
Prediction of Playing Abilities of Athletes and Coaching Competence of Potential Coaches in Ball Games

By

DR. LARO IBRAHIM ABUBAKAR

*Department of Kinesiology, Health Education and Sport Administration
Kwara State University,
Malete, Ilorin.*

Abstract

Over the years, stake holders in the selection process of coaches and athletes for performances in ball games have always run into difficulties. Similarly, lack of measure and test batteries for such assessment factors which would have proven to have significant impact on athletic performances were missing. The known and usual parameter is for practitioners to rely on descriptive measurements in selection processes, which may have led them into taking wrong decisions in some instances. For a better reading of this paper, examination of how the competence of coaches and athlete abilities in ball games could be measured were x-rayed through the followings: classification of human body types as postulated by Sheldon, guiding principles for predicting athletes abilities and coaches competence as well as the classification of sports skills. Because of the nature of the topic, a test batteries on how to measure the coaches competence and athlete abilities in ball games was packaged to assist the would-be practitioners of the selection process.

Athletic performance has dramatically progressed over the past few years through performance levels which are unimaginable, Bloom (2005). The numbers of athletes capable of showing outstanding results are on the increase, probably because of challenges, field, intense motivation and long, hard hours of training. Also, coaching has become more sophisticated, partially from the assistance of sport specialists and scientists. A broader base of knowledge about athletes now exists, which is reflected in training methodology because Sport Sciences have progressed from descriptive to scientific. Most scientific knowledge, according to Morgan (2000) whether from

The Intuition

experience or research, aims to understand and improve the effects of exercise on the body. Exercise is now the focus of sport science. Research from several sciences enriches the theory and methodology of training, which has become a science on its own. The athletes are the subject of the science of training.

During training, the athlete reacts to various stimuli, some of which may predict more certainly than others. Finding from studies confirmed that Physiological, biochemical, psychological, social and methodological information come from the training process so as to understand the athlete's reactivity to the quality of training and properly plan future programs. In light of this, it becomes clear that coaches require scientific assistance to ensure that they base their programs on objective evaluations. Singer (2008), asserted that Closely observing the information available from each science will make coaches more proficient in their training endeavours. According to him, the principles of training are the foundation of this complex process. Knowing the training process will clarify the role each factor plays in training, the according to the characteristics of a sport or event needed for success in their field, the author said the lack of the skills necessary to assess the psychological factors have proven to have significant impact on athletic performance. Not only that the identification, quantification and implementation of these psychological attributes similarly have a significant impact on a programme's success.

The method by which athletes are selected for a team can have significant impact on their team's success. In the past, decision on selection have been made based largely on judgments of individual's physical characteristics needed for success in their field, this according to experts lack the necessary skills to assess the psychological factors that contribute to athletic characteristics needed for success in their field; however, they lack the skills necessary to assess the psychological factors that have been proven to have a significant impact on athletics performance. Coaches have relied on informal judgment of construct such as an athlete's motivation and level of aggression to determine their potential; to succeed. Everyone has heard stories of athletes that were told they lacked the physical skill to perform but due to the psychological resources to drive and determination, these individuals have overcome their physical limitations and gone on to be highly productive individuals.

A large proportion of Research that has been conducted in the field of sport psychology has been descriptive and is therefore well suited for the identification of the psychological skills necessary for success. Descriptive information involves comparisons of highly skilled athletes with less skilled athletes for the purpose of identifying difference. This information is useful in the hypothesis generation phase of selection programs. By identifying the presence of certain characteristics that are uniquely associated with the success of certain of future athletes. In many ways, this

descriptive research can be thought of as a job analysis similarly the knowledge, skills and activities that are important to the performance of athletes and coaches could be identified using the classification of body types.

