

A PRELIMINARY LOOK AT PERSONALITY ANALYSIS AS A COACHING STRATEGY

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Abstract

This paper explores the need to understand athletes' personalities in ensuring favourable coaching outcomes. Successful coaching cannot be judged based solely on winning or losing but also based on the development of athletes. As such, the process of coaching must be changed to involve the learning of athletes' personality types. No two athletes are the same but many have similar characteristics. The understanding of personality would enable coaches to cater their approaches to athletes accordingly and achieve positive outcomes without enduring unnecessary stress. Although some researchers have found contradictions and difficulties in personality research based on sports due to the different methodologies used, this paper will embark on two approaches to explore the issue. The approaches are the review of literature on personality types and the presentation of the findings of local studies based on different personality models. Specifically, the review will include behaviour characteristics of athletes, personality traits of athletes from individual and team sports, athletes' personalities from different types of sports, personality and ability to learn motor skills, personality differences between contact and non-contact sports and personality differences with different body types. The local studies will focus on Sanguine-Choleric-Melancholic and Phlegmatic Model (SCMP) and The Big-Five Model. Based on the findings, strategies will be suggested for coaches to address the difficulties faced in coaching athletes with diverse personality.

Keywords: *personality, coaching, Big-Five Model, athletic profile*

Introduction

Although the personality of athletes has been used to understand, explain and predict athletes' behaviours (Geron, Furst & Rotstein, 1986; Kirkcaldy, 1982, Weinberg & Gould, 2011), many coaches have not considered it a strategy for effective coaching. Therefore, they have not attempted to apply it in their training. This may be due to the inconsistencies and contradictory results from the various studies of personality among athletes (Geron, Furst & Rotstein, 1986; Hardman, 1973; Kane, 1982; Morgan, 1978). It should be noted that some consistent characteristics of athletes were found in some studies (Blaser & Schilling, 1976; Johnson & Morgan, 1981; Kroll, Loy, Hosek & Vanek, 1973; Schurr, Ashley & Joy, 1977) but comparison of the findings is difficult to achieve due to differences in methodology as researchers employed different instruments (Bhullar, 1974; Mushier, 1972; Slusher, 1964; Thakur & Thakur, 1978), different combined groups of samples and irrelevant statistical analysis (Kane, 1982; Morgan, 1978). Personality is the sum of characteristics that make a person unique. The study of personality helps us work better with students, athletes and exercisers (Weinberg & Gould, 2011). Weinberg and Gould (2011) also emphasized that getting to know the real person, which is the individual's psychological core and typical modes of response, produces insight into the individuals' motivations, actions and behaviours. As such, it is important to understand those aspects of athletes so that coaches can choose the best way to help them and achieve coaching objectives.

A coach should be conscious of the circumstances surrounding the life of an athlete (Yukelson, 2001). Therefore, athletes should not be neglected and an analysis of their personality should be conducted. With the personality profile, a coach should be able to adapt to the variability of personalities among the athletes. The ability to understand and respond to the individual needs of each athlete is a critical element of effective coach-athlete communication (Yukelson, 2001).

Numerous research on college students showed that personality can be used as a coaching strategy because it is stable. In a meta-analysis, Roberts and Del Vecchio (2000) found that personality traits become increasingly stable across the lifespan with test-retest correlations increasing from .30 in children to .54 in young adults from age 18 to 21.9 and to around .70 in adults age 50 to 70. Similarly, in examining personality changes of young adults, aged 18-26 in a longitudinal study of 1000 participants, Roberts, Caspi and Moffit (2001) confirmed that 93% of the sample had relatively stable traits over an 8-year period.

Personality and Athletes

In a study of personality, Cooper (1969) found that athletes were more competitive, dominant, self-confident, and achievement-oriented. Athletes have also been found to be more psychologically well-adjusted and often report higher levels of self-esteem than non-athletes (Kamal, 1995). Research has also indicated that, compared with non-athletes, athletes often hold slightly more conservative political views (Rehberg & Schafer, 1968), are more authoritarian (LeUnes & Nation, 1982), and demonstrate higher levels of persistence (Lufi & Tenenbaum, 1991).

