



A REVIEW REGARDING PERSONALITY TRAITS AND VOCATIONAL INTERESTS

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Abstract

Starting from the points that Hexagonal model of Holland (1973; 1985) highlights the six types of personality: realistic, investigative, artistic, social, entrepreneurial and conventional the scientific literature investigates how the individuals in the work environment might match as personality profiles with the characteristics of the jobs through the six types of work environment. In this way the employee may carry out their tasks and activities matching their personality type. Many studies were focused to investigate how the personality factors: openness to experience, conscientiousness, neuroticism, extraversion, and agreeability correlate with the vocation interests presented by Holland. Also, were analyzed the aspects of different work values in relation with the individuals' cultural characteristics. The conclusion of the scientific studies leads to the career counseling in the way of choosing the perfect workplace corresponding to the personality Hexagonal model as individuals' vocational interests.

Keywords: *personality traits, vocational interests, work environment, career choice theory, Hexagonal model.*

1. PERSONALITY-A FACTORIAL APPROACH

The concept of personality plays a primordial role in understanding human behaviors with applications in organizational, educational, clinical, and many other domains. The personality study captivated scientific literature from the early decades of the twentieth century (https://ro.wikipedia.org/wiki/Psihologia_personalității).

Zlate (2008) presents the concept of personality through the perspective of 6 facets (page 41):

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1. Real personality - as it is in reality;
2. Self-assessed personality - the image that the individual has about himself;
3. The ideal personality - the one imagined, the one desired, the one the individual aspires to form;
4. Perceived personality - the image of the individual about others;
5. Personality designed - believes the individual thinks others about it;
6. Personality manifested - the exteriorized, objectively behaved.

In the personality psychological assessment, the personality structures based on factors have been imposed since the second half of the 20th century. Thus Cattell (1946; 1973; 1978) advanced studies on factorial analysis and usability of questionnaires, but also the personality structure on 16 factors-16PF Personality Inventory (Cattell, 1989; Cattell & Krug, 1986; Cattell & Mead, 2007).

The most used factorial structure of the personality is that structured on five factors advanced by the Big Five model: Open to experience, Conscientiousness, Extraversion, Agreeability and Neuroticism (Goldberg, 1993; Costa & McCrae, 1992). Burtăverde (2015) conducted a study investigating the relationship between personality traits structured with the Big Five model and vocation interests on pharmacies. Using the entire structure of the five personality factors, Costa and McCrae (1985) have also advanced another personality inventory, NEO-PI R.

A new factorial model of the personality that follows the Big Five structure but contains an extra dimension is that advanced by the Hexaco model (Ashton & Lee, 2009; De Vries, Ashton, & Lee, 2009; De Vries, Lee & Ashton; Vries, Lee & Ashton, 2008; Lee & Ashton, 2006). The Hexaco model is structured on the following factors: Honesty-Humility, Emotionality, Extraversion, Agility, Conscientiousness and Openness to Experience. In Romania, the psychometric properties of the Hexaco Personality Inventory by Burtăverde (2015) were performed. Burtăverde (2015) translated and adapted the Romanian Hexaco-PI R inventory in both forms: 100 items and 60 items.

2. A CONCEPTUAL PERSPECTIVE ON VOCATIONAL INTERESTS

In view of the vocational interests, Holland (1959, 1973, 1985) argued that there are six broad categories of interests as follows:

1. Realistic interests that highlight the fact that people are concerned about money, status and power.
2. Investigation interests that are interested in science and scholarship.
3. The artistic interests through which people are interested in self-expression and aesthetic achievements.

4. Social interests through which people are interested in getting involved in teaching, help, training, and so one.
5. Entrepreneurs are people who aim at career, economic success, prestige.
6. Conventional interests through which people are interested in an orderly and systematic career.

Holland (1973; 1985) has created a hexagonal pattern with which the individual's individuality is represented by the environment. Thus, in figure 1 we can analyse the personality types after it.

