Which relationship estimate outcome shooting skill Case soccer

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Abstract

In this modest study, our interest supports the most common question in training shots on goals: Power or Accuracy? Confirmed by (J Chris Roselius, 2008) from the proof we chose the relationship Visual information and mental representations as important factor in the control and production of shooting movement to estimate the outcome in shooting with Optimal power and accuracy. From that, our research sample was consisted from 20 students their average age =18 years, specialized in football (Institute of Physical Education and Sports academic year 2014-2015) which they were tested in two situations (eyes closed and eyes open) based on the test vertical jump and accuracy.

 After statistical analysis, computing by calculating Paired t-test and correlations Samples.

 In the lake of the new visual test technology and biomechanics tests analysis, our find confirmed:

- There are a strong positive correlation relationship between the two cases (eyes closed and eyes open) in both tests applied where all comparisons between the proposed positions are in benefit of eyes open.

- The weakness of the research sample in vision blocked position due to weakness of optimal approach in the mental representations shoot with power and accuracy.

- Developing estimations outcome to shoot with power and accuracy requires the development of optimal approach visual in the feedback mental representations skill scoring in soccer game.

From those results, our aims are intended for specialists to develop similar approach based on laboratory testing. In parallels for our coaches and players, we recommend the development of optimal approach visual as feedback mental representations skill to contribute the use of skills in achieving the expected goals, which are the first step to develop the ability to shoot with power and accuracy.

Keywords: visual and mental representations, power and accuracy, shooting skill.

1. INTRODUCTION

Successful goals typically come from shots that have both pace and accuracy where literature review confirmed that Soccer performance in shooting depends upon a myriad of factors, such as technical/biomechanical, tactical, mental and physiological areas. in our case we refer to (Andersen TB, Dorge HC, 2009)that, players generally self-select the optimal approach speed for both shot velocity and accuracy .While (national soccer coaches association of america, 2004)indicates that the key for the player will be to identify certain visual cues that point toward the right decision. In general, Shooting with Power and accuracy are two major components of any shot (Dorothy Z, Lois C, Frank E. P, 2003). (Alan H Rechard B, 1990) Described that after controlling the ball into a position to shoot, the player should observe the position of the goalkeeper and select the appropriate shooting skill. • Accuracy is paramount whether the player opts for power in the shot using the instep drive for (Clayne R. J, A. Garth F, 1979) Skills are logically divided into (1) accuracy skills, (2) power skills, and (3) maneuverability skills. However, (John O,Vincent F, 2001)most goals are scored by shooting hard and accurately on goal. To combine power and accuracy, a player needs a good technique that (Peter Stewart, 1995) explains the perfect shooting technique is the right combination of Balance, control, accuracy and power. In our modest study, we chose the Impact of Visual information and mental representations of skill where (Robertson S., Elliott D, 1996a)and (Davids K., Renshaw I., Glazier P, 2005) confirmed the important role in the control and production (Robert L. Koger, 2015) of shooting movement to estimate the outcome as the power and accuracy required. From that, our research sample was consisted from 20 students their average age =18 years, specialization football (Institute of Physical

Education and Sports academic year 2014-2015) which they were tested in two situations (eyes close and eyes open) based on the test vertical jump and accuracy. To test the hypothesis: developing estimations outcome to shoot with power and accuracy requires the development of visual and mental representations in scoring in football and for that, we chose the experimental method to examine our secondary hypothesis by computing Paired t-test and correlations Samples:

• are there any statistical correlation relationship between the two cases (eyes closed and eyes open) in both tests applied?

• are there any significant differences between the proposed positions?

• Which weakness can we observe in our research sample?

Where the Purpose of the current study was to anticipate their strategist under pressure (Debra laParth, 2009). In our Case, delineate the roles of visual information to reliance on mental representations that the literature review confirmed:

- The action representations of experts are stated to be hierarchically organized containing cognitive motor units, which act to guide the planning and execution of actions (Schack. T, Mechsner F, 2006).
- The action representations of the novices have been shown to be less hierarchically organized (Schack T., Hackfort D., 2007).

2. METHODOLOGY

Subjects : Our research sample was consisted from 20 students volunteered to participate in this study their average age =18 years, specialization football (Institute of Physical Education and Sports academic year 2014-2015). The professors of football "Institute of Physical Education of the University of Mostaganem" approved the study protocol and methods and all subjects participant gave written informed consent prior to participation.

