

## **Correlation between yoga practice, personality dimensions and life styles**

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**Abstract:** *This paper examines the connection between the practice of yoga, expression of personality dimensions on which the Five Factor Theory of Personality is based and presence of the lifestyles. We used the NEO PI R test of personality (Costa and McCrae, 1985) based on the Five Factor Model of Personality, which examines five dimensions (neuroticism, extraversion, openness, agreeableness and conscientiousness), each of which covers 6 more aspects of personality. Value orientations were examined by using the instrument of Kuzmanović (1995) and Pantić (1981), and preferred lifestyles were examined by the instrument of Popadić (1990, 1995). The results suggest that yoga techniques practice provides ability to manage the needs and impulses and greater tolerance to frustration. It reduces the propensity for experiencing grief, shame, helplessness and loneliness and increases general tendency toward positive affect, greater stability and easier adaptation to new circumstances and stress.*

**Key words:** *yoga, personality, emotions, lifestyles, relaxation*

### **Introduction**

Personality dimensions are related to individual differences among people in patterns of behavior, emotions, cognitive and conative aspects. Different personality theories define personality according to their theoretical positions. NEO PI R is based on Big Five (McCrae, Costa, 2008) which highlights the five personality traits - neuroticism, extraversion, openness, agreeableness and conscientiousness. Some authors argue that personality traits have adaptive value (Block, 2001). Others believe that personality traits do not have adaptive or maladaptive value, but sometimes they can lead to the development of characteristics that are associated with problems in living (Costa, McCrae, 2005). People who have high scores on the dimension agreeableness can be gullible and enter into depending relations in which other people use them, and those who have low scores on the dimension agreeableness may exhibit harsh and unpleasant behavior (McCrae, 2010). This dimension of personality is of interest in our work because the analysis of variance showed a statistically significant difference between the recreational yoga practitioners and yoga instructors in the dimension agreeableness. In the Big Five instrument it is considered that both high and low scores on certain dimensions may be indicators of insufficient adaptation.

Lifestyle represents a unique, unconscious, repetitive way of dealing (or avoiding) with basic life tasks such as friendship, love and work. These are the strategies by which an individual solves situations which occur. Lifestyle that is formed in childhood, is maintained during the lifetime and can be changed by in-depth psychotherapeutic work (Adler, 1992). Creating a lifestyle is a long process that takes place in the

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child's learning through trials and mistakes as to which concepts of behavior are successful (Adler, 1993) and worth repeating. Thus, a person develops their individual principles that define their lifestyle (Shulman, Mosaku, 1988). This is a typical way of life of a person, group or culture. Factors that make the lifestyle are the individual demographic characteristics, personal values, preferences, appearance and more.

Values are beliefs that are inextricably linked to the emotions rather than objective ideas. These are motivational constructs, the desired objectives to which achievement individual aims. They are abstract goals and because of this kind of nature they are different from the attitudes and norms. In addition, people have a hierarchical system of priority values that characterize them as a person, which also differs values from the attitudes and norms (Schwartz, 2006).

Yoga techniques practice, including yoga exercises (asanas), breathing exercises (pranayama), meditation and relaxation, significantly contributes to gaining greater insight into ones own perception, reactions and behavior in life situations (Janjušević, 2011) and provides the ability to choose among the value orientations and lifestyles in which we can recognizes the openness toward others and for new experiences (Janjušević, Nikić, 2012).

## **Method**

The paper explores connection between the yoga practice, personality traits and lifestyles. The study was conducted on 43 certified yoga instructors and 30 individuals who practice yoga recreationally, both sexes, 16 to 64 years of age from different parts of Serbia.

We used the NEO PI R personality test (Costa and McCrae, 1985) based on the Five Factor Model of Personality, which examines five dimensions (neuroticism, extraversion, openness, agreeableness and conscientiousness), each of which covers 6 additional aspects of personality. There were examined value orientations using the instrument of Kuzmanović (1995) and Pantić (1981), and preferred lifestyles were examined with the instrument of Popadić (1990, 1995).

In the data analysis Spearman's correlation coefficient was used (for the variable "yoga") and Pearson's correlation coefficient and multivariate analysis of covariance were used, where differences between pairs were observed. Interpretation of the results obtained in the research is focused on the detection of correlation between yoga practice and psychological characteristics of yoga practitioners, as well as interpretation of the established correlations between these two groups of phenomena.

## **Results**

The results were obtained by the mentioned instruments and correlations between the variables "yoga practice", aspects of the domains of personality, lifestyles and value orientations were established on that base.

### *Correlations*

For the variable "yoga" which is ordinal by nature, Spearman correlation coefficient was used, whereas for the other variables Pearson method was used.