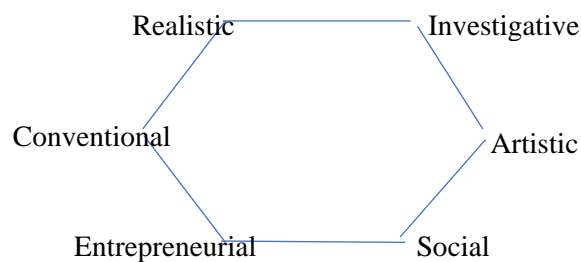


Figure 1. The Hexagonal model introduced by Holland (1973; 1985)

Holland's career choice theory is the most well-known and based exactly on the hexagonal pattern shown in Figure 1, thus developing a number of 6 types of personality: Realistic, Investigative, Artistic, Social, Entrepreneurial and Conventional. In this way, individuals in each personality group will create an environment at work that matches their personality type. An example would be that the artistic personality will create an artistic environment in the workplace, reinforcing creative thinking and associated behavior. Knowing that in the selection of staff, future candidates are chosen according to the position of the job holder, their values must coincide with the values of the working environment as much as possible in order to be able to express themselves and carry out the duties and work activities accordingly. Thus, an artistic type will look for an artistic environment, a conventional type will look for a conventional work environment, etc. In this respect, individuals who choose to work in an environment that suits their personality will be professionally successful, will work efficiently and will be satisfied. Holland (1973; 1985) emphasizes through his theory of career choice and the model in Figure 1 that the more employees fit as a personality profile with the type of work environment but also with the other colleagues, the more professional achievements will be safe, successful, but also a high level of satisfaction.

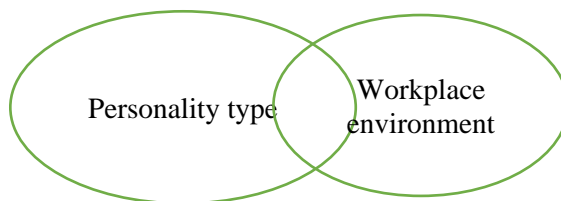


Figure 2 The match between personality traits and workplace environment through Holland personality theory (1973; 1985)

In Figure 2 we can see at the intersection between the personality type and the work environment the superposition of the two variables, which is in fact the matching of the individual with the working environment in the light of Holland's hexagonal theory and model.

3. STUDIES INVESTIGATING THE RELATIONSHIPS BETWEEN PERSONALITY TRAITS AND VOCATIONAL INTERESTS

In a study on the relationships between the vocational typology and the personality model presented in Figures 1 and 2, Costa, Holland and McCrae (1984) highlighted a number of 217 men and 144 women, strong associations between investigative and artistic interests and the opening to experience. Also, there was a statistically significant correlation between social and entrepreneurial interests with extraversion and the fact that occupations with conventional work environment are closed to experience. The findings of this study have brought the importance of vocational counseling implications in older adults as well.

Bullock-Yowell, Peterson, Wright and Mohn (2011) conducted a study aiming at the importance of self-efficacy in assessing self-esteem vocation interests. Hence, the authors use the self-efficacy, self-estimation and self-competence variables in a multiple hierarchical regression model and confirmatory factorial analysis based on Holland's hexagonal model (1973; 1985). In Figure 1, concluding that when self-estimation is used to measure career interests, it is not necessary to show a certain level of self-efficacy.

Bullock-Yowell, Reed, Mohn, Galles, Peterson & Reardon (2015) conducted a study in which they were interested in studying the relationship between neuroticism, coping strategies and negative career thinking in the context of positive status. The study was applied to 119 women and 113 males with a mean age of 20.3 years. They were following a career development program. The results highlighted that coping strategies did not make any significant contribution to the proposed model and that neuroticism had a significant indirect effect on career decision-making due to negative thoughts. An interesting conclusion of the study is that in the presence of negative thoughts about careers, neuroticism becomes associated with increasingly positive career development decisions. Thus, career

counseling can intervene on the extent of neuroticism so that the expression of this has productive implications in making career decisions.

Gundula & Ulrich (2017) highlighted the vocational interests in terms of personality traits having significance in educational and organizational environments. Thus, the authors emphasize that vocal interests are an important aspect of personality. By treating Holland's model and theory of vocational interests, the two authors present a dynamic perspective on interactions that influence stability and change throughout life. Moreover, the conclusion reached by the two authors is that the professional interest is a motivating aspect of the personality that has an effect on the individual development of the people.

