Ovidius University Annals, Series Physical Education and Sport / SCIENCE, MOVEMENT AND HEALTH
Vol. XIV, ISSUE 1, 2014, Romania
The journal is indexed in: Ebsco, SPORTDiscus, INDEX COPERNICUS JOURNAL MASTER LIST, DOAJ DIRECTORY OF OPEN ACCES JOURNALS, Caby, Gale Cengace Learning, Cabell's Directories

Science, Movement and Health, Vol. XIV, ISSUE 1, 2014
January 2014, 14 (1): 24-30
Original article

THE RELATIONSHIP BETWEEN THINKING STRATEGIES, PHYSICAL SELF-CONCEPT AND THE PERFORMANCE LEVEL IN CERTAIN INDIVIDUAL AND TEAM ACTIVITIES

AMAL SAYED[1], WAFAA HASSAN[1]

Abstract

Purpose. The objective of this investigation was to identify the relationship between thinking and Physical Self-Concept and the level of skill performance of female players in team games (basketball) and single games (speedball) and to know individual differences between female players in basketball and speedball in thinking strategies and Physical Self-Concept.

Methods. The sample was selected intentionally and randomly and included (50) first class basketball female players represented by Al-Ahly, Al-Gezira and Al-Maady Sporting Clubs and (50) first class speedball female players participated in the Republic Championship in a season in 2011/2012. They used the measurement of height, weight and the test for measurement of the level of performance in speedball by the number of strokes for time added in each position of the individual play. To measure the level of skill performance in basketball the test of passing towards circles (5) times, the test of halt and pivoting, test of forward shot, test of barrier feint were used.

Results. Statistical analyses showed that:

- Significant correlation between thinking strategies and the level of skill performance in basketball.
- Significant correlation between thinking strategies and the level of skill performance in speedball.
- Significant correlation between physical Physical Self-Concept and the level of skill performance in basketball.
- Significant correlation between physical Physical Self-Concept and the level of skill performance in speedball.
- Significant differences between female basketball players and those of speedball in thinking strategies.
- Significant differences between female basketball players and those of speedball in Physical Self-Concept.

*Conclusions.*Using thinking strategies in the skill task and self-talk together with training programs as studies and scientific researches confirmed the importance of such strategies in up-grading the skill level. And Identifying psychological characteristics of female players, particularly Physical Self-Concept as it constitutes an indicator of self-confidence and consequently concentrating on the performance. Add to, Psychological requirements should be categorized for each game.

Key words: Thinking Strategies, Physical Self-Concept, Speedball, Basketball

Introduction

The scientific research of the most important science upon which to develop the communities in order to reach the highest levels in all areas in general, and the field of sports , in particular , and this is by identifying what the gift of God to man of the capabilities and capacities of multiple in an attempt to achieve the greatest benefit from the scientific theories of modern sports field , to achieve high levels of sports in various sports activities this requires the integration of sports in various physical, technical , tactical and psychological and mental health .

(Osama, 1995) noted that the Games individual represented in the speedball you need an opportunity for a merger between the mind (time) and capabilities harmonic and skill which is characterized by high trait anxiety and arousal emotional as well as take responsibility firmly style performance either at the beginning or end of the game A good needs to collect his skills and performance in an integrated and accurate.

(Mohamed, 2000) indicated that each sporting activity requirements and physical skill and tactical and psychological characteristic of all other sporting activities , mass was or individual need to be a high degree of perception and the focus of attention , but to varying degrees , and the mass games , which require those capabilities to the ball game Basketball as contained in the positions of variable contrast requires the player modified his thinking and actions to address these attitudes and this requires a high degree of synergy and compatibility neuromuscular and the accompanying high ability to focus attention to the performance of skill

[1] Faculty of physical education for girls, Helwan University, Egypt
CORRESPONDENCE AND REPRINT REQUESTS: Email: dr_aml2007@yahoo.com

Ovidius University Annals, Series Physical Education and Sport / SCIENCE, MOVEMENT AND HEALTH
Vol. XIV, ISSUE 1, 2014, Romania
The journal is indexed in: Ebsco, SPORTDiscus, INDEX COPERNICUS JOURNAL MASTER LIST,
DOAJ DIRECTORY OF OPEN ACCES JOURNALS, Caby, Gale Cengace Learning, Cabell's Directories

appropriate in different situations faced by the player greatest degree of accuracy.