Kirkcaldy (1984) emphasized that the study of individual differences permits better appreciation of the personality types in athletes. Generally, successful athletes are characterized by a more extraverted, tough minded and less neurotic personality than non-athletes. As such, a coach should be aware of these qualities and capitalize on it to achieve

better results in sports training and competition. Eysenck (1982) stressed that coaches should realize that the individual differences have their origin in physiology systems associated with arousal which in turn, sets up behavioural patterns. Emotionally unstable individuals will be more anxious and face more conflict. Since arousal is related to performance, different personality types will definitely affect the level of performance.

Regarding performance, in an observation of interaction between *Extraversion-Introversion* and *skill acquisition*, Eysenck (1982) found that *introverts* benefit from impersonal coaching methods whereas *extroverts* enjoy variability of instructions and enjoy social interaction with team mates. Extraverts can recall better and learn more rapidly on complex tasks that are current. Conversely, introverts were more superior in memory recall after longer periods of time. This differences in learning method should be recognized by coaches and provide them with new insights when coaching athletes. In addition, Eysenck (1982) found that extroverts produce more errors in performance; they possess lower levels of aspiration than introverts but could work on different tasks at one time. On the other hand, introverts' performance would be disrupted by a second task. However, introverts perform better in mental imagery.

Personality and Gender of Athletes

In a study of female athletes, Malumphy (1968) found individual female athletes to be more anxious, venturesome, tough-minded, and extraverted whilst team athletes were lower in leadership, less venturesome and extraverted. In addition, Rushall (1967) discovered that male swimmers (individual sport) were more individualistic and self-centered. Similarly, Hendry's (1968) British swimmers' profiles showed that they tend to be introverts. This is again supported by Warburton and Kane (1966) that many top track and field athletes and swimmers showed predominance to introversion. In a study regarding the personality of college male athletes, Thakur and Thakur (1978) found that the characteristics associated with the athletes were happiness, cordial and affectionate relations, anxiety, achievement, dominance and superior organization capacity. In Malaysia, Yusof Ismail (1989) studied personality and sports motivation among varsity athletes using Universiti Kebangsaan Malaysia students and found that personality was weakly but significantly related to sports motivation (in positive or negative direction) among varsity athletes. There was also a moderate gender relationship between the dependent variables. Male varsity athletes reported significant positive relationship between the four personality subscales of ascendancy, responsibility, emotional stability, and sociability with the sports motivation subscales of aggression, conflict (for sociability only), competence of aggression, conflict (for sociability only), competence, and cooperation. Conversely, female varsity athletes reported a significant negative relationship between the personality subscale of emotional stability with sports motivation subscales of conflict, competition, and cooperation.

Numerous findings indicated that female athletes possess a stable personality profile. When compared with non-athlete females, female participants tend to be less angry, confused, depressed, and neurotic (Freedson, Mihevic, Loucks, & Girandola, 1983). Based on her research with female United States Olympians, Balazs (1975) concluded that elite female athletes could be best described as high in the need for achievement and autonomy. In addition, Williams (1980) noted that female athletes often display assertiveness, aggression, and dominance. He concluded that female athletes tend to exhibit traits that are more similar to male athletes and non-athletes than to female non-athletes. When comparing the personality characteristics of male swimmers with female swimmers, Rushall (1967) found that females

were socially bold, noisy and unrestrained in their behavior whereas males appear to be self-centered and individualistic. It has also been found that novice female swimmers were, in general, more introverted than a control group of female athletes that are not primarily engaged in swimming (Meredith & Harris, 1969). Coaches should differentiate between male and female athletes and coach them based on the personality type; coaches should analyze the strength and weaknesses of athletes based on their personality type.

Personality and Individual and Team Athletes

Personality plays an important role in athletes' participation of individual or team sports. Kirkcaldy (1984) found that extraverted individuals, which are characterized by impulsive, sociable, easy-going and optimistic behaviour, would be attracted to team sports because it provides for their need of social interactions. Coaches would then be able to gauge whether the athletes under him/her will be able to adapt to the team well or otherwise. This analysis of personality will enable the coach to examine players and make decisions based on the suitability of a candidate. This would be done by assessing the degree of agreement between the coach's analysis of the task and the candidates' abilities. Kirkcaldy (1984) stressed that a coach could use a battery of psychological tests, which act as predictor variables. This analysis would then be used to categorize the athletes and place them according to the degree of compatibility with the specified criterion.

