EFFECT OF MENTAL IMAGERY TRAINING PROGRAM ON KINESTHETIC IMAGERY AND VISUAL IMAGERY OF HANDBALL PLAYERS

Research Scholar:
Mr. Dinesh Ukirde
Director of Physical Education
Arts, Commerce & Science College,
Nandgaon, Nashik

Research Guide:
Dr. Atmaram V. Thoke
Principal,
Arts, Commerce & Science College,
Makhamalabad,

Abstract:

The purpose of the study was to investigate the effectiveness of imagery intervention on a team sport like Handball, with emphasis on psychological variables. To find out the effectiveness of mental imagery intervention program for the total duration of twelve weeks on selected Visual imagery and Kinesthetic Imagery of handball players. For this study Visual imagery and Kinesthetic Imagery are dependent variables. The population for the present study will be Nashik District Senior Handball Male player's age group between 18 to 25 years were selected as subjects. The convenience sample method was used for this study. To achieve the purpose of this present study 60 number of Handball players of Nashik district were selected. For this study, there were four groups such as Experimental (Elite), Control (Elite), Experimental (Novice), and Control (Novice) within 15 subjects each group. The imagery training considered of having auditory listen to a imagery tape. Each participant of experimental groups should listen the auditory and visual for 15 minutes prior to kinesthetic and visual imagery performance in handball. The control groups were not given any treatment. The pre and post-test data were collected before and after training period of both experimental and control groups. The Analysis of Paired sample't' test was used to investigate the effect of mental imagery training programme on kinesthetic and visual imagery of handball players. Imagery training programme has significant impact on movement and visualization among the players of imagery training compared to players of control groups.

Keywords: *Visual imagery and Kinesthetic Imagery, MIQR Questioner, Handball.*

Introduction:

Imagery as a powerful and useful psychological tool has been applied for various purposes in sports and exercise. Potential applications of imagery include skill learning and practice, development and practice of tactical skills, competition and practice. The focus on imagery

uses so far has been on performance related aspects of sport, but imagery can also influence an athlete's psychological state. It can enhance psychological skills such as concentration, self confidence, motivation, attention, and anxiety control. Therefore it was the purpose of the study to investigate upon the effectiveness of imagery intervention on a team sport like Handball, with emphasis on psychological variables. Moreover, the researcher himself, being a handball player, and handball being a popular game in the world, it seemed justified that undertaking such a study would be beneficial in improving the psychological build of the players and thereby improvement in performance. The researcher himself being a Handball player has experience such a situations and hence was curious to study the effect of mental imagery and performance. According to researcher mental imagery has been a measure factor for such a result. After being in contact with many similar athletes and coaches the researcher has found that similar problem is faced even today. Hence the researcher decides on performing a study on athletes and sees the effect of mental imagery on their performance. This data assessed by using the Movement Imagery Questionnaire Revised (MIQR).

Objective of the study

To find out the effectiveness of mental imagery intervention program for the total duration of twelve weeks on selected Visual Imagery and Kinesthetic Imagery of handball players

Hypothesis

The present study was undertaken with the following hypotheses:

$H_{1:}$ There would be significant effect for the mental imagery intervention program on Visual Imagery and Kinesthetic Imagery of handball players

Methodology

Research Method

The present research is an experimental study. For this study pre and post test was taken to collect the data and then experimental research method was used. This data assessed by using the Movement Imagery Questionnaire Revised (MIQR), For the experimental part of the research two group Pre test and Post test design was used by one is experiment and another is control group.

Variables of the Study:

For this research Visual Imagery and Kinesthetic Imagery are dependent variables.

Population

The population for the present study will be Nashik District Senior Handball player's age between 18 to 25 years.

Sample

The convenience sample method was used to select the sample for this study. This study is restricted to the various handball clubs as well as senior colleges of Nashik District. For this study 60 no. of Handball players of Nashik district were selected. Handball players of age group between 18 to 25 years were selected as subjects. For this study, there were four groups such as Experimental (Elite), Control (Elite), Experimental (Novice), and Control (Novice) within 15 subjects each group.

