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# The Relationship between Personality and Physical Activity

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**Abstract.** The present article is a meta-analysis of existing literature regarding the relationship between personality and physical activity. The interest of specialists for the role of the athlete's personality in achieving sports performance is highlighted by various studies and research. However, it was not possible to establish a certain "standard" for the personality of the athletes who achieve great sport performance, but a number of common features were revealed. On the other hand, the second direction of this meta-analytical study regards personality development based on its classical structure, temper, skills and individual character of sport practicing subjects.

**Keywords**: personality, physical activity, sport performance, personality development, temper

## The concept of "personality"

Psychological studies and research pay great attention to personality due to the fact that it is a point of reference in determining and influencing the attitude of athletes.

The definition of personality as a concept has experienced many attempts since 1937 when Gordon Allport considered that an inventory and classification of this concept is necessary. Withal, to Gordon Allport we owe the most well-known definition of personality: the dynamic organization of certain psychological and physical systems within the individual that determine a specific thinking and behavior (Allport, 1981). Analyzing the definition proposed by Allport, Bonchis (2009) argues that it contains concepts and actions such as dynamic organization which reveals that personality is constantly changing, but also a psycho-physical

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system which means that personality involves changes both at psychologically and physically level.

Regarding its structure, the personality consists of *temper* which is innate and is the most easily to observe and identify, *skills*, a complex of individual processes and psychological attributes that allow the successful accomplishment of certain activities, as well as *character* by which we understand the idea of trait and attitude, essential attributes of an individual that determine a unitary way of manifestation (Bochis, 2009).

Different research on personality and its relationship with individual, interpersonal and social behaviors are equally important regardless the period of time they have been argued (Funder, 20011; Funder & Fast 2010). The predictive power of personality is highlighted in the meta-analyzes performed on the theory which argues the links between personality and sport performance (Cristea, 2015). Meta-analytical studies show that personality traits can predict on long term certain results that athletes can achieve in areas such as happiness and health, relational engagement, group cohesion and social behavior (Hampson, 2012; Benet-Martinez & Ozer, 2006).

### Personality and sport

Starting with Coleman Griffith, considered to be the promoter of sports psychology, personality has remained an essential element in this area, and psychologists have continued to make efforts to understand the personality of the successful athlete.

Valley (2002) is surprised that despite the overwhelming evidence that highlights the role of personality in achieving great sport performance, many researchers believe that this topic has not revealed significant results.

Valley, however, is contradicted by Allen in an analytical study regarding research on sports psychology that contains descriptive reports of athletes' personality profile, changes in personality and sport performance development, personality differences between athletes and individuals who are not practicing an organized sport, differences in the personality of athletes practicing different sports or between athletes and members of different physical activities groups (Allen et al., 2013; Marcu & Buhas, 2014). In the 60s and 70s research on athlete's personality increased exponentially, with over 1.000 published studies (Fisher, 1984), transforming the vision over the concept and strengthening the understanding of personality. In recent years, the frequency of studies on athletes' personality has decreased, with very little progress in answering some of the fundamental questions raised at the beginning of the last century. The decline of the interest for studying personality is hard to explain. An explanation can be the fact that the research of the athlete's personality turned to more specific concepts such as anxiety, optimism, resistance and mental toughness. These aspects have been over-studied lately and researchers used general concepts measured in the context of sport in order to understand the behavior of athletes throughout the competition (Gucciardi & Gordon, 2011; O'Rourke et al., 2011). The tendency of athletes to experience anxiety or to show resistance or optimism offers too little information about their

personality. There are good reasons to believe and expect the athlete's personality to have a mild prediction (based on theoretical grounding) on the performance that an athlete can achieve in career (Poropat, 2009). The author sustains that performance, both in work and in the academic environment, is determined by factors related to the ability and desire to achieve performance.

We are tempted to believe that achieving performance in sport is most likely determined both by the individual's mental capacity to cope with different pressures (the quality of sports infrastructure, geographical position, etc.) and by the athlete's desire to achieve very good results, expressed through effort and perseverance (Ilies et al., 2014).

Over time, the relationship between personality and sports performance has been investigated by researchers who have used a wide variety of research methods. A particular approach compared the personality traits of athletes who compete at a high level of performance with those of athletes competing at a lower level (Dumitrescu, 2015). Although this type of method used in comparative studies does not exclude the contribution of other variables in generating differences in sport results, it provides valuable information about the athlete's personality linked with long-term performance and successful sports career (Buhaş, 2015). These studies have highlighted the fact that high performance athletes are more extrovert and more emotionally stable.

Other studies have analyzed differences in performance and compared the profile of novice and advanced athletes by correlating the results obtained in personality tests with the competitive performance obtained by athletes. Generally, between novice and advanced athletes there were no significant differences in the prediction of short-term success (one match, one encounter) based on the results obtained by athletes in personality tests (Evans & Quarterman, 1983; Garland & Barry, 1990; Morgan, 1968; Rogulj et al., 2006).