A West German study done by Sack (1975) revealed that middle and long distance runners, when compared to handball and football players, were different along the dimensions, dominance, introversion-extraversion (and body-build). Peterson (1967) found that individual athletes were significantly more dominant, adventurous, emotional, radical and less dependent than team participants. Kane (1970) showed a complex relationship between the second order personality variable "Extraversion" and performance of "track athletes": sprinters and "throwers". They were frequently more extraverted than middle-distance runners. From his research, he claims that as the distance increases, there is a trend towards introversion. Johnson (1972) had demonstrated differences between female athletes participating in sports such as basketball, bowling, field- hockey and golf, as did Kroll and Crenhaw (1968) between footballers, wrestlers and gymnasts.

Over the years, questions have been raised about the personality traits of athletes participating in individual sports and team sports. The personality traits of women in individual sports and in team sports were studied by Peterson, Weber and Trousdale (1969). They found that women athletes competing in individual sports rated higher on dominance, adventurousness, sensitivity, introversion, radicalism, and self-sufficiency and lower in sophistication, when compared to women athletes competing in team sports.

In other studies, many researchers (Foster, 1972; Meredith & Harris, 1969; Peterson et al., 1969; Rushall, 1967) reported that women athletes who participated in individual sports were more dominant, adventurous, sensitive, radical, imaginative, self-sufficient, and more forthright than women competing in team sports.

Many researchers (Eysenck, 1982; Hendry & Douglas, 1975; Kirkcaldy, 1982) studied personality and sex differences in team sports and found that team athletes were extraverted, emotionally more stable (females being less stable than males athletes), self-sufficient, tough-minded, dominant, aggressive, and hostile.

Personality and Contact and Non-Contact Athletes

It has been found that extraversion was higher for athletes in ‘direct’ sports where aggression is permitted via contact than in ‘parallel’ sports where it is not (Newcombe & Boyle, 1995). This is similar to the high sensation-seekers who engage in riskier sports to satisfy their need for new experiences (Young, 1990). This implies that there are pre-existing differences which draw participants into different sports (the gravitational hypothesis).

Athletes in contact sports are likely to differ in a number of ways from those in non-contact sports, particularly in height and weight. If personality is related to body build, physical differences may account for personality differences between athletes in various sports. In fact, while he recognized that some of the relationships may be based on stereotypes, Sheldon found that more muscular types (mesomorphs) are more outgoing than less muscular types (ectomorphs) (Hall & Lindzey, 1957).

Personality and Sport Injury

Some studies have found that psychology has a great influence on the occurrence and recovery from injury and illness (Clark & Robertson, 2005; Raynor & Levine, 2009). One main component of sport psychology that has been found to influence the occurrence of injury is life stress. Contributing stressors include social support, coping skills, and personality (Albu, 2009). Personality is the basis of these three stressors. Personality determines how a person will normally think, feel, and act. When put in a particular situation, a person’s personality will influence how they respond to the circumstance (Luis-Font, 2005).

Using Big Five Model of Personality Analysis as Coaching Strategy

The Big Five Model conceptualizes personality through five constructs: Extraversion; Conscientiousness; Agreeableness; Neuroticism or Emotional Stability; and Openness to Experience (Costa & McCrae, 1992; Goldberg, 1981). Table 1 below examines the characteristics for the five constructs to provide a better understanding of the model.