Testing Protocol

Our sample was tested in two situations (eyes closed and eyes open) based on the test vertical jump and accuracy:

- **test vertical jump**

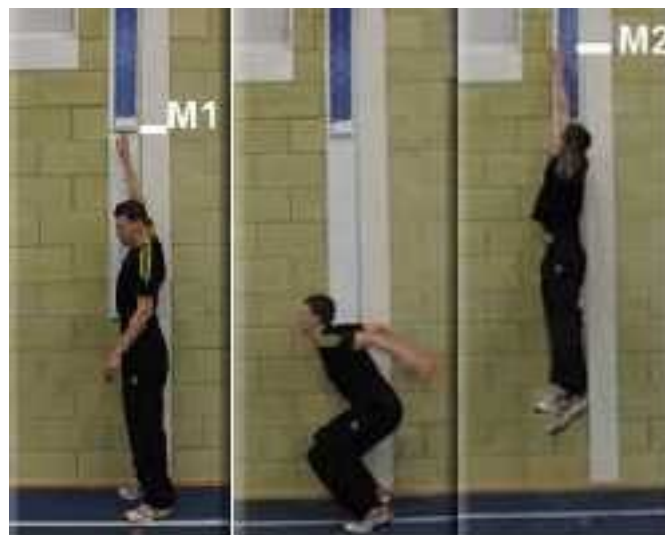This procedure describes the method used for directly measuring the vertical jump height jumped.

Fig1 Measure Vertical Jump in the case of our study

Procedure: The soccer stands in socks or bare feet, as still as possible on the mat with weight evenly distributed over both feet. Once the mat is reset, the soccer jumps vertically as high as possible using both arms and legs to assist in projecting the body upwards (this method uses the countermovement technique).

Scoring: The jump height is usually recorded as a distance score, in cm or inches.

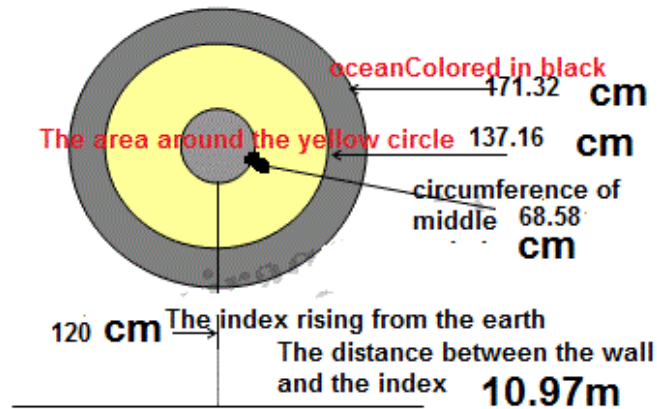- **Accuracy shooting skill test : fig2**

Fig2 Measure accuracy in the case of our study

This procedure describes the method used for directly measuring the Accuracy shooting skill.

Procedure: The soccer stands 10.97M from the distance between the walls where the index rising 1,20m from Surface earth, and for the index circle seen fig2. The player did 3 shot counted

Whereas the Standards applicable are derived from the penalty position

Scoring: middle circle 3 points, yellow circle 2 points for black circle 1 point other 0 point.

Statistical Analyses

Data analysis was performed using SPSS 22.0 for Windows (32BIT). Data obtained from the tests showed a normal distribution and were presented as mean ± standard deviation. Paired sample t-test was conducted to combine the results obtained from the two cased explain in (eyes closed and eyes open) where the relationship between the two proposed situation was analyzed by Pearson correlations (r).

3. RESULTS

Mean (± SD) and the Paired sample t-test for power measure by the vertical Jump tests results are shown in Table 1(a). The results show that all comparisons are in the benefit of eyes open. The Table 1(b) show Mean (± SD) and the Paired sample t-test for power measure by the Scoring shooting tests where all comparisons are in the benefit of eyes open. For the table 2(a-b) the result show the relationship between the proposed situations where Pearson correlations (r) are strong positive significant between the two cases (eyes closed and eyes open) in both tests applied in the benefit of the same test.

Table 1 (a-b) show the Paired sample t-test (a)Power and (b) Accuracy as case tests of the current study

Variables		Mean	N	S. D	T	Sing
(a) power	power eyes open	38.15	19	10.37	12.93	.00
	power eyes closed	35.80	19	10.16		
(b) accuracy	shoot eyes open	6.40	19	1.35	15.38	.00
	shoot eyes closed	4.50	19	1.36		

The table 2(a-b) show the Paired Samples CorrelationsBetween the two tests proposed as situations in the current study

Variables	R	N	Sing
(a) power eyes open& power eyes closed	.99**	20	.00
(b) accuracy eyes open & accuracy eyes closed	.92**	20	.00

