An Expanded Look at the Relationship between Personality and Sport Participation and Commitment

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Research, extending back to the 1950s, has attempted to evaluate the role of personality in sport. Subsequently, a long line of research has produced a wide array of personality variables explicating sport-related behavior. However, a combinational of small sample sizes, methodological weaknesses and invalid sample selection has resulted in inconsistent patterns between personality and athletic behavior (Newcombe & Boyle, 1995). For instance, many questioned researchers’ propensity for classifying athletes as belonging to a single, homogeneous category, rather than making them distinct based upon athletic level and type of sport (Dowd & Innes, 1981; Valliant et al, 1981). Athletic activity can include open (environment is constantly changing) and closed (stable and predictable environments) sports, contact (direct) and non-contact (indirect) sports, and team and individual sports (Wann 1997; Cox, 2007). But by scoring athletes from different sports in an aggregate manner, academics have been left with findings characterized as unpredictable and ill defined (Egloff & Gruhn, 1996).

The development of the five factor model of personality, as well as Myers-Briggs personality inventory has enabled researchers to expand on previous work by providing a broader description of how personality relates to sport (Costa & McCrae, 1992). However, a limitation identified among several personality scales refers to their dichotomous labeling (Ibid, 1993). As a result, a methodological objective of this study was to create levels of personality in an effort to partition respondents as low, high or balanced. Doing so provided a more clear depiction of athletes representing particular personality traits. A second objective of this study was to assess how personality mediates sport commitment. It has been suggested that personality may be a better predictor of sport interest rather than outcomes (Eysenck, Cox, & Nias, 1982). This suggests that athletic participation and performance may be a mere derivative of personality traits that helped first manifest an introduction to sport into a sustained behavior. To address this philosophy, a causal model called Serious Leisure (Stebbins, 1982) was used to evaluate how personality may directly or indirectly impact performance.

Overall, the purpose of this study was to re-examine how levels of personality type and sport commitment influence sport choice and skill level by analyzing a wide array of club sport athletes. The following four questions guided this study:

(1) Do the big Five Personality Dimensions predict Skill and Serious Leisure?
(2) Do the big five personality dimensions predict sport choice: contact (direct) versus non-contact (parallel), team sport versus individual sport?
(3) Does Skill Level and Serious Leisure differ by MBTI personality types?
(4) Does Serious Leisure differ by sport choice: contact (direct) versus non-contact (parallel), or by team versus individual sport?

A convenience sample of participants (N = 215) were recruited from two mid-sized universities in the mountain region of the United States to complete a 44-item paper survey comprised of the following measurement items: short form of the Myers-Briggs Type Indicator (MBTI) form G (Briggs, 1977), the Ten Item Personality Measure (TIPM; Gosling et al., 2003), assessing the Big Five Personality dimensions, and the Serious Leisure Inventory and Measure (SLIM; Gould et al., 2011).

Fifteen club sports were represented in the sample, including participants from both team sports (n = 177) and individual sports (n = 38); these participants can also be broken down into contact sports (n = 130) and non-contact sports (n = 85). Participants reported having higher Conscientious (m = 4.51) and Openness (m = 4.36) personality types according to the Big Five Personality Types while reporting higher Judging (m = 4.33) Extraversion (m = 4.32), and Sensing (m = 4.20) personality types according to the MBTI measurement (using a 6-point Likert-type scale).
A multiple regression analysis revealed that an athlete’s level of seriousness, $R^2 = .06$, $F(5,209) = 2.549$, $p = .029$ and skill, $R^2 = .06$, $F(5,209) = 2.493$, $p = .032$ can successfully be predicted by the big five personality traits, $R^2 = .06$, $F(5,209) = 2.549$, $p = .029$, with extraversion being the most influential personality trait in both models ($p < .01$). This supports previous findings by Dowd & Innes (1981)) that athletes exhibiting greater extraversion are more likely to excel on the playing field. It also supports the notion that commitment to a leisure activity often stems from an athlete’s deep involvement in and attachment to its culture, explaining why an athlete’s enjoyment is often linked to its social outcomes (Weinberg & Gould, 1999).

With regard to sport choice, a logistic regression model that included the big five personality types by level (low, balanced, high) significantly distinguished between athletes participating in contact sport and non-contact sport, $\chi^2 (10, N = 215) = 30.247$, $p = .001$. Classification was much more successful in predicting contact sport athletes (76.9%) than non-contact athletes (54.1%), but had an acceptable overall success rate of 68%. Among the personality traits included in the model, only openness ($p = .009$) and extraversion ($p < .05$) were unique contributors to sport choice classification. Respondents exhibiting higher openness characteristics (curious, creative, and imaginative) were more inclined to choose non-contact sports and high extraverts were more inclined to select contact sports.

A MANOVA was also conducted to determine if Skill Level and Serious Leisure differed by Myers Briggs personality type. Results indicated that an athlete’s level of seriousness differed across levels of Judging and Perceiving, $F(2, 159) = 4.33$, $p = .002$. Post hoc tests revealed that Perceivers evaluated themselves as significantly more serious athletes ($M = 6.14$) than Judgers ($M = 5.74$) and those “Balanced” between perceiving and judging ($M = 5.72$). This may be due to the fact that pressure inspires perceivers to do well (Quenk, 2009), whereas athletes who are less likely to manage stress are more prone to dropout (Allen, Greenless, & Jones, 2013).

Moreover a significant interaction was observed between Extraverts/Introverts and Judgers/Perceivers on Skill Level, $F(4, 159) = 2.79$, $p = .028$. This suggests that skill level may change on levels of Judging/Perceiving based upon the degree to which one identifies him/herself as an introvert. Lastly, an ANOVA revealed there to be no differences between serious leisure and either of the two sport types (contact/non-contact and team/individual sports).

The results from these findings can serve researchers by clarifying the relationship between personality types, serious leisure, and sport participation.