

RELATIONSHIP OF MENTAL IMAGERY BETWEEN RUNNERS AND SWIMMERS

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ABSTRACT

The purpose of this study was to find out the relationship between some mental imagery aspects of runners and swimmers. 25 players from each individual sports (runners and swimmers) randomly selected on the basis of simple sampling method. The age ranged of the subjects was 18 to 27 years. Runners and swimmers who have taken part in inter collegiate competition (W. B.) were selected as subjects. The necessary data were collected by administering questionnaire (test items) for mental imagery visual, auditory, and tactual items components of runners and swimmers. The criterion measures for the study were standard questionnaire prepared by Dr. M. Raja mamik chand. To establish the relation in between the variables product moment co-relation method was employed. The significance was set at 0.05 level of confidence. Results of study concluded that was a significant relationship was found between auditory – visual; visual - touch variables among swimmers. But insignificant relationship was observed between auditory - touch among swimmers. Insignificant relationship was also observed between auditory – touch; visual- touch; auditory - visual among runners. Insignificant relationship was also existed between runner and swimmers in their visual, auditory and touch items of mental imagery.

Key Words: Runner, Swimmer, Imagery, Auditory, Touch, Visual.

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INTRODUCTION

Imagery is generally stated as imageries in plural form in literary works for symbolic representations. Imagery means images in groups. When we wanted to state images collectively, we state it by the concept imagery. Therefore, a group of collective images is called imagery. Imageries are the materials involved in the general process of imagination. Imagery is the distinctive type of mental images formed by a particular individual. Psychologically, imagery also refers to the mental experience of something that is not immediately present to our senses. The objects of past sensory experiences exist in the memory. A series of mental images may be also called as imagery such as visual images, auditory images, olfactory images, gustatory images, tactual images and so on. It becomes a mental image drawn from our memory. We are forming images of persons, objects, places, events and experiences. Apart from what we have already experienced about many things, we are also experiencing everyday many new thing.

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A mental image is a personal experience of a person about a person, an object or an event that he has formed. These mental images may be referring to visual, auditory, olfactory, gustatory sensations or the sensation of touch. Apart from what we have already experienced about many things, we are also experiencing everyday many new things (Manickam, 1985) .

Anderson (1980) stated the propositional theory is currently the most popular in terms of understanding the representation of imaginable information in memory, it too is not without its critics. The major question appears to be whether human memory is exclusively propositional or if it is possible that three separate codes exist. Weinberg(1981) explained that mental imagery gets the musculature into action and can prepare an athlete for the actual physical competition. These mental preparations can be helpful to a wide range of sport activities, especially for elite athletes who seem to engage in a great deal of mental imagery before competition. Mantens (1982) reviewed the imagery research related to sport and motor behaviour from 1970 to 1982. He concluded that imagery is an effective technique to improve performance and documented improvement in the following sport skills through imagery practice, basketball free throw shooting, football place kicking, swimming starts, drat throwing, alpine skiing, karate skills, running technique etc. Clark (1994) compared the effect of mental practice with that of physical practice in learning of the pacific coast one hand basket ball foul shot. showed that mental practice was almost as effective as physical practices was far superior to mental practice for the beginners. Housner(1984) provided support for the that visual imagery may play a role in the recall or modeled motoric stimuli. Coffins (1987) analyzed functional characteristics of mental imagery, in which the question is whether the format for the majestic representation is pictorial or sentential. I offer an account of imagery and cognition as an important aspect of the theory of mental representation, one which serves as a test for prevalent views of the nature of explanation in cognitive science. Olia (1986) examined the influence of mental imagery in the individual learner's field

dependent/field independent cognitive style. The statistic revealed a high degree of significance in the three main effects. However there was no significant interaction effect among the three factors. Ragle (1985) studied importance of imagery as a vital concomitant of the learning process in the developing psyche has largely been ignored by present-day educators. Nevertheless, it was believed by the investigator that relaxation methods, guided imagery and dream work as regular. Duane (1986) determined the effects of mental imagery practice upon the improvement of pitching skills. He indicated that all three practice groups made significant improvement between the pre-test and post-test scores at the .05 level. However, the analysis of variance yielded data that found no group significantly superior to the other groups.