In the group of respondents who practice yoga recreationally, results show that a statistically significant correlation exists between the yoga practice and planning ( $r = 0,33^{**}$ ) as a factor of motivation and management ( $r = 0,32^*$ ) as a factor of emotional intelligence. In this group, statistically significant negative correlation between yoga practice and sentimental lifestyle ( $r = -0,36^{**}$ ) at the level 0,01 and

anxiety ( $r = -0,33^*$ ) appeared. Statistically significant negative correlation between the yoga practice and the following personality dimension: depression ( $r = -0,30^*$ ), impulsivness ( $r = -0,31^*$ ), neuroticism ( $r = -0,30^*$ ) and search for excitements ( $r = -0,32^*$ ) (Janjušević, 2011).

**Table 1.** Recreational practice of yoga

Psychological variables with which correlations exist	Spearman correlation coefficient
Depression	-0,30*
Impulsivness	-0,31*
Neuroticism	-0,30*
Search for excitements	-0,32*
Planning	0,33**
Management	0,32*
Sentimental	-0,36**
Anxiety	-0,33*

\* Correlation significant at the 0.05 level

\*\* Correlation significant at the 0.01 level

In people who for many years practice the yoga techniques (asana, pranayama, relaxation, meditation), there is also a negative correlation with sentimental lifestyle, but its intensity is lower ( $r = -0,33^*$ ) (Janjušević, Nikić, 2012). Competitiveness as a motivation factor is negatively correlated with the yoga practice in yoga instructors ( $r = -0,32^*$ ) (Janjušević, Nikić, 2012). Conformity as a value orientation and the practice of yoga are in a high positive correlation in yoga instructors ( $r = 0,33^{**}$ ).

**Table 2.** Yoga instructors

Psychological variables with which correlations exist	Pearson correlation coefficient
Competitiveness	-0,32*
Conformism	0,33**
Sentimental style	-0,33*

\* Correlation significant at the 0.05 level

\*\* Correlation significant at the 0.01 level

## Multivariate level MANCOVA

### *Differences between groups*

When comparing groups, the variables depression, social discomfort, impulsivness, neuroticism, search for thrills, values, fairness / honesty, politeness / compliance and agreeableness showed a statistically significant difference between certified yoga instructors and practitioners who practice yoga recreationally.

In the research of other authors (Nikić, 2011) appeared statistically significant difference between these two groups of yoga practitioners in the variable "locus of control".

**Table 3.** A comparison group of yoga instructors and recreational practitioners of yoga in the dimensions of personality

<b>Dependent Variable</b>	<b>(I) yoga</b>	<b>(J) yoga</b>	<b>Mean Difference (I-J)</b>	<b>Sig.(a)</b>
DEPRESSION	I practice yoga	I'm yoga teacher	2.871(*)	0.036
	I'm yoga teacher	I practice yoga	-2.871(*)	0.036
SOCIAL DISCOMFORT	I practice yoga	I'm yoga teacher	2.872(*)	0.012
	I'm yoga teacher	I practice yoga	-2.872(*)	0.012
IMPULSIVNESS	I practice yoga	I'm yoga teacher	2.355(*)	0.037
	I'm yoga teacher	I practice yoga	-2.355(*)	0.037
NEUROTICISM	I practice yoga	I'm yoga teacher	13.858(*)	0.021
	I'm yoga teacher	I practice yoga	-13.858(*)	0.021
SEARCH FOR EXCITEMENTS	I practice yoga	I'm yoga teacher	2.854(*)	0.028
	I'm yoga teacher	I practice yoga	-2.854(*)	0.028
VALUES	I practice yoga	I'm yoga teacher	-2.396(*)	0.01
	I'm yoga teacher	I practice yoga	2.396(*)	0.01
FAIRNESS/ HONESTY	I practice yoga	I'm yoga teacher	-2.973(*)	0.007
	I'm yoga teacher	I practice yoga	2.973(*)	0.007
POLITENESS/ COMPLIANCE	I practice yoga	I'm yoga teacher	-2.225(*)	0.034
	I'm yoga teacher	I practice yoga	2.225(*)	0.034
AGREEABLENESS	I practice yoga	I'm yoga teacher	-9.118(*)	0.04
	I'm yoga teacher	I practice yoga	9.118(*)	0.04

Analysis of variance revealed statistically significant differences between groups on the variables values, honesty, achievement, externalization and persistence.

### **Discussion**

In this paper, we investigate the correlation of practicing yoga with dimensions of personality, lifestyles and system of values. We hypothesized that in people who practice yoga techniques for a longer period of time openness, persistence, fairness and agreeableness are more pronounced, and the scores on the scales

of depression, impulsiveness, neuroticism and anxiety are low. In the study, we compared yoga practitioners who practice recreationally and yoga instructors.