Damian, Spengler, & Roberts (2017) conducted a study in which they wanted to highlight the implications of computerization of jobs on staff selection. The sample consisted of 346.660 participants, high school students in the US who were tested in two parts of the longitudinal study: 11 years and 50 years later. Initially the variables were measured: social background, intelligence, personality traits and professional interests. Thus, the participants' occupations and the likelihood of being computerized on the basis of the necessary skills and the technology were recorded during the study. The applied regression model highlighted the fact that regardless of the social context, smarter, mature people interested in art and science at the time of initial measurement had selected jobs that were less likely to be computerized. For these variables, an increase in the standard deviation predicted a decrease by 4 points of computerization probability.

Strong, Rieger, Ludtke, Nagengast, Trautwein, and Roberts (2017) conducted a more extensive research. They were interested if the professional interests that people have when finishing high school will predict work, relationships and health outcomes over a 10-year period. The authors used the taxonomy of Holland (1997), RIASEC and the Big Five Personality inventory. The sample consisted of 3.023 high school students in Germany who were monitored for 10 years after graduating from high school. Regression analysis was used to verify the prediction of vocation interests and personality traits. Thus, professional vocational interests were a significant predictor for a number of 7 variable variables: full-time employment, gross income, unemployment, marriage, children, non-involvement in any relationship, and perceived health. Personality traits significantly predicted better self-perceived health.

Given the person's fit with the work environment in terms of personality traits, Ehrhart and Makransky (2007) conducted a study investigating professional interests and personality. Thus, the authors wanted to test the hypothesis that occupational interests as a system of occupational preferences of vocational interests (person-vocation matching) predict the right perception of occupations and more than the personality assessed in terms of the five-factor model predicts the characteristics of the workplace (matching the person to the position he / she occupies). The results of the study of the two researchers, Ehrhart and Makransky

(2007) showed that professional interests were better predictors of the perceived person, but also of the person perceived as a personal vocation compared to the personality traits taken as predictors.

Fan, Cheung, Leong, and Cheung (2012) conducted a cross-cultural study between American students and students in Hong Kong on the features of their precociousness, career interests and career. This study compared patterns of relationship through personality traits, career interests, and career exploration. Two student samples were analyzed a sample of 369 American students and a sample of 392 Chinese students in Hong Kong. The tool used was Cross-cultural (Chinese) Personality Assessment Inventory-2 (CPAI-2). The first hypothesis tested prediction capacity for personality traits as career predictor variables taken as a variable criterion for American and Chinese students. The second hypothesis focuses on the role of the mediating variable of vocational interests between personality traits and career exploration. Cultural differences have been highlighted as significant in testing the first hypothesis. Personality traits measured with CPAI-2 predicted career exploration only for Chinese students in Hong Kong. The second hypothesis has been partially confirmed. The entrepreneurial character has mediated the association between the social potential variables and the career exploration for the Chinese student group. For the US student group, artistic interest has proven to be a mediator.

Zhu, Yang & Cai (2017) were interested in conducting a study of personality traits and vocational interests at students in the technological educational environment. They conducted a study on the relationship between personality types and choices made on the vocational orientation of Chinese students in China's educational and post-graduate technology. The sample consisted of 209 students and 194 postgraduate students. The applied tool was Personal Globe Inventory-Short, used to determine personality types. The results were in the form of three-letter personality profile codes for students in both groups, ESA (social, artistic and entrepreneurial). Also, there were significant differences between the students in the field of educational technology and the postgraduate students according to the realistic personality type that proved to be a significant predictor for most of the vocational options as well as the students' interests in the technology of education. Moreover, postgraduate students in education technology interested in specific realistic activity have selected little interest in educational technology, and the type of social personality as a profile has been associated with more interests.

Duffy, Borges & Hartung (2009) were interested in investigating relationships between personality traits, vocational interests, and work values at medical students. The sample consisted of 282 medical students (169 women and 113 men). The tools applied were: Strong Interest Inventory, NEO Personality Inventory-Revised, and Physician Values in Practical Scale. In this respect, the results have proved significant relationships between openness as a personality trait and artistic interests and between extraversion as a personality trait and entrepreneurial

character, social interests and managerial work values. Testing hypotheses on regression analysis has highlighted that personality and vocational professional interests predicted between 2% and 14% of the variation of each of the six measured workplace values as values of work.