To achieve high levels in various sports activities individual was or collective requires that sports integration in terms of brainpower represented in the thinking strategies with all its capacity to imagine the mental focus attention , relaxation, positive thinking and speaking with the self and the capacity of physical and skill to create a personal player , as well as confidence through self - acceptance to the same physical as it is the first core upon which the personal , as it demonstrates (Osama , 1995) that the individual 's sense that his body, large or small that is attractive strong or weak People who They have a positive perception about their bodies see themselves as more social and intimacy with others and more intelligent

And more able to take responsibility for achieving its goal of achieving tournaments, and to achieve this , too , must That there will be thinking strategies that include control emotions to reduce tensions and stress and anxiety imposed by the conditions of competition , and the lies the importance of strategies to think that behavior has two aspects , one is clear performance apparent to the athlete and the other hidden not see one , namely the ideas that affect an active role on the performance where the result and win the most important concern sports and this is what he referred to the (Mohammed, 2000).

Higher order thinking skills include critical, logical, reflective, metacognitive, and creativethinking. They are activated when individuals encounter unfamiliar problems, uncertainties, questions, or dilemmas. Successful applications of the skills result in explanations, decisions, performances, and products that are valid within the context of available knowledge and experience and that promote continued growth in these and other intellectual skills. Higher order thinking skills are grounded in lower order skills such as discriminations, simple application and analysis, and cognitive strategies are linked to prior knowledge of subject matter content (Tarek, 1993).

Thinking strategy in skillful task is considered the primary part in preparing thinking content, so it is necessary to emphasize performance technical aspects such as the exerted power and reducing feelings of tire or the required motor range, while strategy of mood words For performance was developed to fill out the resultant lack from the difficulty of using the strategy of skillful task content for a long term. These strategies express how to perform through using expressive words of the required motor content (Mohammed, Abdelnabi, 1999).

Most people of average intelligence, given data or some problem, can figure out the expected conventional response. Typically, we think productively, that is on the basis of similar problems encountered in the past. When confronted with problems, we fixate on something in our past that has worked before. We ask, "What have I been taught in life, education or work on how to solve the problem?" Then we analytically select the most promising approach based on past experiences, excluding all other approaches, and work within a clearly defined direction towards the solution of the problem. Because of the soundness of the steps based on past experiences, we become arrogantly certain of the correctness of our conclusion. (Salah, 2000; Ahmed, 2002)

Appropriate teaching strategies and learning environments facilitate their growth as do student persistence, self-monitoring, and open-minded, flexible attitudes.Hence the idea of research , namely, (thinking strategies and physical self-concept and their relationship of performance level in some individual activities represented in ball speed and collective represented in basketball to get to know the extent of the relationship between these variables) .

The research aims to identify:

1. The relationship between thinking strategies and the level of skill of the player's performance in speedball game.
2. The relationship between thinking strategies and the level of skill of the player's performance in basketball.
3. The relationship between physical self-concept and the level of skill of the player's performance in speedball game.
4. The relationship between physical self-concept and level of performance skill of basketball players.
5. Significant differences between speedballplayers, basketball game in thinking strategies.
6. Significant differences between speedballplayers and basketball in physical self-concept.

Material and Methods:

Subjects:

The sample was selected intentionally and randomly and included (50) first class basketball female players represented by Al-Ahly, Al-Gezira and Al-Maady Sporting Clubs and (50) first class speedball female players participated in the Republic Championship in a season in 2011/2012. They used the measurement of height, weight and the test for measurement of the level of performance in speedball by the number of strokes for time added in each position of the individual play. To measure the level of skill performance in basketball the test of passing towards circles (5) times, the test of halt and pivoting, test of forward shot, test of barrier feint were used.