MATERIALS AND METHODS

The test was administered on all selected subjects for the study after seeking permission from the manager and coach of the participating teams as well as team members were requested to cooperate with the investigation for the study. The questionnaires were distributed to the subjects. Necessary instructions were provided before the administration of the test for all the subjects. The purpose of the study was clearly explained to understand the player's mental imagery.

The subjects were asked to respond as quickly as possible without brooding over any questions and statement, once the instructions were understood clearly by them, None of the subjects encountered any serious problem in understanding the questions/statements which were invariably in English. The mental imagery questionnaire contained 45 items and assess the auditory, touch, visual components of mental imagery.

Total number of subjects were fifty (Runners=25, Swimmers= 25). The age ranged of subjects was 18 to 27 years. Mental imagery questionnaire prepared and validated by M. Rajamaniekam (1985) was used for the purpose of data collection from the runner and swimmers. Simple random sampling method was employed for selection of subjects. After collection of data Pearson's Product Moment Co-efficient of correlation was employed. The following formula of Pearson's moment coefficient of correlation is employed

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{[N\sum x^2 - (\sum x)^2][N\sum y^2 - (\sum y)^2]}}$$

Scoring: This test items were visual, auditory and tactual. The norms of collecting information were selected are as follows.

No.	Range of Scores	Degree of Mental Imagery	Weight
A	67.5 – 75.0	Very clear & vivid image	5
B	52.6 – 67.5	Fairly vivid image	4
C	37.6 – 52.6	Just clear image	3
D	22.6 – 37.6	Some what clear image	2
E	7.6 – 22.5	Dim image	1
F	0 – 7.5	No image	0

RESULTS AND DISCUSSION

On the basis of the norms established by Dr. M. Rajamaniekam, the responses were compiled and tabulated accordingly to find out the percentage of responses and as a whole. The responses were also taken into consideration to find out its relationship by using Product Moment Correlation and data pertaining to this have been presented in Table 1 to 3.

TABLE 1
RELATIONSHIP BETWEEN THE SELECTED VARIABLES OF THE SWIMMERS

Variables correlated	coefficient correlation
Auditory V/S Visual	0.618*
Auditory V/S Touch	0.184*
Visual V/S Touch	0.658*

Table 1 reveals that the significant relationship was found between auditory – visual; auditory – touch and visual - touch components of mental imagery among swimmers, as the obtained Correlation Coefficients (r) values of .618, .184 and .658 respectively were higher than the required value to be significant.

TABLE 2
RELATIONSHIP BETWEEN THE SELECTED VARIABLES FOR THE RUNNERS

Variables correlated	coefficient correlation
Auditory V/S Visual	0.011*
Auditory V/S Touch	0.146*
Visual V/S Touch	0.298*

Table 2 reveals that the significant relationship was also found between auditory – visual; auditory – touch and visual - touch components of mental imagery among runners, as the obtained Correlation Coefficients (r) values of .011, .146 and .298 respectively were higher than the required value to be significant.

TABLE 3
RELATIONSHIP BETWEEN THE SELECTED VARIABLES FOR THE SWIMMERS AND RUNNERS

Variables correlated	Coefficient correlation
Runner visual V/S swimmer visual	0.169*
Runner auditory V/S Swimmer auditory	0.099*
Runner touch V/S swimmer touch	0.070*

Table 3 reveals that the significant relationship was found between runners and swimmers in their visual, auditory, and touch components of mental imagery, as the obtained Correlation Coefficients (r) values of .169, .099, and .070 respectively were higher than the required value to be significant.

CONCLUSIONS

It was concluded that the significant relationship was found between auditory and visual variables of mental imagery among runners and visual and touch variables of mental imagery aspect among swimmer. Insignificance relationship was found between runners and swimmers in their visual, auditory and touch aspects of mental imagery.

RECOMMENDATIONS

Mental imagery may be used by the coaches and the trainers as prerequisite quality among players in selected sports. The study of similar nature may be undertaken by selecting the subjects of national levels. The similar study may be undertaken with the larger sample size. The similar study may be undertaken by selecting the subject of different age groups and different level of performance. The similar study may be undertaken by selecting subjects from both the sexes.

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