collected from fifty (n=50) handball players belonging to Iraqi Central Handball Federation, Baghdad, Al Shorta Stadium, Baghdad, Albaladiyeh club, Basra during the camp for the selection of Iraqi National 'A' and 'B' teams. Prior to the pretest data collection, consent was taken from the players. In the beginning, sixty-five (65) subjects were randomly selected. However, to fulfill the research objectives based on their performance level and age group, a total of fifty subjects (n=50) aged between 18 and 24 years were included for pre and post-data collection. Moreover, players who voluntarily agreed to participate in this study were considered and included in the present investigation. Sport Competition Anxiety Test - (SCAT) was used to collect the data.

The principal objective of the present research work was to find out the effect of rehabilitation program on handball players. A well-designed rehabilitation program was prepared for the particular handball players to achieve this purpose. The researcher considered **Cognitive Behavioral Therapy (CBT)** and took the help of sports psychiatrists and professional counselors in implementing the entire four-week Rehabilitation program. The training program included lectures, meditation, breathing exercises, and personal counseling to reduce high anxiety among the participants. The major factors that affect high anxiety were considered as:

- Apprehensiveness
- Feeling powerless
- Mental and physical preparation
- Visualization

The rehabilitation program sessions were scheduled just before the evening handball practices time. During these sessions, all participants were gathered in a multipurpose hall where the facility of PowerPoint projection and the sound system was already installed. With the help of a sports psychiatrist and professional counselor, the researcher administered the pre-designed activities program to minimize the pattern of high anxiety among the participants.

Table 1. the brief description of seven days program for anxiety is furnished below:

Days	Theme of the lecture designed (45 minutes)	Meditation 10. min.	Breathing and Relaxing exercises. (5. min)	Personal counseling (20 minutes)	Self-efficacy skill training (10 minutes)
Day 1	Performance Anxiety and Sports Psychology	Meditation practices	Breathing and Relaxing exercises	Personal counseling was done	Self-efficacy skill training was done
Day 2	Performance Anxiety and Players Performance	Meditation practices	Breathing and Relaxing exercises	Personal counseling was done	Self-efficacy skill training was done
Day 3	Anxiety as an Emotional Construct	Meditation practices	Breathing and Relaxing exercises	Personal counseling was done	Self-efficacy skill training was done
Day 4	Signs and Symptoms of an Anxiety Disorder	Meditation practices	Breathing and Relaxing exercises	Personal counseling was done	Self-efficacy skill training was done
Day 5	Management of Performance Anxiety Symptoms	Meditation practices	Breathing and Relaxing exercises	Personal counseling was done	Self-efficacy skill training was done
Day 6	Reduction of Performance Anxiety before the Event	Meditation practices	Breathing and Relaxing exercises	Personal counseling was done	Self-efficacy skill training was done
Day 7	Reduction of Performance Anxiety during the Event	Meditation practices	Breathing and Relaxing exercises	Personal counseling was done	Self-efficacy skill training was done

The data were analyzed using Statistical Package of Social Sciences (SPSS) version 21.0. At the first stage, descriptive statistics were used to determine the psychological characteristics of Iraqi handball players at various levels. Furthermore, to answer the specific objective of the research study and to find out the effect of the rehabilitation program among the handball players of Iraq t-test was used, the level of significance was set at 0.05 ($P < 0.05$).

Results and Discussion

Significant differences were found in table 2 on the items related to anxiety between the pre and post mean scores of t-tests of handball players on *competing against others are socially enjoyable* ($t = 6.08$, $p < .05$), *competing in competitions with sportsmen spirit* ($t = 4.63$, p

$< .05$), *worry about making mistakes during the matches* ($t = 4.63$, $p < .05$), *setting a goal during competitions* ($t = 6.04$, $p < .05$), *competing in games that demands a lot of physical energy* ($t = 2.59$, $p < .05$), *before competitions, I feel relaxed* ($t = 2.24$, $p < .05$), *before competitions, I remain nervous* ($t = 5.62$, $p < .05$), *nervousness before the start of the game* ($t = 3.97$, $p < .05$), and *before competitions, I usually get uptight* ($t = 2.44$, $p < .05$).