Procedures:

Age, height, weight, intelligence level and performance level were recorded. Height was assessed with a standard tape measure on a wall; weight was measured with household scales.

The tests which used:

- (Hala, 2010) test to measure IQ.

Ovidius University Annals, Series Physical Education and Sport / SCIENCE, MOVEMENT AND HEALTH
Vol. XIV, ISSUE 1, 2014, Romania
The journal is indexed in: Ebsco, SPORTDiscus, INDEX COPERNICUS JOURNAL MASTER LIST,
DOAJ DIRECTORY OF OPEN ACCES JOURNALS, Caby, Gale Cengace Learning, Cabell's Directories

- A test to measure the level of performance skills in ball speed number of strikes for a minute in each mode of play modes four singles (right - left –forward hand–back Hand) .
- Tests measure the level of performance skills in basketball (passing on the circles "5" times to measure the accuracy of the scroll, a conversation about the test to measure the speed barriers conversation,test of front shooting to measure the accuracy of shooting, test of stopping andpivot).
- Scale thinking strategies for **(**Mohammed, 2000) which includes (9) dimensions in addition to (3) the dimensions of the (Ahmed, 2003) adds them to the scale and thus became the scale (12) dimension, every dimension contains eight items, and the dimensions are:
  - Self-talk
  - Thinking due skill
  - Automated
  - Words moods
  - Segmentation performance
  - Building goals
  - Mental visualization
  - Relaxation
  - Stimulation
  - Emotional control

Except for two dimensions (control ofattention focus - positive thinking)each contains four items.

- Items for each dimension are divided into four phrases in the training conditions and the other four in the conditions of competition, except for the two dimensions (control the focus of attention - positive thinking), you may ensure that each of them is only in conditions of competition.

- Have been distributed so that was some phrases in the direction of the dimension and others reverse dimension.

- Developed for each ferry a scale of five scales.

- The total number of phrases scale (88)is, the total score of the scale (440) degrees.

- Physical self-concept scale (HA. Mohamed, 2002).

Exploratory study

The researchers conducted an exploratory study in the period from 20/6/2011 to 23/6/2011 on a sample of the research community and other basic research sample (40) soccer player speed, (40) a basketball player, and to identify the appropriate tools and measuring devices as well as the tests used to apply the sample to determine the time required for the application of the sample and how to understand the instructions of performance, and transactions account for scientific tests.

The results of the exploratory study are:

- Ensure appropriate tools and measuring devices.

- The ease and clarity of physical and skill tests as well as a standard thinking strategy and physical self-concept.

Search application

The researchers applied the tools under the basic sample and in the period from 21 - 28/7/2011 as follows:

- Reel speed tests in the period from 21-24 / 7/2011, in the preliminary competition of the Republic and championships Cairo Stadium.

- Tests of basketball during the period from 25 - 28/7/2011.

Statistical Analysis.

All statistical analyses were calculated by the SPSS.V.16 (Statistical Package for the Social Sciences). The results are reported as means and standard deviations (SD). T Test was used to compare group means in variance analysis results that were found statistically significant. Differences in means were considered if p, 0.05

Results

Table 1. Age, anthropometric characteristics and training experience of the two groups (Mean ± SD)

Variables	Measurement unit	Mean	Standard deviation	Median	Skewness
Age	Year	21.20	2.48	22.00	0.095
High	Cm	174.26	5.89	175.00	0.59
Weight	Kg	71.52	9.27	72.00	0.25
Intelligence	Degree	124.94	2.59	125.00	0.25
Performance level	Degree	25.00	1.93	25.00	0.15

Table 1 shows the age and anthropometric characteristics of the subjects. There were no significant differences were observed in the sample.