Table 1 The characteristics of the Big Five personality constructs

Extraversion	Conscientiousness	Agreeableness	Emotional Stability	Openness to Experience
<ul style="list-style-type: none"> • Talkative • Outgoing • Energetic • Dominant • Optimistic • Expressive • Seeks attention 	<ul style="list-style-type: none"> • Team player • Good self-control • Focused on tasks & goals • Think before action • Follow norms & rules • Plan, organize & prioritize 	<ul style="list-style-type: none"> • Communal orientation • Selflessness • Honest/Trusting • Moral • Tender-minded • Modest • Cooperative • Tolerant • Accommoda- 	<ul style="list-style-type: none"> • Negative emotionality • Calm • Poised • Self-confident • Secure with decisions • Anxious, vulnerable • Tense • Moody 	<ul style="list-style-type: none"> • Open-minded • Love of adventure • Love arts • Imaginative • Curious • Interested in novel ideas

	tasks	ting <ul style="list-style-type: none"> • Aggressive • Rude • Spiteful • Stubborn • Cynical • Manipulative 	<ul style="list-style-type: none"> • Angry • Easily frustrated • Insecure in relationships 	
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Research conducted in Malaysia

Purpose

The main purpose of this study was to investigate the Big Five Personality Factor (Extraverts, Agreeableness, Openness to Change, Conscientiousness, and Emotional Stability) among sport science students of a public university in Malaysia.

Demographic Data of the Respondents

One hundred students, comprised of 50 athletes and 50 non-athletes (54.0% male and 46.0% female), were studied. 8.0% of them were less than 20 years old, 72.0% were 21-23 years old, 16.0% from 24- 26 year group and 4.0% were 27 years old and above. In terms of sports experience, 94% of them have participated in sports. 67% had 3-4 years experience, 18% 1-2 years experience, 9% had less than a year experience while 6% had no sports participation. Among those involved in sports, 21% are involved at school level, 22% at district level, 41% state level and 10 % achieved national level of involvement. In terms of the type of sports involved, 8% of the students were involved in hockey, 4% in rugby, 3% each in archery, badminton, bowling and table tennis, 5% in handball, 14% in netball, 15% in football, 9% in volleyball, 5% in sepak takraw, and 22% in other sports.

Findings

The statistics showed that 31 (62%) of the respondents were extravert, 29 (58%) had agreeable personality, 32 (58%) were open to change, 45 (90%) were conscientious and 40 (80%) were emotionally stable. Results of ANOVA showed no significant differences among athletes from different levels of involvement in the five personality sub-scales. No significant results were also obtained among athletes from different sports in the five sub-scales. Comparison of male and female athletes also yielded no significant results in all the five sub-scales.

Strategy for Coaches

Coaches should attempt to develop training based on the findings. A high percentage of 'conscientiousness' means that athletes are competent, organized, achieving and proactive. John and Srivastava (1999) emphasized that highly conscientious individual think before they act, follow norms and rules, and plan, organize, and prioritize tasks. This is supported by Van Vianen and De Drwu (2001) that athletes with these characteristics are responsible, organized, self-disciplined, achievement-oriented, hard working, and exhibit maximum effort and perseverance toward individual and team goals. This will definitely help coaches to push the athletes into achieving higher goals. The athletes were also stable emotionally which means

that they are confident, resilient, contented and relaxed. The quality of confident and resilient should be exploited by the coaches to gain more during training. However, the contented and relaxed behaviour among athletes should be tackled accordingly to not to jeopardize the sports training programme.

Majority of athletes were extraverts which mean that they are friendly, outgoing, assertive and energetic. These athletes value social interaction so coaches should give them the opportunity for increased social interaction such as holding leadership posts in the sport team. This is supported by Shiner (2006) which noted that extraverts like to be dominant. This will undoubtedly help promote good rapport among team members. Their energetic nature also means that they are able to work harder. This characteristic is recognized by Caspi, Roberts and Shiner (2005) who state that they like to be the center of attraction.

On openness to change, these athletes are imaginative, innovative, and adaptable but prefer to break the rule. Coaches must recognize their innovative and imaginative nature and provide room for them to express that through discussion of training programmes, coaches need to ensure rules are kept intact so that the end results are favourable. The ‘agreeableness’ nature means that the individual is trusting, straightforward, considerable and unassuming. Coaches should be open to them but must tackle the unassuming nature; encourage the athletes so that they are willing to come forward and involve themselves in activities. On the other hand, Shiner (2006) stated that individuals with low levels of agreeableness could be aggressive, rude, spiteful, stubborn, cynical, and manipulative.

Using SCMP (Sanguine-Choleric-Melancholic-Phlegmatic) Model As Coaching Strategy

Table 2 showed the characteristics of the four constructs of the SCMP Model.