Classification of Human Body Types

William Sheldon (1897-1977) was an American psychologist who spent his life observing all the variety of human bodies. He taught at several universities and spent his career doing valuable research. As a child, he was an avid observer of animals and birds and as he grew up, this hobby turned into a strong ability to observe the human body as follows:

Ectomorph: Ectomorph individual physique is a fragile and delicate one. The bones are light, joints are small and muscles are slight. The limbs are relatively long in proportion and the shoulders droop. The Ectomorph is of linear physique, straight up and straight down, and may appear longer than he or she really is, due to the length of limbs coupled with lack of muscle mass developed on those limbs. The ectomorph is not naturally powerful and will have to work hard for every kilogram of muscle and every bit of strength he or she can gain.

Other Ectomorph Traits

The extreme Ectomorph may have long fingers, toes, and long neck. The features of the face are sharp, and triangular. The lower jaw is somewhat receding. The skin tends to 'burn easily'. Extreme ectomorphs may suffer from extremes of temperature. Due to the great body in relation to muscle mass, the ectomorph may suffer from great heat and due to low body fat; the ectomorph may suffer from great cold. The hair is fine and grows quickly and is sometimes difficult to keep in place.

An athletic (Mesomorph) Individual

Such an individual is blessed with the following characteristics; hard body, glass shaped appearance for female, rectangular shaped appearance for male, possession of mature muscle mass, the body looks more muscular, presence of excellent posture, possibilities to gain muscle easily, Such an individual equally gains fat more easily than ectomorphs, the skin is equally thick so as to prevent easy access of germs and bacteria.

Endomorph: The personality of an Endomorph is characterized with the following; soft body, underdeveloped muscles, round physique, weight loss is difficult for such an individual, gains muscle easily like the mesomorph, the body of the extreme endomorph is round and soft, the physique present the illusion that much of the mass has been concentrated in the abdominal area. This may or may not be true, the arms and legs of extreme endomorph are short in length and taper. This may give the appearance of stockiness. The hands and feet of the endomorph are comparatively small, the upper

arms and the thighs are often more developed than the lower parts of the arms or legs, the body has a high waist. Other traits of the endomorph is spherical and large while face is broad. Very often, people cannot be easily classified as one of the three main body types. Although there are some people who are purely ectomorphs, endomorphs, or mesomorphs with little or no characteristics of the other body types. Very frequently, people fall into mixed categories such as Ectomorph, or Endo mesomorphs, where largely, they are like the mesomorph, but with traits of the ectomorph (such as small joints or a trim wais), or traits of the endomorph (such as tendency to gain fat easily).

Guiding Principles for Predicting Athletes Abilities and Coaches Competence Multilateral Physical Development

Athletes need multilateral physical development as a training base as well as overall physical fitness. The purpose is to increase endurance and strength, develop speed, improve flexibility, and refine coordination, thus achieving a harmoniously developed body. We expect athletes with a strong base and a good overall development to improve athletic addition, such athletes will have a superior body form, which will increase their self-esteem and reflect a strong personality.

Sport-Specific Physical Development

Sport-specific development improves absolute and relative strength muscle mass and elasticity, specific strength such as Power or Muscular endurance according to the sport's requirements, including movement and reaction time, coordination and suppleness. This type of training creates the ability to perform all movements, especially those required by ball game sports with ease and smoothness.

Technical Factors

Technical training involves developing the capacity to perform all technical actions correctly, perfecting the required technique based on a rational and economical performance with the highest possible velocity, high aptitude, and a demonstration of force; performing specific under normal and usual circumstances e.g. improving the technique of related sports and ensuring the ability to perform all movement correctly.

Tactical Factors

Tactical factors include improving strategy by studying the tactics of future opponents, expanding the optimal tactics within athletes' capabilities, perfecting and varying the strategies to be used as well as developing a strategy into a model of considering future opponents.

Psychological Factor

Psychological factor include improving strategy by studying the tactics of future opponents, expanding the optimal tactics within athletes capabilities, perfecting and varying strategies and developing a strategy into a model considering future opponents.

Team Capacity

In ball game and sports, team preparation is one of the coach's main objectives. The coach can accomplish this by establishing harmony in the team's physical, technical and strategic preparation, meaningful sound relationships, perfect friendships, and aspiration for common goals among teammates. Training competitions and social gatherings consolidate the team and enhance the feeling of belonging. The coach must encourage the team to act as unit and should establish specific plans and roles for each athlete according to the needs of the team.