Data Analysis:

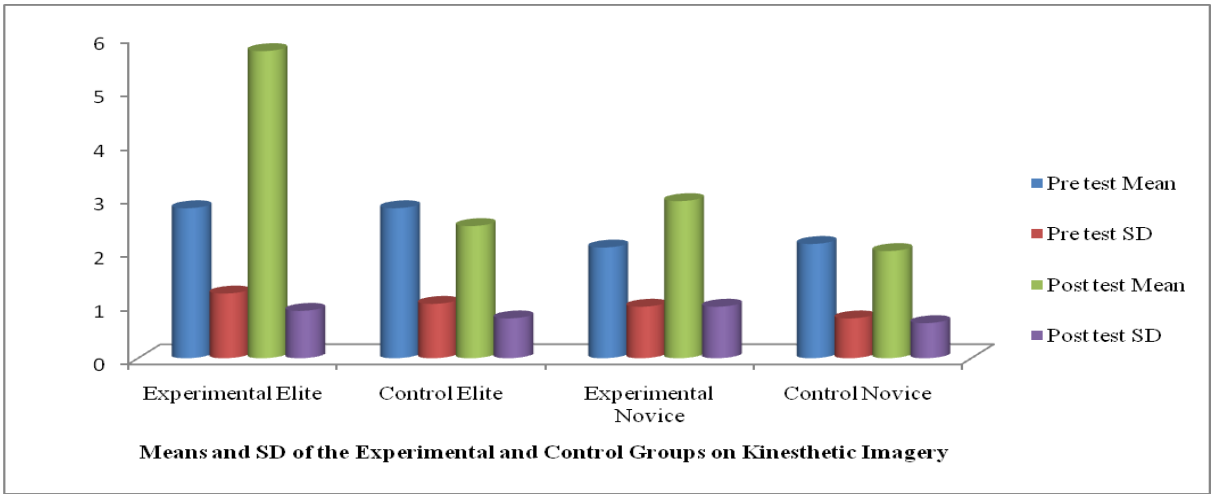
Pre and Post-Test Scores of the Experimental and Control Groups on Kinesthetic Imagery

Groups	**N**	**Pre test**		**Post test**	
		Mean	**SD**	**Mean**	**SD**
Experimental Elite	15	2.8	1.20712	5.7333	0.88372
Control Elite	15	2.8	1.01419	2.4667	0.74322
Experimental Novice	15	2.0667	0.96115	2.9333	0.96115
Control Novice	15	2.1333	0.74322	2.0000	0.65465

The above table of the pre-test and post-test means of the experimental and control groups on kinesthetic imagery indicates that in case of experimental elite group, the pre and post-test mean and SD were 2.80 (1.20) and 5.73 (0.88) respectively. In case of control elite group, the pre and post-test mean and SD were 2.80 (1.01) and 2.46 (0.74) respectively.

In case of experimental novice group, the pre and post-test mean and SD were 2.06 (0.96) and 2.93 (0.96) respectively, and for the control novice group, the corresponding pre and post-test mean and SD were 2.13 (0.74) and 2.00 (0.65) respectively.

Figure 1 shows that the means and SD of the experimental and control groups on Kinesthetic Imagery



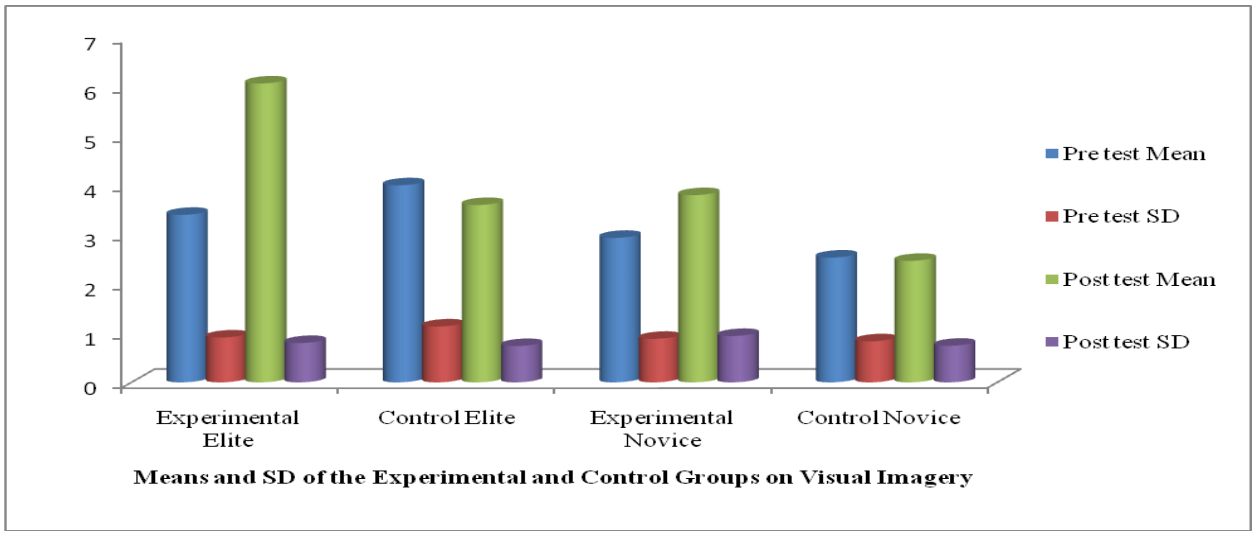
Pre and Post-Test Scores of the Experimental and Control Groups on Visual Imagery