**. Correlation is significant at the 0.01 level (2-tailed).

4. DISCUSSION

This study aimed to develop and evaluate a new test to estimate the outcome in shoot with power and accuracy soccer game. Where (J Chris Roselius, 2008) raises the most common question in training shots on goals: Power or Accuracy? When taking a shot, a player can shoot with power or accuracy. A shot with power is harder for a goalkeeper to defend but it is not always accurate. An accurate shot is usually more on target, but it has less power according to our background and the lake of the new visual materiel tests and the analysis technology kinematics or kinetics, it did not allow us to estimate the applied force in hitting the ball. In parallel, no one can know the strategist of what the player aims to apply like him. From this situation, we have chosen the Measure of the vertical Jump as power and accuracy test in two conditions (eyes closed and eyes open) to estimate the strategist and to compare the player's optimal approach as representations(visual and mental) of the shoot with power and accuracy. From the reality and conditions that limiting our goal: we confirmed the validity of the tests practice in our study because the conditions proposed did not affect the credibility of the tests, this confirms in the table 1 that the two Tests differentiate between the two proposed situations. Where the table 2(a-b) shows the Correlations and their relationship between the two cases (eyes closed and eyes open) in both tests applied in the benefit of the same test which we Certified the credibility of the first hypothesis. Based on that we can Certified the credibility of the second and third hypothesis based on the Paired sample t-test where all comparisons are in the benefit of eyes open. Our results are consistent with (Itay Basevitch, Gershon Tenenbaum, Paul Ward, 2015) that the role of visual information and action representations in executing a motor task was examined from a mental representations approach where the High-skill and low-skill soccer players performed a skill, under three visual conditions: normal, occluded, and distorted vision (Zerf Mohammed, Bengoua Ali, 2015). Form that we confirm the weakness of the research sample are in vision- distorted, where (Caljouw S. R., van der K J., Savelsbergh G. J. P, 2004) confirms that, the visual-perceptual input has been shown to be an important source of information to regulate action wherever the higher skilled individuals possess more detailed to representing the mental action the logic that their mediating movement execution in the absence of vision (Zerf Mohammed, Bengoua Ali, 2015). However, (Basevitch I, 2009)set that the underlying mechanisms mediating performance (action representations and schemas)with more detailed examination by the role of visual information help the player to product superior performance which is essential power and accuracy in our case The inability of the players to appreciate their powers and their accuracy when they close their eyes. Moreover, (Joanna Scurr and Ben Hall, 2009) set that, there appears to be gaps in the literature, specifically relating to penalty kick accuracy, suggesting that the skill has not been fully described. From that, we agreed the opinion of (Davids K., Lees A., Burwitz L, 2000) the ability of the subjects might partially explain the large accuracy measurements, and consequently the lack of improvement in performance. It has been suggested that kicking is enhanced with training and is a well-developed skill in experienced players (Zerf Mohammed, 2015), whereas amateur players demonstrate less consistency in coordination of movement in our case the coordination to reproduce both representative of the moving as a transfer in both situations (eyes open and eyes closed).

5. CONCLUSIONS

Results from the present study indicate that accuracy came first then Power in shooting training (Wayne Harrison, 2005). From the proof: We support the theory that success back from the both mental representations and vision mediate are the keys to shooting skill with power and accuracy, which explain weakness of the research sample to control their movement in distorted visual condition from that the visual information is important to them to shooting skill with power and accuracy. However, the literature review confirmed:

- The action representations of experts are stated to be hierarchically organized containing cognitive motor units, which act to guide the planning and execution of actions (Schack. T, Mechsner F, 2006).
- The action representations of the novices have been shown to be less hierarchically organized (Schack T., Hackfort D., 2007).

For that, we invite the specialists to develop similar approach based on laboratory testing to estimate the applied force in hitting the ball on parallel to what the player aims to apply. Where the current results support the notion that visual position are better than closed, were any less in visual information defect motor system to compose and adjust the outcome (Mann D. L., Ho N. Y., De Souza N. J., Watson D. R., Taylor S. J, 2007) and from that the outcome shooting skill is influenced by the quality of vision.

Were our find confirmed the vision of (Davids K., Lees A., Burwitz L, 2000) that Further interdisciplinary work is needed to enhance understanding of coordination and control of soccer skills in our case:

- The weakness of the research sample in vision-blocked position is due to weakness of reproduce both typical image visual mental feedback based on behaviors visual information to shoot with power and accuracy.

- Developing estimations outcome to shoot with power and accuracy requires the development in containing cognitive motor to represent the typical mental feedback skill in the absence of visual information.
- Estimations of results requires a representation of Strategy space (time and distance) which depends on the finality of the program motor.
- For our coaches and players, we recommend the development of visual and mental representations to contribute to achieve the goal of this skill, where the first step is to develop the ability to shoot with power and accuracy (Joe Luxbacher, 2005) in a low pressure practice type environment (Joseph Luxbacher, 2014).
- the player's vision must serve a dual purpose Optimal approach feedback Case eyes closed and eyes open (Garland, Jim, 2014)

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