# ASSOCIATIONS BETWEEN THE FIVE-FACTOR MODEL OF PERSONALITY AND HEALTH BEHAVIORS AMONG ADULT IN ALBANIA

**Doc Student Elsida Sinaj** University Europian of Tirana, **ALBANIA** 

### **ABSTRACT**

Studies show that there are strong connections between personality traits and health behaviors. This study aims to examine the connections between the five factor model of personality and health behaviors among adults in Albania. The final sample included 275 participants with an average age 41.6, SD = 10.4, where 189 of these participants were female and 63 were male, with status from higher education (Bachelor) to PhD level. The following procedure was anonymous self-reporting and confidential by completing the questionnaires. The data is analyzed in two stages: 1. Descriptive Analysis 2. Inferential analyses: Multivariate analysis (general linear model). The results showed that there was a statistically significant positive correlation between extroversion and general health condition, also a statistically significant correlation exists between compliance and healthy behaviors health. Another positive significant correlation is between neuroticism and health behaviors and lifestyles. According to statistical data also is shown that the low level of education has a negative correlacion of lifestyle, and has a strong positive correlation between higher educational level and health control. Results suggest that personality traits are closely related to the practice of health behaviors and that these individual features are superior in relation to social variables. Results are discussed in the context of theoretical and practical implications.

**Keywords:** Adult, five-factor model of personality, health behavior, personality traits.

# INTRODUCTION

According to the results of INSTAT in the last years in Albania there has been a great growth of the prevalence of diseases directly related to the style and quality of life, health behaviors and beliefs.(INSTAT, 2010). The etiology of these diseases is directly related to the health behaviors as the unbalanced diets, the lack of physical activity, smoking, the over-consuming of alcohol, etc. The studies show that individuality in the teens and in the early youth creates a stable repertory of behaviors which are carried and developed, this happens often with behaviors which are faced with change, but these changes are strongly related to three big and very important groups: 1. individual factors (as the personality features) 2.social factors (subjective and descriptive norms) 3. demographic factors (age, gender, etc.) Behaviors who affect in the individual health are related to smoking, health diets, physical activity, sexual relations, etc. Main theories and models related to the health behaviors have been mainly related with cognitive-behavioral orientation. The model of belief in health is one of the earliest theory related to the health behaviors (Health Belief Model, Rosenstock, 1974). Rosenstock proposes that a health behavior is an aimed behavior to prevent a disease. According to the model of Rosenstock if an individual practices or not a healthy behavior depends from: 1. The perceptual warning of the health and 2. The perception that a certain behavior will be effective to low the risk by the time in which we live today in the social society, because the individual elements themselves have changed their abilities to predict the health behaviors (Harrison, Mullen, Green, 1992). Many theories on the health behaviors and

health promotion ask answers for basic questions as why do people behave in a certain way and why do they create certain beliefs on health?

These theories are used as a way to understand and to predict how and why do people change their ill beliefs to healthy beliefs, or their total belief. Empiric studies each time and more are trying to use these theories or models in order to be as all-inclusive as possible e.g. as the model of the reasonable commitment or the planned behavior (TRA and TPB) (Ajzen, Fishbein, 1980; Ajzen, 1991). The model of the reasonable commitment or the planned behavior in its own includes the relations, the attitude, the behavior. The model proposes that most of behaviors with social importance (including the health behaviors) are voluntary controlled from the individual himself and the aim the individual has to commit a behavior it's an only and immediate decisive and predictive of this behavior. The aim is to maintain under function two basic determinatives: the attitude among behavior (general evaluation of the individual behavior) and subjective norms (the perceived expectations of important others with regard to the individual performing the behavior in question). To commit a certain action, the individual should have a very strong aim which is assessed positively, the individual tends to think that he should control his own behavior by himself and be responsive for his health (Sutton, Marsh, Matheson, 1987; Sutton, 2002). The health is the result of an interaction between the individual and his biological, psychological, existential, social and cultural variability and the ecosystems in which he is part of (Brera, 1989), but this study will not focus on the biological or existential factors, but it will focus mainly on psychological, individual and social factors. The combination of the up-mentioned factors and of many others affect on the individual and community health in general. If people are healthy or not, is determined from the circumstances, from habits, behaviors, beliefs and the lifestyle practiced (Dic, Calma, 2007). The up-mentioned variables affect not only the health of the person but they both affect the creation of the beliefs and of health behaviors (Mosby's Medical Dictionary, 8th edition. © 2009, Elsevier). The commission of the social department of health (CSDH, 2007) proposes a lot of important factors related to determining health factors. According to this, the health determinings could be grouped in different categories as: personal behaviors and lifestyle, social factors which can cause advantage or disadvantage, life quality and working conditions, the access in health services, socioeconomic, cultural and environmental conditions, genetic factors. The listed elements affect in various ways to the individual and to different societies. The personality features have an important role in the individual health. These personality features could be important predictables in the manifesting of health behaviors. There exist various hypotheses which try to explain that how do factors of personality affect in the individual health.

