

EXHAUSTIVE REVIEW ON PROBLEM OF ATHLETIC POTENTIAL TEST OF STUDENTS

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ABSTRACT:

Physical educators have long realized that the performance of boys and girls is greatly influenced by factors such as age, height, weight and body structure. At present, the rivalry to reach top and excel each other. So, every aspect that contributes for the excellence is carefully looked in it. One of such aspects is the selection of the right person for the right event in sports and games and normally a choice of selection is given to that the athletes. In this article, exhaustive review was highlighted through problem of athletic potential test of students.

Keywords: Athletic, Test, Problem, Students, Potential

INTRODUCTION:

Sports, an integral part of human life has an important and valuable effect on many spheres of social life. Similarly, the whole social pattern of a society may be reflected in its sports. Sports, unlike the other activities, is not an end product. It is undertaken essentially for its own sake (De Koning J.J. et al., 2005). If we want to know why people play, the first answer is that they primarily play for fun, enjoyment or satisfaction. The sport is a carrier, which encourages coaching of various sports and games along with rules and regulations governed by them and also it prepares the trainees to take active part in competitive sports. It grows out of man's struggle for survival in a hostile world. Sports in the present day have become extremely competitive, previous records are being broken whenever there is competition. It is not mere participation or few days practice that brings an individual victory, but the continuous hard work by training right from childhood. Man, by nature, is highly competitive

and in pursuit in performance; he has always been striving to jump higher and farther, to run faster and to demonstrate greater strength and ability. Physical fitness places emphasis on more and more activity. The preparation of an athlete today for achievement is a complex dynamic matter, characterized by a high level of physical and physiological efficiency and the degree of perfection of necessary ability and knowledge and proper teaching and tactics. An athlete arrives at the training centre /institute only as a result of corresponding training sports activity in this respect is an activity directed at steadily enhancing the preparation of an athlete and grooming him for a higher-level achievement (Brutsaert TD et. al., 2009). Many other factors are also brought in to action in his preparation such as special nutrition; organization of a general region in accordance with conditions of sports activity rehabilitation after injury etc., thus athletes training today is a multisided process of expedient use of aggregate factors so as to influence the development of an athlete. In today's sports a person faces some unique challenges. The standard are higher, the competition is tougher the stakes are greater attention in these days. Coaches, physical educationists and sports scientists have always expressed a great need to know more about those Anthropometry variables. With rapid growth and development in the modern world sports becomes a highly organized and competitive social phenomenon. It has a clear-cut classification on the basis of intensity of participation namely the recreation sports for children, health and conditioning sports for elders and competitive sports for the youth and adults. The competitive sports are further ranked according to the level of intensity of the competition. The highest level of competition in which the intensity of physical activity raises the pulse rate of the athlete to approximately between 180-200 beats/minute is considered as the top sport. Now the sports is more and more developed, it becomes a scientific discipline. Each nation in the world is vying with other to produce top class athletes to win laurels in the international competitions. Considerable research is done and developed to identify various factors that will be productive of achieving high-level performance in abilities of a given sport with proper coaching.

REVIEW OF LITERATURE:

Andrade Jr et. al. (2019) stated that the carries out the diagnosis of detection of sports talents of school children with iSports software and laboratory tests. We evaluated: 26 males and 11 females, age (13 to 18 years), lower limb strength and manual, flexibility, waist-hip ratio and body mass index. The boys did not present a correlation between the variables of the iSports

tests with the laboratory tests, but the girls had (rp power = 0.64 $p < 0.05$). The largest values in weight resulted in poorer performance in software testing. The iSports was able to identify athletic potential for football only in girls, corroborate with lab tests. Both tests can complement each other to enhance assessment of sporting talent detection.