Groups	N	Pre test		Post test	
		Mean	SD	Mean	SD
Experimental Elite	15	3.40	0.91	6.0667	0.79
Control Elite	15	4.00	1.13	3.60	0.73
Experimental Novice	15	2.93	0.88	3.80	0.94
Control Novice	15	2.53	0.83	2.46	0.74

The above table of the pre-test and post-test means of the experimental and control groups on visual imagery indicates that in case of experimental elite group, the pre and post-test mean and SD were 3.40 (0.91) and 6.06 (0.79) respectively. In case of control elite group, the pre and post-test mean and SD were 4.00 (1.13) and 3.60 (0.73) respectively.

In case of experimental novice group, the pre and post-test mean and SD were 2.93 (0.88) and 3.80 (0.94) respectively, and for the control novice group, the corresponding pre and post-test mean and SD were 2.53 (0.83) and 2.46 (0.74) respectively.

Figure 2 shows that the means and SD of the experimental and control groups on Visual Imagery



Means and SD of the Experimental and Control Groups on Visual Imagery

Result and Discussion: The results of the study with respect to the hypothesis that there would be significant effect for the mental imagery intervention programme on selected psychological variables namely, Kinesthetic Imagery and Visual Imagery of Handball players indicated the following results.

Kinesthetic Imagery: Experimental Elite (EE) – the Mean difference between the Pre and Post test of Kinesthetic Imagery on Experimental Elite Group was 2.93 with SD equal to 0.79. This difference was tested with pair sample 't'test and it shows that this was statistically significant at 0.05 level of significance (t = 14.22, df =14, p = 0.000)

Experimental Novice (EN) – the Mean difference between the Pre and Post test of Kinesthetic Imagery on Experimental Novice Group was- 0.86 with SD equal to 0.35. This difference was tested with pair sample 't'test and it shows that this was statistically significant at 0.05 level of significance (t = -9.53, df =14, p=0.000).

Control Elite (CE) – the Mean difference between the Pre and Post test of Kinesthetic Imagery on Control Elite Group was 0.33 with SD equal to 0.61. This difference was tested with pair sample't' test and it shows that this was statistically significant at 0.05 level of significance (t = 2.09, df = 14, p = 0.05).

Control Novice (CN) – the Mean difference between the Pre and Post test of Kinesthetic Imagery on Control Novice Group was 0.13 with SD equal to 0.63. This difference was tested with pair sample't' test and it shows that this was not statistically significant at 0.05 level of significance (t = 2.10, df = 14, p =0 .43).

Visual Imagery: Experimental Elite (EE) – the Mean difference between the Pre and Post test of Visual Imagery on Experimental Elite Group was 2.66 with SD equal to 0.72. This difference was tested with pair sample 't'test and it shows that this was statistically significant at 0.05 level of significance (t = 14.27, df =14, p = 0.000).

Experimental Novice (EN) – the Mean difference between the Pre and Post test of Visual Imagery on Experimental Novice Group was 0.86 with SD equal to 0.63. This difference was tested with pair sample 't'test and it shows that this was statistically significant at 0.05 level of significance (t = 14.22, df =14, p = 0.000).

Control Elite (CE) – the Mean difference between the Pre and Post test of Visual Imagery on Control Elite Group was 0.40 with SD equal to 0.73. This difference was tested with pair sample't' test and it shows that this was statistically significant at 0.05 level of significance (t = 2.10, df = 14, p = 0.05).

Control Novice (CN) - the Mean difference between the Pre and Post test of Visual Imagery on Novice Control Group was 0.66 with SD equal to 0.70. This difference was tested with pair sample't' test and it shows that this was not statistically significant at 0.05 level of significance (t = 0.36, df = 14, p = 0.71).

Conclusion:

In the present study, the obtained result was favored to the effectiveness of mental imagery training in improving movement and visualization of handball players. In such a way, mental imagery interventions were found to be effective in improving the power of the Visualization as well as capability of doing correct movement of Handball players.

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