An important hypothes raised by many scholars is that of 5 factors of personality affecting the individual health. These five personality features according to various psychologists are considered as the basic of individual differences of the personality of the individual. Many psychologists suppose that people behavior is determined by these inner features, giving the situation a minimal role in behavior determination (Pervin & John, 1999). The affecting of the personality features in health behaviors is suggested also even from Leventhal (1970-1193). The personality features and behaviors that the individual manifests continuously also affect in developing of many chronic diseases which make his life more difficult. These personality features could lead the individual toward unhealthy behaviors. The individuals who are often stressed, anxious are more likely to manifest damaging behaviors to health, as e.g. smoking or drinking alcohol which in many cases are related to the cancer diseases, but in the other side it cannot be said that if the individual is being treated for recruiting the anxiousness level or stops smoking or drinking alcohol, will be totally cured from cancer.

Studies specify that these persons with these personality qualities are more risked to manifest damaging behaviors which could be related to heavy diseases. Many personality problems are manifested quite directly to the health of the individual e.g. persons who show stable humor qualities, who are continuously tensed, have depressive tendencies, they are also more risked to develop a low-life quality, are more risked to have infective diseases and this happens also because of the weak immunity they have as a personality, also this category of individuals are more disposed to have problems with the feeding style (Lakhan, 20016). As a summary, it can be said that personality features affect in manifesting of health behaviors and in creating health beliefs.

The importance of health beliefs and behaviors study is related to the fact that they could be changed or modified, because they are different processes, where the change or the modification could be through psycho-social programs. The aim of this study is to examine relations between the five factor model of personality and health behaviours among adults in Albania.

## **METHODOLOGY**

## A. Participants

In the study took part 200 participants with an average age of 41.2, SD=1.3 where 146 of these participants were females and 35 were males. The participants recruiting was held in many cities of Albania like Shkoder, Tirana, Lezha, Elbasan, Vora, Durres, etc. The age of the included participants in the study varies from the minimal age of 23 to 65 with an average age of 41.69 (SD= 10.4). From 200 participants, 11 individuals have not declared the status 28 (10.4%) are bachelor, 146 (84.3%) are married, 6 (2.1%) are divorced, 9 (3.2%) report that their partner is dead. From 200 participants it results that 123 (56.7%) are graduated (bachelor), 66 (30.4%) have a master diploma, 11 (5.1%) have finished the doctoral studies.

### **B.** Measures

The study used two self report measures: Behavioral Risk Factor Surveillance System Questionnaire (BRFSS, 2012), and Big Five Inventory (BFI) John, O. P., & Srivastava, S. (1999). The first questionnaire is made of 16 sessions and 22 modules, the selection of sessions and modules is made according to the aim and objectives of the study. The second questionnaire is made of 44 questions. The inner consistence of the questionnaire Behavioral Risk Factor Surveillance System Questionnaire (BRFSS, 2012) has been  $\alpha$ . =81, the inner consistence of the second questionnaire Big Five Inventory (BFI) John, O. P., & Srivastava, S. (1999) has resulted  $\alpha$ =.79. Questionnaires were translated into Albanian by using the Translation/Back-translation method; thus they were first translated into Albanian and then back translated to English and compared to the original versions. Adjustments in wording were made to ensure comprehensibility. After translation the questionnaire was pilot tested on 30 individuals to ensure comprehensibility and the necessary changes were made according to the participants' comments.