Significant differences were not found from table 2 on the items related with anxiety between the pre and post mean scores of t-tests of handball players on *feeling of uneasiness, before the competition* ($t = 1.00$, $p > 0.05$), *before competitions, feeling of worry about performance* ($t = 1.85$, $p > 0.05$), *before the starting of matches, feeling of calmness* ($t = 1.45$, $p > 0.05$), *queasy feeling of stomach before*

matches ($t = 0.38, p > 0.05$), *faster heart beats before matches* ($t = 0.41, p > 0.05$) and *team sports are more exciting than individual sports* ($t = 1.75, p > 0.05$).

Table 2: Indicating comparison between the mean scores of pre-and-post-test

Items		Paired Differences				
		Mean	Std. Deviation	t	df	Sig. (2-tailed)
Pair 1	Competing against others is socially enjoyable for me	1.22	1.4	6.08	49	.00
Pair 2	I feel uneasy, before the competition	.18	1.27	1.00	49	.32
Pair 3	Before competition , I always remain worry about my performance	.42	1.60	1.85	49	.070
Pair 4	I always compete in competitions with sportsmen spirit.	1.00	1.52	4.63	49	.00
Pair 5	During the matches, I always remain worry about making mistakes	1.10	1.18	6.57	49	.00
Pair 6	Before the starting of matches, I remains calm	.30	1.46	1.45	49	.15
Pair 7	Setting a goal is important for me during competitions	1.24	1.45	6.04	49	.00
Pair 8	Before the starting of matches, I get queasy feeling in stomach	.08	1.46	0.38	49	.70
Pair 9	Just before competing, I notice my heart beats faster than usual.	.08	1.36	0.41	49	.68

Pair 10	I like to compete in games that demands a lot of physical energy	.42	1.14	2.59	49	.01
Pair 11	Before I compete, I feel relaxed	.48	1.51	2.24	49	.03
Pair 12	Before I compete, I remain nervous	1.12	1.40	5.62	49	.00
Pair 13	Team sports are more exciting than individual sports	.42	1.69	1.75	49	.08
Pair 14	I get nervous wanting to start the game	.78	1.38	3.97	49	.00
Pair 15	Before I compete, I usually get uptight	.42	1.21	2.44	49	.01

Table 3 presents the results of the rehabilitation program on anxiety. There was a significant difference in the mean scores between the pre-and-post anxiety test. The obtained t-value 02.13 is significant at a p-value of 0.03 ($p < 0.05$);

hence the null hypothesis is rejected and determined that the implemented rehabilitation program significantly impacts anxiety in the Handball players of Iraq.

Table 3: Shows altogether pre & post t-test results on items related to anxiety:

Variables	Paired Differences					
	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
ANXIETY PRE & POST	1.88	6.23	.88	2.13	49	0.03

Conclusion

it was observed from table 3 that the mean score of subjects before the rehabilitation program was lower than the scores after implementation of the rehabilitation program. This shows that the rehabilitation program has a significant impact on anxiety. The t-test values between pretest and post-test were significant, showing the rehabilitation program's positive effect. It

showed that the implemented intervention technique used for the rehabilitation program was meaningful and improved the participants to reduce the competition failure due to high anxiety before and during the competition. It is by and large concurred that the best time to start a rehabilitation program is in the off-season or pre-season. In this period, competitors have more opportunities to learn and develop new

abilities, and they do not have winning pressure (Weinberg & Gould, 2006). Moreover, the findings of (Navaneethan & Rajan, 2010) is contrary who implied their study to investigate the effect of psychological skill training techniques such as progressive muscle relaxation on anxiety, the results of the study revealed an insignificant difference in levels of anxiety among male inter-collegiate volleyball players and the findings are in partial consonance with the research of Crocker et al. (1989), (Navaneethan & Rajan, 2010). Every player has a certain anxiety level that is needed to optimize his or her performance in a game. That depends on past experiences, practices, learning techniques, coping responses, and genetics.

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