Health Factor

Strengthening each athlete's health is important. Proper health must be maintained through periodic medical examinations, a proper correlation of training intensity with individual effort capacity, and alternating hard work with an appropriate regeneration phase. Following illness or injury, the athlete must begin training only when completely recovered, as well as ensuring adequate progression.

Injury Prevention

Prevent injuries by following all safety precaution's increasing flexibility beyond the level required; strengthening muscles tendons and ligaments, especially during the initiation phase of a beginner, and developing muscle strength and elasticity to such a degree that when athletes perform unaccustomed movements, accidents will be unlikely.

Theoretical Knowledge

Training increases athletes' knowledge of the physiological and psychological basis of training, planning nutrition and regeneration. Coaches should discuss athlete coach, athlete-opponent, and teammate relationships to help athletes work together to reach the set goals.

Classification of Kills

Several Attempts have been made to classify physical exercises. One criterion was based on the idea that if a person looked good, then he or she was healthy and strong. Researchers focusing on the physiological attributes of successful athletes whose sport is individual in nature have identified several characteristics not indentified by researchers focusing on sport in a team frame of reference. Other researchers have attempted to use physiological data in conjunction with other information to predict

The Intuition

individual's selection to athletic teams. Morgan (2000) makes use of the profile of mood States (POMS) and data about an individual's performance and physiological characteristics to achieve a 90% success rate in the identification of who will make the team or who will be cut from the team. Morgan has identified what he calls an Iceberg profile, which is typical of Olympic caliber distance runners, wrestlers and oars men. Low rating on tension, depression, fatigue, confusion, anger and high scores on vigor characterized the Iceberg profile.

Much of the research in the file has been anecdotal in nature, gathered primarily through the analysis of unstructured interviews. However, the information that has been acquired in this fashion is quite compelling and useful in identifying the psychological skills necessary for success in sport. It can be thought of as asking subject matter experts (SMEs) the qualities that are most important for success on the job performance. By analyzing the statement of present champions (SME's) on their psychological abilities, characteristics, opportunities and family role so that we can differentiate between successful and unsuccessful performers.

Meyers, Cooke, Cullen, and Liles (2009) reported that successful athletes were self confident and had thought of their sport throughout their daily thoughts and dreams. Grafield and Bennett's (2004) study of anecdotal reports supported earlier research. They stated that elite athletes do have predictable feelings during peak performances including confident and optimistic in control, mentally relaxed, physically relaxed and extraordinarily aware and in the "cocoon" (intense sustained concentration).

The measurement of psychological variables important information. However, the data of limited value for prediction purposes of other factors such as physiological variables and prior behavior are not included in the selection decision. Morgan (2000) was the first to consider prior athletic performance in the design of his research. As was mentioned earlier, the inclusion of prior performance and physiological characteristics led to a 90% success rate at correctly identifying those individuals selected for a team. Therefore it is important to consider prior performance in any selection decision. However, it is important to quantify prior performance data (PPD) in order for it to be of any use in selection programmes.

Certain psychological constructs seem to be most relevant to all competitors; vigor, aggression, leadership, and ability to cope with stress, coachability, confidence, social support and positive – concept. In addition, the ability to interact with others seems to be an important psychological skill within the team setting. Because prior performance and psychological data have been found to have such a significant impact on predicting those individuals that eventually qualify for a team, it is important to consider those variables as well in order to develop a valid selection procedure, it is

important to develop a means for quantification of an individual's prior performance in order to make appropriate selection decisions many will already identified the PPD they consider to be most important in recruits. However, mechanical approaches for selection decisions that make use of quantified data are more effective than judgmental approaches in identifying those individual with the necessary PPD to succeed. Development of a weighted application bank that measures these abilities would result in an increase in the reliability of selection decisions. This would need to be empirically validated before it could be used. Reviewing coach's records of prior recruits may provide most of this information thus facilitating the validating process.