Table 2 Characteristics of Sanguine-Choleric-Melancholic-Phlegmatic constructs

Sanguine (Extrovert/Stable)	Choleric (Extrovert/Unstable)	Melancholic (Introvert/Unstable)	Phlegmatic (Introvert/Stable)
<ul style="list-style-type: none"> • Leadership • Cheerful • Friendly/Sociable • Talkative • Changeable • Lively • Restless • Energetic/Lively • Responsive • Self-centered • Carefree • Curious • Undependable 	<ul style="list-style-type: none"> • Optimistic • Active • Confident • Strong-willed • Assertive • Impulsive • Hot temper/ Touchy • Aggressive • Goal oriented • Well organized • Faithful • Brave • Independent 	<ul style="list-style-type: none"> • Sensitive • Artistic/Creative • Perfectionist • Analytical • Serious and purposeful • Selfless • Idealistic • Reserved • Moody • Rigid/lack flexibility • Insecure • Anxious • Pessimistic 	<ul style="list-style-type: none"> • Calm/Stable • Patient • Controlled • Good listener • Dependable/ Reliable • Efficient • Thoughtful • Easy-going • Passive • Stubborn • Lazy

	<ul style="list-style-type: none"> • Inconsiderate • Aloof/Reserved 		
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Research conducted in Malaysia

Purpose

The purpose of this study was to investigate the personality of athletes using SCMP model.

Demographic Data of the Respondents

Two hundred and fifty-nine athletes which comprised of 193 male (74.5%) and 66 female athletes (25.5%) were studied. About 7% of them were less than 20 years old, 62.2% were 20-24 years old, 18.9% from 25- 29 year group and 11.6% were 30 years old and above. In term of sports experience, 63.3% of the athletes were involved in hockey (5.8%), rugby (9.3%), archery (0.8%), bowling (1.2%), hand ball (1.5%), net ball (5.4%), football (18.1%), badminton (5%), volleyball (5.4%), ping pong (1.9%), sepak takraw (8.9%). In terms of achievements, the athletes were successful at various level; national (38.2%), state (30.1%), district (21.2%) and school (10.4%). 40.5% became champions, 31.7% achieved second placing, 12.4% third placing and 15.4% others. In terms of responsibilities in their respective teams, 56% were team captain, 2.7% assistant team captain, 1.5% committee member and 35% played the role of team members/ players.

Findings

Majority of the athletes (80.7%) are Melancholic followed by Sanguine (8.1%), Phlegmatic (6.6%) and Choleric (4.6%). Results of ANOVA showed no significant differences among athletes from different levels of involvement in the five personality sub-scales. No significant results were also obtained among athletes from different sports in the five sub-scales. Comparison of male and female athletes also yielded no significant results in all the five sub-scales.

Strategy for Coaches

For Sanguine type athletes, coaches should understand that they are fun-loving, happy go lucky, unorganized, needs attention but needs to be in charge. This mixed personality should be tackled with caution; coaches should ensure training includes fun, give them as much attention as possible. On the need to be in charge, coaches should give some responsibility to them but monitor them closely because they are unorganized. Choleric personalities are born leaders, production oriented, excels in crisis, decisive aggressive and bossy. Coaches could assign athletes with this personality to be team captains, allow them to make decisions but ensure that their aggressiveness is controlled. On the other hand, melancholic individuals are perfectionist, like order, needs details, accept order with ease, and achieve better with repetition. Coaches should provide details of training to this type of athletes and at the same time provide adequate repetition during training. Phlegmatic individuals are introverts, dislike conflicts, externally motivated, no urgency to work and needs well-planned programmes to be successful. Coaches need to provide extra motivation to this group of athletes, monitor their

progress and push them to achieve training goals. Coaches should avoid giving them big responsibilities but should encourage them to help out with a lesser responsibility.

Conclusion

Despite the diversity in the instruments used and conflicting results obtained, personality analysis should be explored as they can be a useful tool in assisting coaches to achieve better outcomes in their training or competition. The analysis would provide a more harmonious coach-athlete environment and definitely increase the fun in coaching.

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