Ovidius University Annals, Series Physical Education and Sport / SCIENCE, MOVEMENT AND HEALTH
Vol. XIV, ISSUE 1, 2014, Romania
The journal is indexed in: Ebsco, SPORTDiscus, INDEX COPERNICUS JOURNAL MASTER LIST,
DOAJ DIRECTORY OF OPEN ACCES JOURNALS, Caby, Gale Cengace Learning, Cabell's Directories

Table 2. Mean ±SD and T sign between Speedball players and Basketball players in scale of strategic thinking

Variables	Speedball players		Basketballplayers		T sign between two groups
	Mean	SD	Mean	SD	
Self- talk	32.62	±5.022	31.72	±4.12	No Sign
Thinking due skill	32.36	±3.85	2.39	±27.48	Sign
Words moods	31.38	±4.24	28.72	±4.12	Sign
Segmentation performance	29.42	±4.04	29.28	±3.29	No Sign
Building goals	31.04	±3.61	31.22	±4.14	No Sign
Mental visualization	29.94	±3.42	30.20	±3.94	No Sign
Relaxation	30.00	±3.78	28.70	±2.67	Sign
Stimulation	25.42	±3.57	29.90	±4.30	Sign
Emotional control	29.64	±3.96	28.50	±2.63	No Sign
Automated	29.58	±3.65	28.24	±5.81	No Sign
Control of attention focus	13.52	±1.72	13.02	±1.33	No Sign
Positive thinking	14.70	±1.88	13.48	±3.02	Sign
Total	25.36	±2.17	24.69	±2.33	No Sign

The t-test showed significant differences (P≥ 0.05) between speedball players and basketball players inThinking due skill, Words moods, Relaxation, Positive thinking for speedball players and the Stimulation for basketball players,No significant differences between speedball players and basketball players in Self- talk, Segmentation performance, Building goals, Mental visualization, Emotional control, Automated, Control of attention focus and the total of strategic thinking scale.

Table 3. Mean ±SD and T sign between Speedball players and Basketball players in scale of Physical Self-Concept

Variables	Speedball players		Basketball players		T sign between two groups
	Mean	SD	Mean	SD	
Physical Self-Concept	81.82	± 7.80	88.42	± 13.83	Sign

The t-test showed significant differences (P≥ 0.05) between speedball players and basketball players in Physical Self-Concept for basketball players.

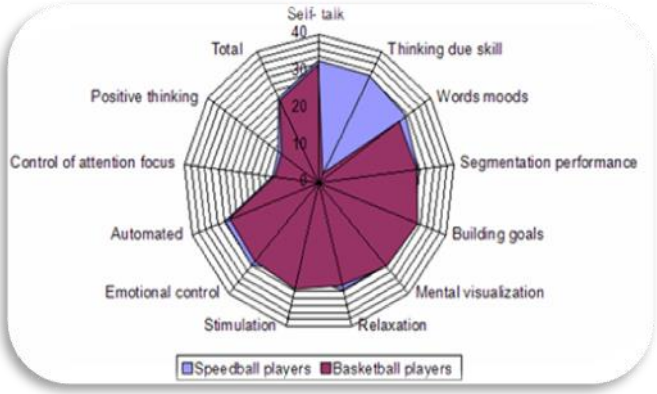

Fig 1 explain the differences between Speedball playersand Basketball playersin scale of strategic thinking

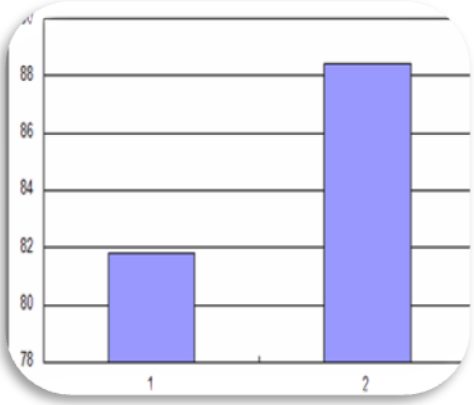

Fig 2 explain the differences between Speedball playersand Basketball playersin scale of Physical Self-Concept

