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The impact of orienteering sport taught through creative drama methods on five factor personality dimensions

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Abstract

This study aims to analyze the impact of orienteering sport taught through creative drama methods on individuals' emotional instability/neuroticism, extroversion, openness to experience, agreeableness and conscientiousness dimensions. With this aim in mind, Adjective Based Personality Test (ABPT) (Bacanlı, İlhan ve Aslan, 2009) consisting of emotional instability/neuroticism, extroversion, openness to experience, agreeableness and conscientiousness dimensions and based on Five-Factor Theory was implemented on physical education department students studying at Kırıkkale University during spring 2010-2011 academic year. The ABPT was implemented on university students before they started studying orienteering sport taught by creative drama methods. The test consisting of emotional instability/neuroticism, extroversion, openness to experience, agreeableness and conscientiousness dimensions includes 40 items. The ABPT was implemented on the students again after they had completed the 10-week orienteering sport programme taught by creative drama methods. The findings of this study revealed that there was a meaningful difference between the emotional instability/neuroticism, extroversion, openness to experience, agreeableness, conscientiousness dimensions pretest and posttest scores of the study group in favour of conscientiousness dimension.

Keywords: Orienteering sport; creative drama method; five-factor theory; personality dimensions.

1. Introduction

Physical health of individuals is one of the factors which has a positive influence on mental health. Therefore, it can be argued that a good mental health reinforces and enhances personality. Orienteering (finding a target by running, skiing, cycling, etc.) is a sport in which participants try to find predetermined marked targets on a map over an unfamiliar or little-known territory by navigating their ways with the help of a map and compass. This sport involves mental elements of individuals (Karaca, 2008; IOF, 2008; Orben, Gawelin, & Nordstrom, 1981, cited in:

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Deniz et al. 2011). In other words, this activity enables body and intellect work together on the basis of finding targets. It can be argued that this sporting activity may contribute to developing consistent personality structures by mainly keeping the mind active.

When personality dimensions based on Five Factor Theory are consulted, it can be seen that openness to experience is usually related to imagination, curiosity, originality, open-mindedness and artistic sensitivity. Agreeableness is connected with flexibility, collaboration and empathy. Conscientiousness dimension is known as reliability, willpower, prudence and conformity. Emotional instability/neuroticism and extraversion are the other dimensions of Five Factor Model which are accepted as continuous (Viswesvaran & Ones, 2003). Five Factor Model is a hierarchical model of the structure of personality traits. Personality traits are often considered as continuous personality dimensions of individual differences in order to reveal the consistent forms of thoughts, emotions and actions (McCrae & Costa, 1990, p.23). Personality traits relatively reflect permanent situations (cite in: Costa & Widiger, 2002).

Jackson, Dimmock, Gucciardi, & Grove (2011) argued that insufficient communication and loyalty explain the difference between extraversion and activeness of late adolescent athletes and coaches. It was found that there is agreeableness, conscientiousness and extroversion in the relationship between athletes and coaches. There is also some research into the relationship between big five personality traits and social usefulness (Gangloff, Gozo, & Zamoşteanu, 2011); big five personality traits and interactions between different parts of the brain (Kunisato, Okamoto, Okada, Aoyama, & Nishiyama, 2011); big five personality traits and Jamaican late adolescents and adults (Hull & Beaujean, 2011); big five personality traits and collaboration (Volk, Thöni, & Ruigrok, 2011); big five personality traits and educational gains, responsibility and returns (O'Connell & Sheikh, 2011) and big five personality traits and positive and healthy behaviours (Hill & Gick, 2011).

1.1. The Aim of The Study

This study aims to analyze the impact of orienteering sport taught through creative drama methods on individuals' emotional instability/neuroticism, extraversion, openness to experience, agreeableness and conscientiousness dimensions. With this aim in mind, a 10-week programme was implemented in order to teach orienteering sport by means of creative drama methods.

1.2. Method

This study is an experimental study. The study group consisted of a total of 1st-3rd year students, 5 of whom were females (45.5%) and 6 of whom were males (54.5%) studying Physical Education at Kırıkkale University Faculty of Education in Spring Semester of 2010-2011 academic year.

1.3. Data Collection Tool

Personality Test Based on Adjectives (ABPT): Developed by Bacanlı, İlhan and Aslan (2009) Personality Test based on Adjectives (*ABPT*) is a Likert type scale consisting of 40 pairs of adjectives which can be graded between 1-7. *ABPT* is composed of five dimensions; extroversion, agreeableness, conscientiousness, emotional instability/neuroticism and openness to experience. Five dimensions explain 52.63 % of the variance of *ABPT*. The factor loadings of the five dimensions vary between .367 and .793. Test-retest reliability coefficient was found .85

for extroversion, .86 for agreeableness, .71 for conscientiousness, .85 for emotional instability/neuroticism and .68 for openness to experience. Meanwhile Cronbach Alpha coefficient was found .89 for extroversion, .87 for agreeableness, .88 for conscientiousness, .73 for emotional instability/neuroticism, and .80 for openness to experience.