De Bruin (2002) was interested in studying the relationship between personality traits and vocational interests. The author made a study in which he applied the Personality Factor Questionnaire and Instrumental 19-Field-Interest Inventory. The results of the study have shown that extrovert people are interested in areas related to social contact and the ability to influence others. Another highlight was that emotionally sensitive individuals as personality traits are statistically significant in arts and languages and independent people are interested in creative thinking.

Hansen & Wiernik (2018) were interested in making a theoretical synthesis of personality traits and performance in the workplace in terms of vocational interests. They highlighted the role of vocational interests in work values and work-person matching. The authors mention in the published theoretical chapter that interventions to make career decisions have been designed to optimize the person-working environment, interests and values, and skills to increase organizational variables such as well-being and work performance.

Wiernik & Wille (2018) conducted a theoretical analysis of career, career development and career management through vocational orientation. Thus, they have reviewed several studies from many traditions. Also, in their work, the authors analyze empirical results from career choices, career management factors, individual changes, persistence and career success.

Wiernik, Dilchert & Ones (2016) conducted a study of personality traits and creative-artistic interests. Thus, the authors used the individual criterion of the profile to investigate the relationship between aesthetic and investigative-creative interests with personality traits. The Big Five and the Holland-RIASEC inventory of interest were used. The results highlighted the fact that the aesthetic and investigative interests revealed distinct patterns that pertain to the individual intrapersonal profile of permissibility. Investigative interests have been significantly associated with increased openness to intellect, consciousness and emotional stability but also with low levels of low extraversion and acceptability to other features of individuals. In pursuit of the results, artistic interests were associated with the perceptual strengths of each participant in the study for opening up to experience and personal weaknesses for conscientiousness, assertiveness and emotional stability.

Salami (2008) investigated the roles of personality traits, vocational interests, academic achievements, and socio-cultural factors in aspirations on adolescent gymnasium education in southwestern Nigeria. The sample consisted of 430 students (220 men and 210 women). A regression model was applied to test the research hypothesis related to the variables mentioned. The results confirm that personality traits, vocational interests, academic performance, socio-economic

status and family requirements are statistically significant related to students' educational aspirations.

Krapić & Kuljanić (2017) were interested in testing whether the level of intelligence, personality traits and vocational interests are predictors of school achievements. Hence, the aim of the study was to highlight these aspects in the primary school, general school and to highlight a certain group of school disciplines such as verbal-communication, social-humanistic, technical and artistic. Moreover, the incremental validity of the personality traits and of the vocational interests against the effects of intelligence has been analyzed. The sample consisted of 263 children (128 boys and 135 girls) from an elementary school. The model of hierarchical regression was applied as a statistical method, in the first model were included the personality traits and the second the vocational interests. The results highlighted that verbal, numerical and abstract skills as well as investigative interests and conscientiousness are statistically significant predictors of school achievement. Finally, the features of the precociousness and the vocational interests explain a further proportion of variation of all the variable variables except for the technical group. Moreover, the role of intelligence, perceptual features and vocational interests is emphasized in the prediction of school achievements in elementary school.

Pozzebon, Visser, Ashton, Lee & Goldberg (2010) conducted a study on the psychometric characteristics of the Oregon Vocational Interest Scales inventory. This study highlights the professional identity of young people in Bulgaria through their professional interests, work-related strategies and personal characteristics. The sample consisted of 257 participants aged 18-29. The applied scales were: the Oregon professional scale - ORVIS (Pozzon, Visser, Ashton, Lee, & Goldberg, 2010), the questionnaire for the study of alternative work strategies (Bozhinova, 2003) and the Big Five inventory (Costa & McCrae, 1992). The results of the study showed that for the selected group aged between 18 and 29 years, professional interests, creativity, leadership and altruism are strongly correlated with the labor market orientation. Dominant personality factors are openness to experience, conscientiousness and agreeability. Moreover, the three types of work-related strategies interact poorly with moderate factors of the Big Five and 8 interests on the Oregon Vocational scale.