Ovidius University Annals, Series Physical Education and Sport / SCIENCE, MOVEMENT AND HEALTH
Vol. XIV, ISSUE 1, 2014, Romania
The journal is indexed in: Ebsco, SPORTDiscus, INDEX COPERNICUS JOURNAL MASTER LIST,
DOAJ DIRECTORY OF OPEN ACCES JOURNALS, Caby, Gale Cengace Learning, Cabell's Directories

Table 4. Correlation coefficients between the axes scale strategic thinking and performance Levelfor speedball players

No.	Variables	Performance Level
1	Self- talk	0.172
2	Thinking due skill	0.518
3	Words moods	0.486
4	Segmentation performance	0.642
5	Building goals	0.427
6	Mental visualization	0.439
7	Relaxation	0.293
8	Stimulation	0.060
9	Emotional control	0.463
10	Automated	0.209
11	Control of attention focus	0.426
12	Positive thinking	0.445
13	**Total**	0.553

R = 0.288

Table (4) showed that there is a Correlation in the variables (Thinking due skill, Automated, Words moods, Segmentation performance, Building goals, Mental visualization, Relaxation, Emotional control, control of attention focus , positive thinking)in addition to strategic thinking as a whole scale) withskill level, while there is no correlation between (self-talk and Stimulation) withperformance Level.

Table 5. Correlation coefficients between the axes scale strategic thinking and performance Level for basketball players

No.	Variables	Performance Level			
		Passing	Shooting	Dribble	Stopping & pivot
1	Self- talk	0.696	0.543	0.579	0.353
2	Thinking due skill	0.332	0.345	0.379	0.324
3	Words moods	0.436	0.384	0.505	0.238
4	Segmentation performance	0.250	0.084	0.375	0.456
5	Building goals	0.596	0.362	0.264	0.291
6	Mental visualization	0.527	0.389	0.150	0.283
7	Relaxation	0.497	0.311	0.261	0.340
8	Stimulation	0.411	0.471	0.308	0.214
9	Emotional control	0.401	0.515	0.317	0.300
10	Automated	0.326	0.321	0.112	0.316
11	Control of attention focus	0.339	0.352	0.400	0.580
12	Positive thinking	0.350	0.480	0.402	0.400
13	**Total**	0.624	0.544	0.466	0.459

R = 0.288

Is clear from Table (5) that there is a correlation between the variables (Self- talk - Thinking due skill - Emotional control - Control of attention focus - positive thinking - in addition to scale strategic thinking as a whole) with Passing,Shooting, Dribble and Stopping & pivot, while therea link between the words moods and Passing, Shooting, Dribble and there was no link between them and the stop-and-pivot, and also no correlation between retail performance and Dribble and stop and build and there is between them and the Passing and Shooting, and there is a link between the Building goals and vision and mental relaxation mechanism and both the passing and shooting and stop and build and there is no link between them and the Dribble.

Discussion

The purpose of this study was to determine the relationship between thinking and Physical Self-Concept and the level of skill performance of female players in team games (basketball) and single games (speedball) and to know individual differences between female

players in basketball and speedball in thinking strategies and Physical Self-Concept.

Recent research has suggested that the effects of sport on well-being are mediated by psychological characteristics such as thinking strstegy and physical self-concept, instrumentality and positive body images; in addition, sport was found to be related to these psychological benefits for athletes. However, physical self-concept played a central role by mediating the sport -body image and sport instrumentality relationships. Positive body image and instrumentality, in turn, predicted greater psychological well-being. The purpose of this investigation was to replicate earlier studies, and to examine these relationships with non-sport physical activity. Sport and physical activity were expected to contribute to higher physicalself-concept, which in turn, would contribute positively to instrumentality and body image.

(Najla, 2002) indicated that positive thinking helps the athletes to address the problems encountered efficiently, and earned self-confidence.

(Hala, 2010) adds that positive thinking gives the individual a state of inner happiness by allowing the individual to deal with the problems faced by non-stereotypical manner.