It appears that a selection program that takes into account psychological variables, biographical data and prior performance would be used. Reviewing coach's records of prior recruits may provide most of this information thus facilitating the validation process. Similarly selection program that takes into account psychological variables, biographical data and prior performance would be both a valid and reliable predictor of athletic success. Singer (2008) supports this notion recommending that psychological tests should not be used as the only basis to determine team membership. This information can be useful in understanding athletes and their potential strengths and limitations. A battery of composite tests to measure skill level is recommended for the following concepts; tactical knowledge, morphology, body composition, physical condition, and psychological attributes. Quantification of these constructs would be necessary in order to make a decision. At the same time validation of the process would be an important final step in the development of a selection program in the field of athletics.

Conclusion

Since the field of sport has become so competitive, it has become increasingly important to make appropriate selection decisions between coaches and athletes in order to be successful. This paper has demonstrated the importance of considering psychological variables, prior performance and psychological data in selection decisions. Subsequent researchers in the field should attempt to validate a selection process outlined in this paper, which include psychological, psychological and prior performance data.

Ball Game Playing Competence Inventory

Instruction: The statement below describes how best you feel about competence selection process used in chosen sport. Tick the option that corresponds to your feelings about each statement.

The Intuition

Keys: Strongly Agree (SA)
 Agree (A)
 Disagree (D)
 Strongly Disagree (SD)

A	Training	4	3	2	1
1.	Flexibility is an important requirement for ball games				
2.	Good reaction time is a prerequisite for excellence in ball games				
3.	Superior body form portends competences in ball game				
4.	Good body movement is an essential characteristic of a good athlete in ball games				
5.	A good athlete must possess strength to be regarded as competent				
B Technical factor					
6	For an athlete to perform very well in ball games he must master the relevant skills				
7.	A good and competent player should be able to adapt to unusual circumstances when competing				
8.	A skillful player should continue to refine and enhance his skills to improve competence				
9.	Ability to learn new and more complex skills relevant to one's sport is a vital requirement to enhance competence				
10.	A good player should learn to maximum his strength and minimize his weaknesses				
C Coachability					
11	A competent player should be able to follow the instructions of the coach accurately				
12.	A good player should show respect for coaches, assistants, volunteers and instructors.				
13.	A competene player is expected to set a good example through hard work and determination.				

D Psychological factors

14. A player should imbibe training to improve discipline
15. Perseverance is an essential ingredient for competence in ball games
16. A competent player in ball games must possess confidence
17. Ability to cope with competitive stress portrays competence of a player
18. A competent player requires courage to sustain him/himself

E Leadership

19. A competent player is expected to be a positive and responsible role model for younger athletes
 20. Ability to interact with teammates with little or no disagreement is a measure of competence
 21. A competent player should be able to identify his functions in special situations
 22. Ability to identify and support team needs enhances an athlete's competence
-

References

- Bloom, B. S. (2005). *Developing talent in young people*. New York; Ballantine Publishing Company.
- Garfield, J. & Bennett, C. O. (2004). Building confidence in athletes by coaches through dialogue. *Journal of Sports psychology* 3, 75-81.
- Gould, D., Weiss, M., & Weinberg, R. (1981). Psychological characteristics of successful and non successful big ten wrestlers. *Journal of Sport Psychology*, 3, 69-71.
- Mahoney, M. J. & Avenier, M. (1977). Psychology of the elite athlete; roles of coaches, *Psychology today* 14, 151-156.

- Meyer, C.; Cooke, M. C., Cullen, F. & Liles, J. B. (2009). Successful athletes; roles of coaches, *Psychology today* 14, 151-156.
- Morgan, W. P. (2000). Test of champions, the iceberg profile. *Psychology Today*, 14, 92-99, 102, 108.
- Morris, L. D. (1975). A socio-psychological study of highly skilled women field hockey players. *International Journal of Sport Psychology*, 6, 134-147.
- Singer, R. N. (1988). Psychological testing: what value to coaches and athletes? *International Journal of Sports psychology*. 19, 87- 106.