Other two types of approaches include studies that correlate the results of personality tests with long-term performance indicators, and studies comparing professional level athletes with athletes who are not performing. The ability to predict long-term performance based on the personality profile of the athlete is also sustained by the significant results obtained by Piedmont and Sindik (Piedmont et al., 1999; Sindik, 2010).

Strong effects were also observed between the athlete's personality and progress at a superior level of competition, in high-performance sports.

Predictability based on personality is sustained by Aidman (2007), who argues that the results obtained by junior elite athletes in personality tests can predict whether they will evolve to a high level and achieve sports performance seven years later. Although the author admits that more critical studies are needed, he claims that long-term success in sport is personality-driven but personality does not influence short-term success.

It should not surprise anyone that the attempt to predict short-term performances based on athlete's personality has failed because a single moment of bad luck, an unexpected event, or a wrong decision of a referee or an official can fundamentally change the outcome of the competition.

Since it is impossible to appreciate the level of short-term sports performance based on personality, researchers have focused their attention on the dimension of the personality concept, including also some behaviors associated with sport success. A study made by Woodman (Woodman et al., 2010) on a group of British gymnasts has shown that consciousness is an ascendant factor in the quality of athletes' training for competition, and emotional stability has been a positive factor for an efficient approach of the competition.

Other studies have highlighted the effect of personality on mental states such as aggression (Trninić et al., 2008) and the mechanisms used to adapt to this state (Allen et al., 2012; Allen et al., 2011; Kaisele et al., 2012). Research results reveal that more introverted or extroverted athletes, as well as those with low emotional stability, have a high predisposition to display aggressive behaviors. Athletes with a high level of consciousness and high emotional stability show openness and willingness to solve problems by using adaptation mechanisms.

In addition to the direct effects of personality on results, various studies showed also noticeable tempering effects manifested by an extraverted temperament. The extent to which sport performance is influenced by the presence of the public (Graydon & Murphy, 1995) and to which a certain emotion has positive or negative effects has been shown to be moderated by the athlete's extraverted character. Specifically, when competing in front of a public athletes with an extroverted temperament seem to achieve superior results than those obtained by introverted temperament athletes, but this situation is not valid when the audience is not present. Regarding anger, it seems to have some positive effects, but only on athletes who have high levels of extraversion.

Globally, our data show that personality plays an important role in sport performance, but we believe that further research is needed to reveal important details about the dimensions of the personality effect and its relationship with different important factors associated with success in sports.

For a long time researchers wanted to establish a personality pattern for the successful athlete (Dragos, 2015). Although common personality traits have been observed for athletes who have achieved great performance in sports, this desideratum remains a utopia.

As for personality differences between athletes and individuals who do not practice organized sports, there is solid evidence showing that personality is associated with sport practicing. Clearly, athletes consistently demonstrate higher levels of extraversion, show better emotional stability and are more open to new experiences than individuals not practicing sport.

Although temper is influenced in a high degree by genetics, following studies on personality we can state that not only people with extroverted temper decide to practice sports and not only them are successful or perform in sport. As there are no pure typologies of extraverted or introverted temperament, and temper is only one of personality components, we argue that athletes 'personality seems stronger as a result of the athletes' exposure to situations where they have to exhibit emotional and behavioral control under conditions of psychological pressure, to engage the

inner mechanisms of will and to increase their tolerance to frustration, because performance in sport means giving up to many life pleasures.

In conclusion, we can state that, to a certain extent, athlete's personality is under the influence of genetic traits; but it mostly forms due to the environment where the athlete develops physical and mental abilities, forms cognitive patterns that lead to the formation of character that will predict on long-term the athletes' behavior in order to achieve performance in sports.