Our results are confirmed with (Miller, Levy, 1996) reported levels of positive physical appearance and athletic competence to be higher for athletes compared to non athletes. In a related study, (Raudsepp, et al. 2002) found higher perceptions of sport competence, strength, and conditioning among adolescents who participated in moderate physical activity compared to adolescents who did not engage in any physical activity. In addition, (Sonstroem, 1997) provided strong evidence that physical activity and exercise are related to higher levels of physical competence.

Conclusions

- The presence of a statistically significant correlation between thinking strategies and the skill level of the players ball speed.
- The presence of a statistically significant correlation between thinking strategies and the skill level of basketball players.
- The presence of a statistically significant correlation between physical self-concept and skill level in football speed.
- The presence of a statistically significant correlation between physical self-concept and skill level in basketball.
- The presence of significant differences between football players, basketball speed in thinking strategies.
- The presence of significant differences between football players, basketball speed in physical self-concept.

Recommendations

The researchers recommended the following:

- The use of thinking strategies on duty skills and self-talk side by side with the training programs where studies have shown the importance of scientific research on these strategies in upgrading skills.
- To identify the psychological characteristics of private players accept self as an indicator on self Iifah and therefore the focus of the performance.
- The work of the classification of mental requirements for each game of sports.
- Conduct studies to determine the level of self accept as they affect the level of ambition and self-confidence of the players.

References

Ahmad, F., 2004, Basketball for youth, College of Physical Education in Cairo, Alexandria University.

Ahmed, K.H., 2002, The electrical activity of the brain as a function of the effectiveness of strategies to develop the thinking level of performance and reduce the pressures Sporting, Faculty of Physical Education for Boys, Helwan University.

Ahmed, Y., 2003, The impact of the program on improving the mental perception the peaceful performance level in basketball , Volume VIII , Issue II , Journal of Sports Arts and Sciences , Faculty of Physical Education for Girls in Cairo , Helwan University .

Elizabeth, M., 2007, Psychological benefits of sport participation and physical activity for adolescent females, Dissertation Prepared for the Degree of doctor of philosophy , university of north texas.

Hala, A., 2010, The effect of the proposed training program for the harmonic capabilities susceptibility emerging kinetic ball speed under 14 years old, Master Thesis, Faculty of Physical Education, University of Almonofiyah

Mohammed, S.H., 2000, Thinking strategies in sports competitions, the Egyptian Society for Mathematical decrease, Cairo

Mohammed, S.H., Abdelnabi, E.L., 1999, Sports psychology and psychometrics, the center of the book for publication, Cairo.

Mohamed, H.A., 2002, Sports training, Arab Thought House, Cairo.

Mohamed, S., 2000, Measurement and Evaluation in Physical Education, Part II , fourth edition, the Arab Thought House .

Miller, J., Levy, G., 1996, Gender role conflict, gender-typed characteristics, selfconcepts, and sport socialization infemale athletes and nonathletes. Sex Roles, 35, 111-122.

Najla, F., 2002, Effective use of strategic thinking in the development of confidence and the level of performance sports in cannula exercises I have some students of the Faculty of Physical Education , University of Menoufia, Ph.D. thesis

, unpublished , Faculty of Physical Education , University of Almonofiyah .

Osama, R., 1995, The Psychology of Sports Concepts applications, the first edition, the Arab Thought House, Cairo.

Raudsepp, L., Liblik, R., Hannus, A., 2002, Children's and adolescents' physical selfperceptions as related to moderate to vigorous physical activity and physical fitness. Pediatric Exercise Science, 14, 97-106.

Salah, M,. 2000, Patterns of some university student leaders and their relationship with physical self - concept and some personality traits Master, wild college sports for girls in Cairo, Helwan University.

Sonstroem, R., 1997, The physical self-system: A mediator of exercise and self-esteem. In K. R. Fox (Ed.), The physical self: From motivation to well-being(pp. 3-26). Champaign, IL: Human Kinetics.

Tarek, A., 1993, Effects of weights training program on some elements of fitness for basketball, Master Thesis, unpublished, Faculty of Physical Education for Girls in Cairo, Helwan University.