Christopher J. Wretman (2017) stated that previous research has found that physical activity has considerable potential to promote child development and, thus, should be of interest to social workers. An important gap in the literature regards the potential of school sports to increase academic outcomes. The goal of this cross-sectional analysis was to examine a partially mediated hypothesis linking school sports participation with academic achievement via positive body-weight image and global self-esteem. Data are from a convenience sample of 3,186 students in the 6th to 9th grades from 14 schools in one North Carolina County. All measures were taken from the School Success Profile survey. Latent variable structural equation modelling was used. The measurement model and structural models exhibited acceptable fit. Results indicate that school sports participation was significantly associated with academic achievement, positive body-image perceptions, and self-esteem. Overall, participation in school sports demonstrated a significant standardized effect (.225) on academic achievement. Comparison with an alternative model comprising only non-sports extracurricular-activity participation found that the school sports model was both distinct and preferred. With appropriate estimation methods for the nonnormal, ordinal, and clustered data. Findings suggest that school sports may promote several outcomes of interest to social workers, and that social work research should further investigate the mechanisms underlying these relationships.

Peter Taylor et. al. (2015) stated that there is significant evidence of a number of social impacts from participation in sport and exercise. The highest quality evidence concerns health benefits, which prevent or reduce physical and mental health problems and save on health care costs. There is more evidence for physical health than for mental health. There are some negative health effects from sports injuries, more commonly associated with young people and typically minor injuries. Positive health benefits are population-wide but particularly important to older people. There is also substantial evidence that sports participation improves pro-social behaviour and reduces crime and anti-social behaviour, particularly for young men. The weight of evidence reviewed suggests a beneficial effect from sports participation on, for example, lower levels of recidivism, drunk driving, use of

illegal drugs, crime and suspensions at school, property crime, shoplifting and juvenile crime. The main exceptions to this positive evidence are the association of sport with increased violence and illegal alcohol consumption. In terms of the social capital impacts from sport, there is evidence that sport is a type of 'social glue', particularly for bonding capital. Positive outcomes in studies include reduced social and ethnic tensions, and more collective action and community involvement through sport, particularly volunteering. Two studies identify negative cases of sports clubs reinforcing social exclusion; and there is only limited evidence of sport providing bridging or linking capital. There is considerable evidence of the positive effect of sport and exercise on educational outcomes, including psychological benefits and cognitive benefits. In turn, sport and exercise have been shown to have positive effects on a number of final outcomes, including educational attainment. There are a few contrasting studies which identify negative effects of sports participation on the educational attainment of specific groups of students. Some studies suggest that sport achieves a number of impacts simultaneously, making it a highly cost-effective intervention. Many of the links between sport and different social impacts are common, including greater physical competence, better cognitive skills, better social skills, trust and reciprocity, and identification with social values. These help to counteract risk factors and stimulate favourable reaction to protective factors. Wellbeing is the manifestation of the catalytic role that sport plays in stimulating social impacts. Without a sense of wellbeing from participating, people would not sign up to sport; and without a sense of wellbeing from participating, people would not play as frequently as they do. There is evidence of a positive relationship between sport participation and SWB. Wellbeing is connected particularly to health, especially mental health; but also, anti-social behaviour, education and social capital.

Abdul Razak et. al. (2012) stated that the involvement in sport activities could improve one's life in terms of physical fitness and mental health. The participation of parents and children in sport activities is crucial in preventing the children from involvement in negative activities especially during their leisure time. This paper examined the involvement of students in sports activities during the school holidays. They normally have fewer activities and therefore may have the tendency to get involved in negative activities since there are less control from parents and teachers during this time. A total of 261 students from two daily schools in Pahang were involved in this study. Only 41 percent or a total of 107 students are interested in sports activities during the school holidays. The common sports activities involve are badminton, football, volleyball and netball. The result shows that students need additional

facilities such as bowling center and swimming pool as an alternative sport activities. Providing the facilities according to their interest could give them more enjoyment and exposure to the new sport activities. The students could also experience healthy life style which could prevent them from joining unconstructive pursuits. Hence, the finding of this study is hoped to provide useful information in improving the quality of life among secondary school students in the rural areas.