#### References

- Aidman, E. V., (2007), Attribute-based selection for success: The role of personality attributes in long term predictions of achievement in sport, in The Journal of the American Board of Sport Psychology, 3, 1-18;
- Allen, M. S., Greenlees, I., & Jones, M., (2011), An investigation of the five-factor model of personality and coping behaviour in sport, in Journal of sports sciences, 29(8), 841-850;
- Allen, M. S., Frings, D., & Hunter, S., (2012), *Personality, coping, and challenge and threat states in athletes* in International Journal of Sport and Exercise Psychology, 10(4), 264-275;
- Allen, M. S., Greenlees, I., & Jones, M., (2013), *Personality in sport: A comprehensive review*, in International Review of Sport and Exercise Psychology, 6(1), 184-208;
- Allport, G.W., (1981), Structura și dezvoltarea personalității [The structure and development of personality], Editua Didactică și Pedagogică, București;
- Benet-Martínez, V., & Ozer, D. J., (2006), *Personality and the prediction of consequential outcomes*, in Annual review of psychology, (1), 401-421;
- Bonchiş, E., Drugaş, M., Dindelegan, C. & Trip, S., (2009), Introducere în psihologia personalității [Introduction to Personality Psychology], Editura Universității din Oradea, Oradea;
- Buhaş, D.S., (2015), Sports Management. From Institutionalism to Research, in GeoSport for Society, 2, 1, 26-32;
- Cristea, D. I., (2015), *Considerations regarding creativity in physical education class*, in Annals of the University of Oradea Physical Education and Sport Fascicle, XXV, 46-50;
- Dragos, P., (2015), Aspects regarding efficiency at work in certain Sport organisations, in Geosport for Society, 2 (1), 21-26;
- Dumitrescu, G., (2015), Aspects regarding training and matches of F.C. Oradea University football team season 2014 2015, in Annals of the University of Oradea Physical Education and Sport Fascicle, XXV, 120-128;
- Evans, V., & Quarterman, J., (1983), *Personality characteristics of successful and unsuccessful Black female basketball players*, in International Journal of Sport Psychology, 14(2), 105-115;
- Fisher, A. C., (1984), *New directions in sport personality research*, in Psychological foundations of sport, 70-80;
- Funder, D. C., (2011), Accuracy in personality judgment: Research and theory concerning an obvious question. In B. W. Roberts & R. Hogan (Eds.), Personality psychology in the workplace: Decade of behavior (pp. 121–140), Washington, American Psychological Association;
- Funder, D.C., & Fast, L.A., (2010), *Personality in social psychology*. In D. Gilbert & S. Fiske (Eds.), Handbook of social psychology (5, pp. 668-697), New York, Wiley;
- Garland, D. J., & Barry, J. R., (1990), Personality and leader behaviors in collegiate football: A multidimensional approach to performance, in Journal of research in personality, 24(3), 355-370;
- Graydon, J., & Murphy, T., (1995), *The effect of personality on social facilitation whilst performing a sports related task*, in Personality and Individual Differences, 19(2), 265-267;
- Gucciardi, D., & Gordon, S., (2011), Mental toughness in sport: Developments in theory and research.

  Routledge;
- Hampson, S. E., (2012), *Personality processes: Mechanisms by which personality traits "get outside the skin"*, in Annual review of psychology, 63, 315-339;

- Ilieş, A., Dumitrescu, G., Dragoş, P., Buhaş, S., (2014), Sport, infrastructure and sport activities-tourist resources, in Crişana-Maramureş. Geographical Atlas of Tourist Patrimony (Ilieş Al., eds), University of Oradea Press, Oradea, 280-285;
- Kaiseler, M., Polman, R. C., & Nicholls, A. R., (2012), Effects of the Big Five personality dimensions on appraisal coping, and coping effectiveness in sport, in European Journal of Sport Science, 12(1), 62-72.
- Marcu, V., & Buhaş, S., (2014), *Sports Organizations –Management and Science*, in Procedia -Social and Behavioral Sciences, vol. 117, 678 682;
- Morgan, W. P., (1968), *Personality characteristics of wrestlers participating in the world championships*, in The Journal of sports medicine and physical fitness, 8(4), 212-216;
- O'Rourke, D. J., Smith, R. E., Smoll, F. L., & Cumming, S. P., (2011), *Trait anxiety in young athletes as a function of parental pressure and motivational climate: is parental pressure always harmful?*, in Journal of Applied Sport Psychology, 23(4), 398-412;
- Piedmont, R. L., Hill, D. C., & Blanco, S., (1999), *Predicting athletic performance using the five-factor model of personality*, in Personality and Individual Differences, 27(4), 769-777;
- Poropat, A. E., (2009), A meta-analysis of the five-factor model of personality and academic performance, in Psychological bulletin, 135(2), 322-338;
- Rogulj, N., Nazor, M., Srhoj, V., & Božin, D., (2006), Differences between competitively efficient and less efficient junior handball players according to their personality traits, in Kinesiology, 38(2), 158-163:
- Sindik, J., (2010), Relationship between big five personality markers with situation-related performance at top Croatian basketball players, in Sport Science, 3(2), 34-38;
- Trninić, V., Barančić, M., & Nazor, M., (2008), *The five-factor model of personality and aggressiveness in prisoners and athletes*, in Kinesiology, 40(2), 170-181;
- Vealey, R. S., (2002), *Personality and sport behavior*, in T. S. Horn (Ed.), Advances in sport psychology (pp. 43-74). Champaign, Human Kinetics;
- Woodman, T., Zourbanos, N., Hardy, L., Beattie, S., & McQuillan, A., (2010), *Do performance strategies moderate the relationship between personality and training behaviors? An exploratory study*, in Journal of Applied Sport Psychology, 22(2), 183-197.