Harris, Vernon, Johnson and Jang (2006) conducted a study on the phenotypic and genetic relationship between vocational interests and personality traits. Thus, the relationships between the personality traits and the professional interest factors have been examined phenotypically and genetically. The sample consisted of 516 twins and brothers who completed personality scales and vocational interests. Factorial analysis was performed for each scale, and five personalities and six professional interest factors were extracted. Correlations ranged from 0 to .33 at the phenotypic level between personality traits and vocational interests. Genetic components accounted for between 0 and 56% of the variation in occupational

factors and between 44 and 65% for personality factors. Finally, it was highlighted that personality is related to certain dimensions of professional interest and that some observed relationships have a common genetic basis.

Holtrop, Born & de Vries (2015) were interested in conducting a study on relationships between vocational interests and personality traits by comparing recent models of vocational interests. The sample consisted of a total of 656 participants in the Netherlands, as a spherical sample (reproduction of spherical structure). The tools applied were: The Personal Globe Inventory, IGP, (Tracey, 2002) and the HEXACO-PI-R personality inventory (Ashton, Lee, & de Vries, 2014). The results confirmed the previous findings from the studies conducted and the interests such as prestige and the defining characteristic of the spherical representation correlated poorly with openness to experience and extraversion. The undergraduate honesty-humility and openness to experience correlated with certain scores of vocational interests.

4. CONCLUSIONS

Following the review of the presented studies it can be emphasized that the person's fit with the work environment remains the most important criterion in the selection of the personnel and not least in the vocational orientation. As Holland (1997) specifies, the six types of personality seen from the perspective of the Hexagonal model (Figure 1): realistic, investigative, artistic, social, entrepreneurial and conventional creates the possibility for individuals in the work environment to carry out their tasks and activities matching personality type. It is important to note that personality factors: openness to experience, conscientiousness, neuroticism, extraversion and agreeability correlate with the vocation interests and aspects of different work values in relation to the cultural characteristics of the respective population. Cross-cultural studies, as well as populations with certain endogenous characteristics based on the relationships between personality traits and vocational interests, represent a challenge to contemporary psychological research.

In this respect, vocational counselling since high school years plays a fundamental role in understanding future adaptation behaviors, relationships with colleagues, behaviors to carry out tasks and activities, and pursuing a certain career in choosing the most favourable the future job from the perspective of the environment and colleagues as well as the tasks to be executed (Bogluț, Rizeanu, Burtăverde, 2015; Rizeanu, 2016). Vocational counsellors should take into account variables such as personality traits, intelligence, skills, vocational interests, and so on.

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REFERENCES

- Ashton, M. C., Lee, K., & de Vries, R. E. (2014). The HEXACO Honesty-Humility, Agreeableness, and Emotionality Factors: A review of research and theory. *Personality and Social Psychology Review, 18*, 139-152.
- Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of Personality Assessment, 91*, 340-345.
- Bogluț, A., Rizeanu, S., Burtăverde, V. (2015). Vocational Guidance for Undergraduate Psychology Students. Psychometric Properties of the Questionnaire of Vocational Interests in Psychology. *Procedia - Social and Behavioral Sciences by Elsevier, Volume 187, Pages 713-718*.
- Bozhinova, R. (2003). *Psihologiya na svobodata i situatsiyata na sotsialna promyana* [Psychology of freedom and the situation of social change]. Sofia, Bulgaria: Akademichno izdatelstvo "Marin Drinov".
- Bullock-Yowell, E., Peterson, G., Wright, K.L. & Mohn, R. (2011). The Contribution of Self Efficacy in Assessing Interests Using the Self Directed Search. *Journal of Counseling & Development, 89* (4), DOI:10.1002/j.1556-6676.2011.tb02844.x.
- Bullock-Yowell, E., Reed, A. C., Mohn, R., Galles, J., Peterson, G. & Reardon, R. (2015). Neuroticism, Negative Thinking, and Coping With Respect to Career Decision State. *The Career Development Quarterly, 63*, 333-347. 10.1002/cdq.12032.
- Burtăverde, V. (2015). Psychometric properties of the HEXACO PI-R on a Romanian sample. The relationship with work outcomes and general outcomes. *Romanian Journal of Experimental Applied Psychology, 6*(1), 32-58.
- Burtăverde, V. (2015). The relationship between personality factors of the Big Five model and the vocational interests in the pharmaceutical field. Pilot study. *Romanian Journal of Cognitive Behavioral Therapy and Hypnosis, 2*(3).
- Cattell, R.B. (1946). *The description and measurement of personality*. New York: World Book.
- Cattell, R. B. (1973). *Personality and Mood by Questionnaire*. San Francisco, CA: Jossey-Bass.
- Cattell, R. B. (1978). *Use of Factor Analysis in Behavioral and Life Sciences*. New York: Plenum.
- Cattell, H. B. (1989). *The 16PF: Personality In Depth*, Champaign, IL: Institute for Personality and Ability Testing, Inc.
- Cattell, R.B. & Krug, S.E. (1986). The number of factors in the 16PF: A review of the evidence with special emphasis on the methodological problems. *Educational and Psychological Measurement, 46*, 509-522.
- Cattell, H.E.P., & Mead, A.D. (2007). The 16 Personality Factor Questionnaire (16PF). In G.J. Boyle, G. Matthews, and D.H. Saklofske (Eds.), *Handbook of personality theory and testing: Vol. 2: Personality measurement and assessment*. London: Sage.
- Costa, P., Holland, J.L., McCrae, R.R. (1984). Personality and vocational interests in adulthood, *Journal of Applied Psychology 69* (3), 390-400, DOI: 10.1037/0021-9010.69.3.390

