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Abstract in English:
Effect of mental program to develop mental toughness and its relationship for athletic beginners.

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Introduction.

Achievement of athletic championship in sports competitions is the goal sought by the players in all athletic activities, but this will not be achieved easily, but there is a need for optimal use of full capabilities as (physical, and tactical as well as psychological skills, to try to make the best possible level in the competition.

Therefore, the preparation of the sports player requires integration between mind and body and the development of this integration between mind and body to move towards showing and presenting the potential and hidden capabilities for the players, and increase excellence in sports

The mental training is one of cognitive training patterns, which is contribute in preparation of the player to enter the competition, it includes the perception of movement and the performance sequence, and the sequence of attitudes and goals, so it is an important part in sports training , but notice that mental training is not only used to participate in athletic competition, but used also in the field of movement in general and in stages of the acquisition of motor skill, they are identified as, (acquisition of the first phase skill process - acquisition of good compatibility of skill process - Installation and machinery phase).

In this regard, (Osama Kamel) in 2000 referred that, preparing of integrated athlete depends on the characteristics of psychological and mental abilities ,especially with the closed levels of physical , proficiency and tactical of competitors, and he also indicates that athletic excellence depends on the extent to which players / athletes use their psychological abilities, not less to take advantage of their physical and mental abilities, and cause psychological abilities help individuals to mobilize their energy and physical abilities to achieve maximum and best athletic performance, and can be developed through special programs and training designed for that purpose, as a psychological skills training programs

Mental toughness is one of the important psychic characteristics to be met in players (team-member), especially athletes, where (Julie Ray 2003) refers that mental toughness means the stability of ideal performance, as it requires an existence of multi psychological skills for every athlete, and it considers one of the acquired features which the person gain through his life situations , and that there is nothing to do with any genetic factor, so the mental toughness is one of factors that

need to be developed continuously , otherwise athlete may got affected by surrounding& circumstances.

Research problem and its importance.

Performance of athlete has an unique feature, cause it requires high proficiency levels of team-member, and also there is a need for every athlete to use all of physical, tactical and psychological abilities and skills in an integrated manner, so to try to make the best possible result.

So (James Loehr) in 1993 thinks toughness is an associated with muscular rigidity as it reduces tension and anxiety and help on feedback usage.

The importance of mental toughness in athletic comes from that differences among players levels in sports is measured by fractions (tenths of a second or part of a percent of a second) and any facility can be provided to reduce time shall be used.

So (Bruce) in 1992 believes (quoted by Mohammed al-araby Shimon 2000) that usage of mental training is one of the main routes that may help racers in athletics on the perception of performance and to imagine it in a helpful way that he is confident that he will lead the race well, and although you can train the body through the use of modern electronic devices, but it is harder to train the mind on these machines, all of these mental perceptions just come in a flash and quick vision, so you must train it as well, and try to get complete control.

Researcher Has attributed defects and failure of some players in the three attempts/ trials in some athletic racing , and also that some players achieve high score from the first attempt / trial, and then went back to normal score in the other attempts, he has attributed that to mental and physical condition that affects the player during the performance, so he found that there is a need to try to find solutions that will achieve a good level of mental toughness for athletes, so that we can get to the good integration in the training system , with his famous three corners- (physical preparation - profession preparation - tactical preparation - psychological preparation), the last item represents the main stone in the training process

So researcher becomes interested in this problem , cause he noticed many facts like that through his permanent contact with athlete sector, and also the registered variation of the racer to another , researcher attributed all those disparities as a result of some personal issues that occupy player mind and affect on his performance, and this concept lead researcher to conduct this study, and that aims to design a training program for the development of mental toughness, and its relationship to athletes scores.

Research goal.

This research aims to build a mental training program to develop mental toughness and its relationship to athletes' scores, through:

- 1 - Building a mental training program for athletes.
- 2 - Identifying the impact of the mental training program on the development of mental toughness and score level for athletes.

Research assumptions.

- 1 - Proposed Mental training program works on development of athletes mental toughness
- 2 - Proposed mental training program affects on improvement of athletes score level, through competition (long jump - shot put) in the Athletics.

Research procedures:

Research methodology.