# **RESULTS**

Descriptive results for personality features and health behaviors were: Each of the health behaviors will be assessed by the 5 personality features, including here the demographic data, age, gender, education and gender showed significative data related to the health behavior and personality traits. According to the statistical descriptive dates it results (Table 1) that on

average, 27.8% of participants SD = 7.4 can be characterized by personality traits of agreeableness, and 30.5% of women SD = 4.6 can also be characterized by this personality trait. With conscientiousness as a personality trait it is shown that 27% SD = 6.02 were male and 29.5% were female SD = 3.5. The results with Extravert personality trait show that 21% SD = 5.1 were male and 22.8% were female SD = 2.5. The results with Neurotic personality trait show that SD = 6.0 23.4% are male and 25.4 SD = 3.9 are women. The results with Openness as a personality trait show that 32.1% SD = 10.2 are male and SD = 6.1 36.4% are women. Also according to the statistical data it was shown that it exists a statistically significant negative correlation between the level of education and lifestyle where, r = -.236, p < .01. positive correlation. The level of education also correlates negatively with health behaviors r = -.214, p < .01, on the other hand the high level of education correlates positively with health control r = -.1000 \*\*, p < .05. A statistically significant positive correlation is between extroversion and overall health \* r = .226, p < .01, between compliance and health behaviors \*\* r = .389, p < .05, between Neuroticism and health behaviour, r = 309 \*, p < .01, between Neuroticism and lifestyle \* r = .253, p < .01.

**Table 1** DESCRIPTIVE ANALYSES FOR FIVE-FACTOR MODEL OF PERSONALITY AND GENDER

	Male, Female	N	Mean	Std. Deviation
Agreeableness	Male	26	27.8	7.4
	Female	69	30.5	4.6
Conscientiousn	Male	24	27.2	6.2
ess	Female	68	29.5	3.5
Extraversion	Male	26	21.0	5.1
	Female	69	22.8	2.5
Neuroticism	Male	26	23.4	6.0
	Female	68	25.4	3.9
Openness	Male	25	32.1	10.2
	Female	70	36.4	6.1

**Table 2.** CORRELATIONS BETWEEN EDUCATION, HEALTH BEHAVIOR AND FIVE-FACTOR MODEL OF PERSONALITY AND

	Edu.	Ag	Co	Ex	Ne	Op	H.	L.	H.C.		
Variables		re	n.	tr.	u.	e.	con.	Styl	Acc	H.B	H.Con
								e.		eh.	
Education										-	1.000
										.214	**
Agreeablen										$.389^{*}$	
ess										*	
Conscientio											
usness											
Extraversio		.64	.48				$.226^{*}$				
n		.64 8**	.48 5**								
Neuroticism		.36						.253*		.309*	

Openness		8** .59 2**	
Health		905	;
condition Life style	- .236*	.986	ķ
Health care access		.855	5
Health behaviors		.993**	k
Health control			

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

## **DISCUSSION**

This study aims to assess relations among personality features and health behaviors. The results discovered important relations among personality features and health behaviors. This study is based in previous studies which have proofed that personality features are important predictables for creating health beliefs and behaviors (Wilson, Mendes, Beinias, Evans, Bennett; 2003). Results also showed important associations among extraversion and health care, also among openness to experience and agreeableness and positive perception on health, these results in Albania have resulted almost similar to other studies (Steptoe et al.1995; Bunker, Colquhoun, Esler, Hickie, Hunt, Jelinek, Oldenburg, Peach, Ruth, Tennant, Tonkin, 2003; Steptoe, Molloy, 2007). Important link was found between the high level of education and health control. Also the study showed that individuals with personality traits neurotic are more sensitive to situations of health and more likely to raport disease or physical disturbance which also relevant theories confirm such a thing (Berger, Levant, McMillan, Kelleher, & Sellers, 2008; Levant et al., 2006). In general, studied show the importance of personality features in creating of health behaviors and beliefs, but studies also support the argument that these personality features are not major stable and decisive factor, but are dynamic predictables of health, which due combination with other biologic and social elements become powerful receivers getting in this way the shape of a stable feature (Turiano, Mroczek, Moynihan, Benjamin, Chapman, 2013). This study has its own boundaries starting from the fact that used questionnaires are not standardized for Albania, the sample can be considered small to achieve generating results for all Albania, anyway this could be the first study accomplished in Albania focused in understanding the correlation among personality features and health behaviors. The study shows modest results which could be a start for further studies in this field.