1.4. The Analysis of the Data

In this study, the impact of orienteering sport taught through creative drama methods on emotional instability/neuroticism, extraversion, openness to experience, agreeableness and conscientiousness dimensions was analyzed. Therefore, Adjectives Based Personality Test (ABPT) was implemented on students both before and after the programme aiming to teach orienteering sport by creative drama methods. The scores of ABPT gained from the students were tested to find out whether these scores correspond parametric statistical assumptions (normal distribution and homogeneity of variance). The data gathered from this test was analyzed through Kolmogorov-Smirnov Test to see whether they show normal distribution and the homogeneity of the score differentiation was tested by means of Levene Test. Since the data showed normal distribution and the variance was homogeneous, t test was used in this study.

2. Findings

In this study, the findings were discussed on the basis of t-test results of each of the emotional instability/neuroticism, extraversion, openness to experience, agreeableness and conscientiousness dimensions for dependent groups.

Table 1. Emotional Instability/Neuroticism T-test Results of Pretest and Posttest Average Scores

Measurement	n	X	S	df	t	p
Pretest	11	24.00	6.08	10	0.81	.44
Posttest	11	22.36	7.55			

As can be seen in Table 1, there was no significant decrease in the university students' emotional instability which is based on five factor theory personality dimensions, at the end of the 10-week programme aiming to teach orienteering sport taught through creative drama methods [$t_{(10)}=0.81$, $p>.05$].

Table 2. Extraversion T-test Results of Pretest and Posttest Average Scores

Measurement	n	X	S	df	t	p
Pretest	11	50.73	9.17	10	0.09	.93
Posttest	11	50.46	14.06			

As is seen in Table 2, there was no significant increase in university students' extraversion which is based on five factor theory personality dimensions, at the end of the 10-week programme aiming to teach orienteering sport taught through creative drama methods [$t_{(10)}=0.09$, $p>.05$].

Table 3. Openness to experience T-test Results of Pretest and Posttest Average Scores

Measurement	n	X	S	df	t	p
Pretest	11	44.00	6.74	10	-1.58	.15
Posttest	11	48.55	6.68			

As it can be seen in Table 3, there was no significant increase in university students' openness to experience which is based on five factor theory personality dimensions, at the end of the 10-week programme aiming to teach orienteering sport taught through creative drama methods [$t_{(10)}=-1.58$, $p>.05$].

Table 4. Agreeableness T-test Results of Pretest and Posttest Average Scores

Measurement	n	X	S	df	t	p
Pretest	11	49.27	8.84	10	-0.72	.49

Posttest	11	52.09	7.33
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As it can be seen in Table 4, there was no significant increase in university students' agreeableness which is based on five factor theory personality dimensions, at the end of the 10-week programme aiming to teach orienteering sport taught through creative drama methods [$t_{(10)}=-0.72$, $p>.05$].

Table 5. Conscientiousness T-test Results of Pretest and Posttest Average Scores

Measurement	n	X	S	df	t	p
Pretest	11	40.36	5.26	10	-2.58	.03
Posttest	11	45.82	4.47			

As it can be seen in Table 5, there was a significant increase in university students' conscientiousness which is based on five factor theory personality dimensions, at the end of the 10-week programme aiming to teach orienteering sport taught through creative drama methods [$t_{(10)}=-2.58$, $p<.05$]. While the average conscientiousness dimension score of the students was $X=40.36$ before the implementation of the programme aiming to teach orienteering sport through creative drama methods, the figure increased to $X=45.82$ after the programme was implemented. This finding revealed that orienteering sport taught through creative drama methods has a significant impact on students' conscientiousness personality dimension.

3. Discussion and Suggestions

The findings of this study revealed that there was a meaningful difference between the emotional instability/neuroticism, extroversion, openness to experience, agreeableness, conscientiousness dimensions pretest and posttest scores of the study group in favour of conscientiousness dimension. Conscientiousness personality trait based on five factor theory involves such features as cautiousness, thoughtfulness, dutifulness, orderliness, self-efficacy, organization and industriousness, success, centralization, etc. Therefore, it can be argued that there was an increase in the conscientiousness scores of the student group who were implemented the programme aiming to teach orienteering sport taught through creative drama methods. It can be said that this finding was an expected one since conscientiousness personality dimension is related to the performance of individuals. It can be analyzed whether cultural factors affect the fact that there was no significant difference in emotional instability/neuroticism, extraversion, openness to experience and agreeableness personality dimensions. In the light of these findings, this study can be carried out in different faculties and universities.

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