The researcher used both descriptive and experimental approaches as in the following manner:

- 1 - Descriptive approach through the questionnaire of a mental toughness scale of to the research sample ,racers (jump and throw) in the Athletics to identify the mental toughness for these players.
- 2 – Researcher used an experimental approach as well, experimental design included two groups, one is an experimental and the other is used for measuring purposes only (as criteria), using measurement(both of before & after techniques) of the two groups, cause this technique is suitable with the nature of this study.

Research sample.

The researcher chose samples from long jump & shot put athletics (team-members) and which they are enrolled in Egyptian Federation records for athletics clubs and centers of AL-sharkya province - of sports season 2010 - 2011, as number of samples were about (24) , the researcher excluded 7 samples cause their permanent absence in training, as well as they got some injuries, then he selected 5 samples as questionnaire for mental toughness limit., and thus the sample core consists of 12 athletes which have been divided into two equal groups, one experimental and the other is used for measuring purposes only (as criteria), by 6 samples for each group to be made up of each group as follows: 3 athletes in the long jump competition, and 3 athletes in the shot put competition.

Means and instruments are used to collect data:

1 -Tools and equipments are used in the measurements:

- Medical Balance, standard for weight measuring.
- Alrstamitr device to measure lengths.
- Stop watch.

2 - Measurement of mental toughness: design by Jim Loehr in 1983

Presented to the Arab environment by , both (Majida Mohammad Ismail, Jihan Mohamed Fouad). In 2006

3- Mental training programs to develop mental toughness, designed by researcher.

Research implementation Steps.

Measurement- Before.

Measurements- before were conducted for research group in the selected variables (mental toughness - score Level to long jump race - score Level to shot put race), started from, Sunday, 3/4/2011 until Tuesday, 5/4/2011, on Sharkya club galleries and tracks, in the following order:

The first day: the application of mental toughness standard.

Day Two: Measuring of score Level to long jump race.

Day Three: measuring of score Level to shot put race.

Application of mental training program:

Proposed mental training program to develop mental toughness was implemented and started on, Saturday 16/4/2011, until, Thursday 23/6/2011, (i.e. over ten weeks)- By 4 training units per week, for experimental group members

Measurement- after:

Measurements- after were carried out for research group in the selected variables ,between Tuesday, 28/6/2011, until Thursday, 30/06/2011 (for 3 days), according to the same order of (measurements-before), taking into account the same circumstances and conditions that have been followed in (measurements- before) experiment.

Statistical treatment :

The researcher used the statistical program (SPSS), to treat data statistically and used the following statistical methods:

- The arithmetic average – or average.
- Standard deviation
- Mediator
- Torsion coefficient
- T-test
- Simple correlation coefficient for Pearson
- Multi -correlation coefficient.
- Alpha Cronbach coefficient
- Percentage of improvement rates - %

Researcher accepted statistical significance level of (0.05)

Conclusions and recommendations.

First- conclusions:

According to results of statistical treatments, and within the research sample, the researcher found out the following:

- 1 -Mental training program had positive effect, there is a statistical indication, on development of mental toughness of long jump and shot put athletes.
- 2 – There was a statistically significant correlation , (0.05)- between mental toughness under research, and score level for the long jump and shot put athletes.
- 3 – There were statistically significant differences , (0.05)- between research samples response(long jump and shot put athletes),on the axes of mental toughness , before and after application of mental training program to develop mental toughness , for the sake of after application.

Second- the recommendations:

- Within research problem and its assumptions, and through research sample, and statistical analysis results, and based on the conclusions, the researcher recommends the following:

- 1 - Instructors should pay great attention for psychic preparation for athletes, ,as well as tactical, profession and physiological preparation.
- 2 - Psychologists must share in the implementation of training programs and preparation for championships ,to note mental toughness standard, (self-confidence - negative energy - control attention - visual perception control - defense level - positive energy - control direction) so that, can be developed for athletes before the tournaments.
- 3 - Presence of a psychologist, beside technical and administrative departments for all athletics.
- 4 – Psychologists must take into account psychological variables that accompany the athletes before, during and after competitions, including variable mental toughness, as demonstrated in the current study, the results have been achieved on score level of long jump and shot put Athletics.
- 5 - Application of mental toughness as a variable psychological measure on the other sports and Athletics.