



THE RELATIONSHIP WITH THE PERSONALITY AND MENTAL TOUGHNESS AT ATHLETES

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Abstract

The investigation of the work was to examine the relationship with the personality and mental toughness of doing sports at universities students. The work consisted of 80 females and 120 males, totally 200. For this study, Eysenck Personality Qestinnare developed by Francis et al. (1992) and Sport Mental Toughness Questionnaire developed by Sheard et al. (2009) were used. The unique sample, Kolmogorov Smirnov Test, was used in order to determine if the measurements are proper for normal dispersion. According to this, canonical correlation analysis to find the relationship between two variable sets were performed. As a result; it was found that there was a meaningful relationship between sub-dimensions of the mental toughness and personality.

Keywords: Mental Toughness, Personality, Sports.

1. Introduction

Different things for physical skills and abilities affect the competitions. But, for the competitions, performance is very important to loose or win the game. So sports people are physically equal, the winning ones are usually those at higher levels of mental skills (Weinberg and Gould, 2015). People are bio-psycho-social creatures. People are all with cognitive, emotional, physical and social aspects. The ability people are brought to a enough level by the coordination of important elements together with the planning and implementation of the required activity (Erdoğan ve Kocaekşi, 2015). Because of that, psychological and mental elements are important factors to determine the difference among sports people having the same level of physiological, motoric, technical and tactical characteristics. During the time, the athlete's mental performance can play an important role in people's team's success. People are physically and psychologically adversely affected by high-level works, displacement trip and intense match program and also people's performance can be reduced. In these days, sports psychologists are doing alot of things to improve performance of the athletes (Altintas and Akalan, 2008). One of the most widely used but less understood thinks in sport psychology is mental toughness (Graham, Hanton and Connaughton, 2002). In the literature, a lot of thinks related to the development of personality, mental toughness and performance have been gained (Gibson, 1998; Goldberg, 1998). Loehr (1982) says that durable athletes from the mental side have various behaviors that make them emotionally comfortable, calm and strong. There are two skills for this direction. First; the ability to use energy efficiently in a crisis and difficult situation, and the other is the ability to think strongly about problems, pressures, mistakes, and correct behavior in the formation of competition. However, mental endurance can be defined as both a personal character (Kroll, 1967) and a mental state (Gibson, 1998). For example, according to Cattell (1957), mental toughness emerges in realistic, independent, timid behavior and emerges as a hard, practical, mature and realistic behavioral dimension. Effectively, Gibson (1998) argues that mental stability is related to self-efficacy and internal control focus. And also, personality is an important part. According top the Tazegül (2014), personal characters decreased the anxiety of the individual and added self-confidence to the person leads to good social relations (Tazegül, 2014, p. 541). Personality is a spiritual integrity that brings together the characteristics of a person. This whole, in itself, embraces the physical structure, physical appearance, intelligence, talents, excitement, reactions, emotions, information and general culture of the person (Adasal, 1979)

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The role of this work is to look into the relationship between the personal characters and the mental toughness of athletes.

2. Materials and Methods

2.1. Research Model

This study is a descriptive study. Descriptive method is a research method aiming to define existing event / phenomenon without intervention of researcher (Karasar, 1995). Descriptive studies aim to define typical characteristics of a particular group and to make conclusions about how people in a particular group will behave in response to certain situations (Borg- Gall, 1989).

2.2. Research Group

The research group consists of 80 female and 120 male athletes at university, totally of 200 students. The research scale was voluntarily applied on students.

2.3. Data Collection Tools

The data collection tools required to achieve the research objectives are given below:

2.3.1. Personal Information Form

To have information of the personal characteristics of the participants and to establish the independent variables of the research, an information form consisting of 4 variables was prepared by the researcher

2.3.2. Sport Mental Toughness Questionnaire-SMTQ

In order to determine the level of mental toughness in the sport, Sheard et al. (Sport Mental Toughness Questionnaire - SMTQ-14) developed by the Ministry of Health, Labor and Welfare (2009) consists of 14 items. In addition to the general mental toughness, the scale consisting of three sub-dimensions (Confidence, Control and Constancy) is the 4-point Likert type (1 = False; 4 = Fully True). The Cronbach Alpha values for the subscales of the original scale were 0.81 for the confidence subscale; 0.74 for constancy sub-dimension; The control subscale was 0.71 (Sheard et al., 2009). As a result of the analyzes conducted on 509 athletes participating in the inventory with a mean age of 20, the fitness index values; Good compliance index as (GCI) = 0.95, Corrected goodness of fit index as (CGFI) = 0.93, The mean error square root mean as (MESR) is 0.05, The residual compliance index as (RCI) = 0.05, The comparative compliance index (CCI) = 0.92, The incremental compliance index (ICI) 0.93 were found (Sheard et al., 2009).

The internal consistency (Cronbach Alpha) reliability coefficients of this study were found as .89 for total mental toughness, .82 for confidence in mental toughness subscales, .84 for constancy and .82 for control.