- Costa, Paul T.; McCrae, Robert R. (1985). *The NEO personality inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., & McCrae, R. R. (1992). *Professional Manual for the NEO-PI-R and NEO-FFI*. Odessa, FL, USA: Psychological Assessment Resources.
- Costa, P.T. Jr. & McCrae, R.R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) manual*. Odessa, FL: Psychological Assessment Resources.
- Damian, R., Spengler, M. & Roberts, B. (2017). Whose Job Will Be Taken Over by a Computer? The Role of Personality in Predicting Job Computerizability over the Lifespan. *European Journal of Personality*. 31(3) DOI: 10.1002/per.2103 31.
- De Bruin, G.P. (2002) The relationship between personality traits and vocational interests. *SA Journal of Industrial Psychology*, <http://hdl.handle.net/10210/2872>
- De Vries, R. E., Ashton, M. C., & Lee, K. (2009). The six most important personality dimensions and the HEXACO Personality Inventory. *Gedrag & Organisatie*, 22, 232-274. (In Dutch)
- De Vries, R.E., Lee, K., & Ashton, M. C. (2008). The Dutch HEXACO Personality Inventory: Psychometric properties, self-other agreement, and relations with psychopathy among low and high acquaintanceship dyads. *Journal of Personality Assessment*, 90, 142-151.
- Duffy, R. D., Borges, N. J. & Hartung, P. J. (2009). Personality, Vocational Interests and Work Values of Medical Students, *Journal of Career Assessment*, 17 (2)189-200
- Ehrhart, K.H., Makransky, G. (2007). Testing Vocational Interests and Personality as Predictors of Person-Vocation and Person-Job Fit, *Journal of Career Assessment*, 15 (2), fimp 0.333 <http://journals.sagepub.com/doi/pdf/10.1177/1069072706298105>
- Fan, W., Cheung, F.M., Leong, F.T.L., Cheung, Sh. F. (2012). Personality Traits, Vocational Interests, and Career Exploration: A Cross-Cultural Comparison Between American and Hong Kong Students, *Journal of Career Assessment*, 20 (1) <http://journals.sagepub.com/doi/abs/10.1177/1069072711417167>
- Gundula, S. & Ulrich, T. (2017). Vocational interests as personality traits: Characteristics, development, and significance in educational and organizational environments. In book: *Personality Development Across the Lifespan, Chapter: 25*, Publisher: Elsevier, Editors: Jule Specht, pp.401-417. DOI:10.1016/B978-0-12-804674-6.00025-9.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*. 48, 26–34. doi:10.1037/0003-066x.48.1.26
- Hansen, J.-I. C., & Wiernik, B. M. (2018). Work preferences: Vocational interests and values. In D. S. Ones, N. Anderson, C. Viswesvaran, & H. K. Sinangil (Eds.), *The SAGE Handbook of Industrial, Work, and Organizational Psychology (2nd ed.)* Volume 1: Personnel psychology and employee performance, 408–448. Thousand Oaks, CA: Sage. <https://wiernik.org/downloads/work-preferences-vocational-interests-and-values>, accesat la data de 05.02.2018
- Harris, J.A., Vernon, P.A., Johnson, A.M., Jang, K.L. (2006). Phenotypic and Genetic Relationships between Vocational Interests and Personality, *Personality and Individual Differences*, 40 (8), 1531-1541, <http://dx.doi.org/10.1016/j.paid.2005.11.024>
- Holland, J.L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6(1), 1959, 35-45