Studies show that people who practice yoga have lower scores on the depression scale (Kinsler, Bourguignon, Taylor, Steeves, 2013). Their experience in the yoga practice shows that they used yoga as a self-help technique in stress and ruminative aspects of depression. They had a feeling of connection and ability to share experiences in a safe environment. Yoga practitioners have lower scores on the scale of impulsiveness (Bilderbeck, Farias, Brazil, Jakobowitz, Wikholm, 2013) and neuroticism and they are less anxious (Lee, Pharm, Goldsmith, 2012).

In the sample used in this study, where these personality dimensions were measured by the NEO PI R test, in yoga practitioners who practice yoga recreationally, low scores show the absence of tendency to experience shame, sadness, helplessness and loneliness. That still does not mean the person is necessarily cheerful and optimistic, but it represents a good basis for developing stable positive mood.

Impulsiveness represents an inability to control needs and impulses. Low scores on this scale, which appeared in a sample of yoga practitioners have shown that a person can refrain from the temptation (smoking, food, alcohol) and has a higher tolerance for frustration.

In yoga practitioner, there was noted the absence of a tendency to experience negative affects, to destabilize and difficulty in adapting to new experiences and stress. These individuals show a low score on the neuroticism scale and the absence of irrational ideas, they are emotionally stable, calm, relaxed and able to cope with stress without panic anxiety.

Yoga practitioners do not show desire for excitement and stimulation, they do not like bright colors and noisy environments and they are not shallow. They are cautious, careful, sober people who avoid intense stimulation.

A statistically significant correlation at the level 0,01 has proven between the yoga practice and orientation toward planning as a factor of motivation ( $r = 0,25^{**}$ ), in order to achieve success in the competition. This correlation appeared in the group of people who practice yoga recreationally.

The correlation of  $r = 0,24^*$  shows connection between the yoga practice and the ability to manage emotions in people who recreationally practice yoga. Recognition, acceptance and management of emotions are the qualities of people who are happy and fulfilled and have the ability to express all their potentials.

There were measured preferences of lifestyles: materialistic style, cognitive, religious, power, altruism, sentimental style, popularity, individualistic, promethean and hedonistic style. In yoga practitioners who practice recreationally, there is a negative correlation with family-sentimental lifestyle on 0,01 level of significance ( $r = -0,29^{**}$ ). This shows us reduction of the tendency to advocate for the general interests and welfare of others, which is common in the early stage of dedication to oneself where a person asks himself questions such as: what is important to me, what I aspire to, what are my goals, where I'm going, where I come from, who am I... In yoga instructors, this correlation was not statistically significant.

Previously conducted studies indicate that in yoga instructors there is statistically significant correlation between the yoga practice and openness ( $r = 0,22^*$ ), which is important for understanding the relationship between duration of practicing and personality (Nikić, Janjušević, 2012). Openness as a personality trait includes aesthetic sensitivity, intellectual curiosity, preference for diversity, the need for change, independence of thought and tendency toward undogmatic attitude. Open people are open to the inner

experiences and to external events, they experience more intensive positive and negative emotions and their interests are extensive and intensive.

In the previous studies (Janjušević, 2010) it was indicated that long-time yoga practitioners showed reduced aggression and high vital need for understanding and learning about their environment due to the expectation that the more knowledge they have, the more functional they will be.

If we take into consideration the negative correlation between yoga practice and dimensions that show the focus on personal well-being and aggression, then we will understand the negative correlation between yoga practice and competitiveness as the factors of motivation as the absence of the priority of personal well-being. Yoga instructors have a strong motive to transfer gained knowledge to students who are interested in personal development.

Self-motivation is expressed in yoga practitioners. Understanding the meaning helps to develop intrinsic motivation. With the increase in duration of yoga practice, there appear negative correlation between yoga practice and competitiveness as a factor of motivation. (Janjušević, Nikić, 2012)

In yoga instructors, there is a significant correlation at the 0,01 level ( $r = 0,25^{**}$ ) between yoga practice and conformity – refraining from actions, inclinations and impulses to disturb others or to harm them.

Analysis of variance revealed statistically significant differences between groups of yoga practitioners who practice recreationally and yoga instructors on the variables of values, fairness / honesty, politeness / compliance and agreeableness that are more pronounced in yoga instructors. Agreeable people are basically altruistic, sympathetic to others, they feel need to help them and believe that other people will be just as generous towards them.

## Conclusion

Research results have shown that yoga practice helps to achieve the ability to manage the needs and impulses and greater tolerance to frustrations. It reduces the propensity for experiencing sadness, shame, helplessness and loneliness and increases general tendency of a person to experience positive affects, to be stable and to adapt easily to the new experiences and stress. In yoga practitioners, the presence of emotion management skills were noted. Yoga practitioners do not find support to achieve results in competition with others, but in finding the deeper meaning of their existence i.e. in winning their inner peaks. This fact puts them in a position to often achieve excellent results, but not to compete with others but to accomplish self-fulfillment – by achieving higher levels of self-realization.

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