## REFERENCES

[1] Instituti i Statistikes i Republikes se Shqiperise [INSTAT], 2010 National statistics. http://www.instat.gov.al/graphics/

[2] Rosenstock, I. (1974). Historical Origins of the Health Belief Model. Health Education Monographs. Vol. 2 No. 4.

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

- [3] Harrison, Mullen, Green. A meta-analysis of studies of the Health Belief Model with adults. Health Education Research, 1991
- [4] Ajzen, I. & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice Hall.
- [5] Ajzen, I. (1991). The theory of planned behaviour. Organizational Behaviour & Human Decision Processes, 50, 179-211. doi:10.1016/0749-5978(91)90020-T
- [6] Sutton, S, Marsh, A and Matheson, J, (1987). Social Behaviour, 2, pp. 35–49.
- [7] Sutton, Health Behavior: Psychosocial Theories, University of Cambridge UK Available online 2002.
- [8] Brera R. G. (1989), Educazione sanitaria nell'adolescenza, in Educazione sanitaria e promozione della salute, 4, pp. 5-9.
- [9] David M. Cutler Education and Health March 2007, Harvard University and Adriana Lleras-Muney, Princeton University.
- [10] Mosby's Dictionary of Medicine, Nursing & Health Professions Pageburst E-Book on VitalSource, 8th Edition, https://evolve.elsevier.com/cs/product/9780323065672?role=student
- [11]http://www.who.int/social determinants/resources/csdh framework action 05 07.pdf
- [12] Oliver P. John and Sanjay Srivastava. The Big-Five Trait Taxonomy: History, Measurement, and Theoretical Perspectives, March 5, 1999
- [13] Leventhal, H. Leventhal, H. (1970). Findings and theory in the study of fear communications. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 5, pp. 119-186). New \brk: Academic Press.
- [14] Lakhan, S. 2006. The Biopsychosocial Model of Health and Illness. OpenStax-CNX, August 3, 2006.
- [15] <a href="http://www.cdc.gov/brfss/questionnaires/pdf-ques/2012\_brfss.pdf">http://www.cdc.gov/brfss/questionnaires/pdf-ques/2012\_brfss.pdf</a>
- [16] <a href="http://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Personality.pdf">http://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Personality.pdf</a>
- [17] Wilson, Mendes, Beinias, Evans, Bennett, Personality and Mortality in Old Age, The journal of Gerontology, December 30, 2003.
- [18] Steptoe, A., Sanderman, R., & Wardle, J. (1995). Stability and changes in health behaviours in young adults over a one year period. Psychology and Health, 10, 155-169.
- [19]Bunker SJ, Colquhoun DM, Esler MD, Hickie IB, Hunt D, Jelinek VM, Oldenburg BF, Peach HG, Ruth D, Tennant CC, Tonkin AM. "Stress" and coronary heart disease: psychosocial risk factors. Med Aust 2003 Mar 17;178(6):272-6.
- [20] Steptoe, A., & Molloy, G. J. (2007). Personality and Heart Disease. Heart, 93, 783-784. http://dx.doi.org/10.1136/hrt.2006.109355
- [21] Berger, Jill M.; Levant, Ronald F.; McMillan, Katharine Kaye; Kelleher, William; Sellers, Al Psychology of Men & Masculinity, Vol 9(3), Jul 2008, 192.
- [22] Nicholas A, Turiano, Benjamin P, Chapman, Tara L, Gruenewald, Daniel K. Mroczek. Personality and the Leading Behavioral Contributors of Mortality, Health Psychol. 2015 Jan; 34(1): 51–60