Brutsaert TD, Parra EJ (2009) provided an overview of the truism that both nature and nurture determine human athletic ability. The major thesis developed is that environmental effects work through the process of growth and development and interact with an individual's genetic background to produce a specific adult phenotype, i.e., an athletic or nonathletic phenotype. On the nature side (genetics), a brief historical review is provided with emphasis on several areas that are likely to command future attention including the rise of genome-wide association as a mapping strategy, the problem of false positives using association approaches, as well as the relatively unknown effects of gene-gene interaction (epistasis), gene-environment interaction, and genome structure on complex trait variance. On the nurture side (environment), common environmental effects such as training-level and sports nutrition are largely ignored in favor of developmental environmental effects that are channelled through growth and development processes. Developmental effects are difficult to distinguish from genetic effects as phenotypic plasticity in response to early life environmental perturbation can produce lasting effects into adulthood. In this regard, the fetal programming (FP) hypothesis is reviewed in some detail as FP provides an excellent example of how developmental effects work and also interact with genetics. In general, FP has well-documented effects on adult body composition and the risk for adult chronic disease, but there is emerging evidence that FP affects human athletic performance as well.

Sheppard JM (2008) examined the potential strength, power, and anthropometric contributors to vertical jump performances that are considered specific to volleyball success: the spike jump (SPJ) and counter-movement vertical jump (CMVJ). To assess the relationship among strength, power, and anthropometric variables with CMVJ and SPJ, a correlation and regression analysis was performed. In addition, a comparison of strength, power, and anthropometric differences between the seven best subjects and the seven worst athletes on the CMVJ test and SPJ test was performed. When expressed as body mass relative measures, moderate correlations (0.53-0.65; $p < \text{or} = 0.01$) were observed between the 1RM measures

and both relative CMVJ and relative SPJ. Very strong correlations were observed between relative (absolute height-standing reach height) depth jump performance and relative SPJ (0.85; $p < \text{or} = 0.01$) and relative CMVJ (0.93; $p \leq 0.01$). The single best regression model component for relative CMVJ was the relative depth jump performance, explaining 84% of performance. The single best predictor for relative SPJ was also the relative depth jump performance (72% of performance), with the three- component models of relative depth jump, relative CMVJ, spike jump contribution (percent difference between SPJ and CMVJ), and relative CMVJ, spike jump contribution, and peak force, accounting for 96% and 97%, respectively. The results of this study clearly demonstrate that in an elite population of volleyball athletes, stretch-shortening cycle performance and the ability to tolerate high stretch loads, as in the depth jump, is critical to performance in the jumps associated with volleyball performance.

Pearson DT, Naughton GA, Torode M. (2006) described the existing practices in physiological tests used for talent identification in team sports and discuss the impact of maturity-related differences on the long-term outcomes particularly for male participants. Maturation is a major confounding variable in talent identification during adolescence. A myriad of hormonal changes during puberty results in physical and physiological characteristics important for sporting performance. Significant changes during puberty make the prediction of adult performance difficult from adolescent data. Furthermore, for talent identification programs to succeed, valid and reliable testing procedures must be accepted and implemented in a range of performance-related categories. Limited success in scientifically based talent identification is evident in a range of team sports. Genetic advances challenge the ethics of talent identification in adolescent sport. However, the environment remains a significant component of success prediction in sport. Considerations for supporting talented young male athletes are discussed.

CONCLUSION:

In conclusion, exceptional athletes are built, not born. Like the great Winston Churchill said, "Success is a journey...not a destination," this tells us that the only way we can achieve our goals is through practice, practice, and more practice. It is impossible to be a "born great" athlete; we become a great athlete through proper training and motivation, and through our environment. In order to reach the top, you must be dedicated and do whatever you must to reach the top. Like the old saying goes, "you can do anything you want to do if you work

hard to achieve it” is very accurate in describing the effects of nurture on becoming a great athlete. The point to remember is that the issue is not nature versus nurture. It is the balance between nature and nurture. Genes do not make a man gay, or violent, or fat, or a leader. Genes merely make proteins. The chemical effect of these proteins may make the man's brain and body more receptive to certain environmental influences. But the extent of those influences will have as much to do with the outcome as the genes themselves. Furthermore, we humans are not prisoners of our genes or our environment. We have free will. Genes are overruled every time an angry man restrains his temper, a fat man diets, and an alcoholic refuses to take a drink. On the other hand, the environment is overruled every time a genetic effect wins out, as when Lou Gehrig's athletic ability was overruled by his ALS. Genes and the environment work together to shape our brains, and we can manage them both if we want to. It may be harder for people with certain genes or surroundings, but "harder" is a long way from predetermination (Indu Mazumdar, 2000).

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