- Holland, J. L. (1973). *Making Vocational Choices*. Englewood Cliffs, NJ: Prentice Hall.
- Holland, J. L. (1985). *Manual for the Vocational Preference Inventory*. Odessa, FL: Psychological Assessment Resources.
- Holland, J.L. (1997). *Making Vocational Choices: A Theory of Vocational Personalities and Work Environments*. 3rd Edition, Psychological Assessment Resources, Odessa.
- Holtrop, D. J., Born, M. P., & de Vries, R. E. (2015). Relating the Spherical representation of vocational interests to the HEXACO personality model. *Journal of Vocational Behavior*, 89, 10-20. DOI: 10.1016/j.jvb.2015.04.003
- Krapić, N., Kuljanić.P. (2017). Intelligence, Personality Traits and Vocational Interests as Predictors of School Achievement, *Psychological topics*, 26 (2), 431-450
- Lee, K., & Ashton, M. C. (2006). Further assessment of the HEXACO Personality Inventory: Two new facet scales and an observer report form. *Psychological Assessment*, 18, 182-191
- Nagel, M.G., Watts, A., Murphy, B.A. & Lilienfeld, S.O.(2018). Psychopathy and Interests: Implications of Psychopathic Personality Traits for Vocational and Avocational Preferences. *Personality Disorders: Theory, Research, and Treatment*.
- Papazova, E. (2016) Personality, Vocational Interests and Work-Related Strategies in the Years of Emerging Adulthood (18-29 Years), *Psychological Thought*, 9 (1), 75-103 DOI: <https://doi.org/10.5964/psyc.v9i1.159>
- Pozzebon, J. A., Visser, B. A., Ashton, M. C., Lee, K., & Goldberg, L. R. (2010). Correction to Psychometric Characteristics of a Public-Domain Self-Report Measure of Vocational Interests: The Oregon Vocational Interest Scales, *Journal of Personality Assessment*, 92 (6), 618. doi:10.1080/00223891.2010.516712
- Rizeanu, S. (2016). Consilierea și orientarea în carieră a elevilor. *Revista de studii psihologice nr 4/2016, issue 25, p 216-221*, Universitatea Hyperion din Bucuresti.
- Salami, S.O. (2008). Roles of personality, vocational interests, academic achievement and socio cultural factors in educational aspirations of secondary school adolescents in southwestern Nigeria, *Career Development International* , 13 (7), 630-647, <https://doi.org/10.1108/13620430810911092>
- Stoll, G., Rieger, S., Ludtke, O., Nagengast, B., Trautwein, U., & Roberts, B.W. (2017). Vocational interests assessed at the end of high school predict life outcomes assessed 10 years later over and above IQ and Big Five personality traits. *Journal of Personality and Social Psychology*, 113 (1), 167-184.
- Wiernik, B. M., & Wille, B. (2018). Careers, Career Development, and Career Management, In D. S. Ones, N. Anderson, C. Viswesvaran, & H. K. Sinangil (Eds.), *The SAGE Handbook of Industrial, Work, and Organizational Psychology (2nd ed.)* Thousand Oaks, CA: Sage. <https://wiernik.org/downloads/careers-career-development-career-management>
- Wiernik, B. M., Dilchert, S., & Ones, D. S. (2016). Creative interests and personality: Scientific versus artistic creativity, *Zeitschrift für Arbeits- und Organisationspsychologie*, 60 (2), 65-78. German Journal of Work and Organizational Psychology. http://doi.org/bhhfhttps://ro.wikipedia.org/wiki/Psihologia_personalității
- Zlate, M. (2008). *Eul și personalitatea*, București: Trei.

Zhu, S., Yang, H.H., Cai, J. (2017). Personality and Vocational Interests: What We Have Learned about Students, *in Educational Technology Major* , IEE: Taiwan <http://ieeexplore.ieee.org/document/7839528/?section=abstract> DOI: 10.1109/EITT.2016.53

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