2.3.3. Eysenck Personality Questionnaire (EPQ)

Francis et al. (1992), Eysenck Personality Questionnaire (Eysenck & Eysenck 1975) and short form of the same questionnaire (48 items) (Eysenck, Eysenck & Barrett 1985) was created by reviewing. The questionnaire has 24 items and assesses personality in 3 main factors: extroversion, neuroticism, psychoticism. In addition, it is aimed to prevent bias and to check the validity of the questionnaire. In this questionnaire where each factor is evaluated with 6 items, participants are asked to answer 24 questions in the format of Yes (1) -No (0). The points that can be taken for each personality attribute range from 0 to 6.

The internal consistency (Cronbach Alpha) reliability coefficients of this study were found as .87 for extraversion from personality subdimentions, as .82 forneuroticism, as .85 for psychoticism and as .87 for lying.

2.4. Collection of Data

First, the available information on the purpose of the research was given in a systematic way by searching the literature. Thus, a theoretical framework has been established. Second, " Sport Mental Toughness Questionnaire-SMTQ " developed by Sheard et al. (2009), " Eysenck Personality Questionnaire (EPQ)" developed by Eysenck et al. (1985) and information form to gather the participants' personal information were used.



2.5. Analysis of The Data

For the analysis; the data was analyzed by using the Spss 25.0 for windows package program. The percentage and frequency method was used to determine the distributions of personal information of the participants. The unique sample, Kolmogorov Smirnov Test was used. And it is normal for the analysing.

3. Results

Personal Characteristics of the Research Group

The data and comments on the demographic characteristics of the students participating in the survey are given below.

Table 1: Correlations between personality level and mental toughness variables, standardized covariances, canonical correlations, and percentages of variance tables

| Canonical Kanonik Variate | | |
|---------------------------|-------------|-------------|
| Personality | Correlation | Coefficient |
| Total Personality | ,208 | ,208 |
| Extraversion | ,015 | ,015 |
| Neuroticism | -,979 | -,979 |
| Psychoticism | -,369 | -,369 |
| Lying | ,309 | ,309 |
| Percentage of variance | ,24 | |
| Redundancy | ,04 | |
| Mental Toughness | | |
| Total Mental Toughness | 1,925 | 1,925 |
| Confidence | -1,884 | -1,884 |
| Contancy | -,379 | -,379 |
| Control | -,196 | -,196 |
| Percentage of variance | ,25 | |
| Redundancy | ,04 | |

In this study, the relationship between personality level sub-dimensions (Extraversion, Neuroticism, Psychoticism, Lying) and mental toughness level sub-dimensions (Confidence, Contancy, Control). The canonical correlation coefficient was (r_c) .40. This value shows that there is a moderately significant relationship between personality level sub-dimensions and mental toughness level sub-dimensions. According to the analysis, the first canonical variable was found as .24. The second canonical variant of the analysis was identified as .25. According to these findings, the first Canonical variable explains 24% of the personality variables and the second Canonical variable explains 25% of the mental toughness variables. Personality variables also account for 24% of the total variance of the mental toughness variables. Mental toughness variables account for 25% of personality variables. A statistically significant relationship was found between personality level and mental endurance variables according to the first canonical variant ($F(20, 723.97) = 2.47, p < .05$). While the extraversion (.02) is found under .30 as a critical value in the first set of variables, Neuroticism (-.98), Psychotism (-.31) were found to be negative, but above .30 as a critical value (Tabachnick ve Fidell, 2012). In the second canonical variant, confidence (-1.88) and constancy (-.38) were found above .30 being the critical value, the control (-, 20) was found to be the negative, and below .30 as a critical value (Tabachnick ve Fidell, 2012).

According to findings, it was determined that personality level sub-dimensions, which are the first variable set, statistically affect the mental toughness sub-dimensions which are the second variable set meaningfully.

4. Discussion

When the findings of the study were examined, it was concluded that the levels of mental toughness and mental toughness level of physical education and sports high school students were higher at the level of confidence and control dimension, and that the contancy dimension was above the mid-level of mental toughness sub-dimensions. When the relevant area is examined, according to the worked done by Yardımçı et al. (2017), it can be concluded that the American football athletes' mental toughness in sports is above with



average of 30.03 and the result supports the findings of this study. In terms of personality levels, it was concluded that the total personality and extraversion from personality sub-dimensions of the students were close to the mid-level, neuroticism and psychoticism from personality sub-dimensions are at the mid-level and the lying dimension is above the mid-level. In a similar study carried out by Sar (2016), extraversion (mean = 3.36) and neuroticism (mean = 3.16) were found to have the highest mean values, respectively. When the relationship between subdimensions of the personality level (Extraversion, Neuroticism, Psychoticism, Lying) and sub-dimensions of the mental toughness level (Confidence, Contancy, Control), it shows that there is a moderately significant relationship between personality level sub-dimensions and mental toughness level sub-dimensions.

5. Conclusion and Recommendation

As a result; physical education and sports college students who participated in the study were found to be about being strong and durable level from the mental side and had mid-level personality. Mental endurance and personality levels do not have an interaction among doing sports, age and gender, but a moderately meaningful relationship between mental and personality sub-dimensions. More work on this area should be done to examine the relationship between variables. This is because the relevant field has made it difficult to interpret the findings that we have lacked empirical studies in the literature. According to the Nas and et al (2018), students participating in the study were about strong and durable level fort he mental side.

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