

PERSONALITY TRAITS AND GENERAL ATTITUDES DIFFERENCES AMONG AGE GROUPS AND POSSIBLE BUSINESS ECONOMICS IMPLICATIONS

KATARINA KOSTELIĆ

Juraj Dobrila University of Pula, Faculty of economics and tourism "Dr. Mijo Mirkovic",
E-mail: katarina.kostelic@unipu.hr

Abstract - Many researches of generation and age group characteristics emphasize the differences and specifics. This paper emphasizes questioning of relatively permanent psychological constructs: personality traits (according to Jung's typology) and general attitudes (according to Spranger's classification), focusing on age groups. Individuals born in period 1996 - 2000 reached adulthood and started making decisions on their own; they have become (or will soon become) part of the labor force, thus increasing their purchasing power, and their share in population (and market) will increase in the years to come. The aim of this research is to determine the differences in personality traits and general attitudes expression concerning the age groups. A convenience sample of 331 respondents has been collected for this research and one-way analysis of variance is applied to transversal data to determine if personality traits and general attitudes expressions show statistically significant differences concerning the age groups. The results show there is no statistically significant differences in personality traits expression given the respondents' belonging to three age groups, while statistically significant difference occurs for individualistic, aesthetical and social general attitude. Results' implications are relevant for theoretical and practical application in employee analysis in the fields of human resources management and internal marketing, as well as for negotiation and purchase behavior analysis in marketing science. Given the established similarities between the age groups, a recommendation derives to emphasize similarities while overcoming age groups differences.

Keywords - Personality Traits, General Attitudes, Analysis of Variance

I. INTRODUCTION

The society is exposed to constant changes. Those changes were less expressed in history, but speeding up in technological, economic and science development causes more frequent changes in individual's environments while growing up, resulting in differences among individuals of different age cohorts. Most of the researches of characteristics of specific age cohorts and generations emphasize the generation gap, differences and novelties, while similarities mostly remain ignored and unexplored. Besides that, the questioning whether the differences arise from the changes in environmental or internal individual features is rarely explored. The emphasis of this research is set on psychological individual features, or precisely, personality traits and general attitudes. Personality represents a relatively permanent and stable combination of individual's characteristics and creates a unique behavioral pattern, which denotes individual's adjustment to environment, and enables anticipation of the individual's behavior up to a certain extent. General attitudes describe general pattern in individuals' reacting to his environment, whereby attitudes hierarchy and intensity is specifically defined. Both personality traits and general attitudes are frequently used in economics while assessing and predicting individuals' behavior. Stated psychological traits represent relatively permanent constructs and the relevance of their analysis follows from the permanence characteristics –specifically, long-term determinants of individual's behavior. The analysis will explore the question of significant differences in

traits and personality types over the age groups, as well as differences in general attitudes. The analysis is based on convenience sample from Croatia.

The rest of the paper offers overview of classification and specifics of age groups, personality traits and general attitudes; section Methods describes data collection and analysis; section Results offers overview of conclusions based on analysis; section Discussion and conclusion points out theoretical and practical implications of the results.

Generations and age groups

According to Underwood (2007:43), the generation denotes an age group that shares unique experiences and learning through the formative years, thus creating unique set of basic values and attitudes that differs one generation from others. Williams and Page (2010) divide generations according to the birth-year to pre-depression (before 1930), depression (1930 – 1945), baby boom generation (1945 – 1964), generation X (1965 – 1976), generation Y (1977 – 1994) and generation Z (after 1994). There are disparities in determining birth-age for generation Y (also known as millennials) and generation Z among the subject researchers. Twenge (2017) names the later iGen. Ozkan and Solmaz (2015) define generation Z as persons born after 2000, while persons born in period from 1980 to 2000 belong to generation Y or the Millennials. Bencsik, Horváth-Csikós and Juhász (2016) determine generation Z by the birth-years from 1995 – 2010, and name following generation (individuals born after 2010), the alpha-generation. According to DelCampo,

Haggerty, Knippel and Haneyu (2011), persons born between 1981 and 2000 belong to generation Y. Laurel (2005) determines generation Y by the years of birth from 1980 to 2000. According to Tulgan (2013), everyone born between 1978 and 2000 belong to one, big, millennial generation. Wells, Fishman, Horton and Rowe (2018), find that generation Z create individuals that turned between 18 and 22 years in 2018. Overview of the generations' divisions by the year of the birth shows overlaps for persons born between 1994 and 2000.

Even though years of birth represent only reference limits for a certain generation, as this research deals with age groups and not generations, a specific frame needs to be chosen. For the purpose of this research, a framework suggested by Wells et al (2018) will be used. In order to investigate psychological differences in the generational perspective, a longitudinal research is required. This research will examine differences between age groups of respondents based on cross-sectional data and age groups will be defined according to the generational division. The research emphasis is set on respondents from the last age group, given that those individuals are nearing the end of their formative years and are going to start (or are already started) making their economic impact. With the aim of presenting comprehensive insight into characteristics of members of the youngest age group, an overview of existing research is presented in continuation.

Numerous observations about generations Y and Z are focused on differences in thinking and learning. Postolov, Magdinceva Sopova and Janeska Iliev (2017) emphasize influence of new technologies to learning, with focus on e-learning. Karakas et al. (2015) distinguish three main difficulties in learning for new generations: the lack of concentration, the lack of engagement and the lack of the social life.

Ilišin and Gvozdanić (2016) analyze the structure and dynamics of youth values in Croatia, given the social environment, situations and personal interests of respondents. Using comparative analysis, they determined that the scale of individual and social values in youth remained stable over 30 years, with values in the private sphere on the top of the scale and values in the public sphere on the bottom. In addition, they point out that the newest generation of youth demonstrates smaller intensity of tested values. The same research offers comparison of the results from the year 1986 and year 2013, which derived authors' conclusion that youth's valuation of leisure, professional success, and political confirmation has diminished, with increase in valuation of religion, nationality, government and autonomy.

Age groups also represent the demographic characteristic of individuals and are frequently used

in market segmentation. Many researches in that fields focus on behavior analysis in purchase situations, decision making and labor market behavior of members of particular age group and generation (DeCampo et al. 2011, Bencsik et al., 2016, Ozkan and Solmaz, 2015, Williams and Page, 2011, Underwood, 2007, Karakas, Manisaligil and Sarigollu, 2015, Pomarici and Vecchio 2014, Razum, Pandža Bajs and Zekić, 2017, Krasulja, Radojević, Janjušić and Vujić, 2015). A part of the stated research is directed toward analysis of previous generations. The interest for the members of the youngest age group increases as its members approach and Priporas, Stylos and Fotiadis (2017) explore the perception, expectations and recommendations for the development of smart retail and find the relevance in employing electronic processes in retail while ensuring speed and autonomy in purchase. Ozkan and Solmaz (2015b) examine the generation Z members' relation toward the work and the results of respondents self-assessments show that respondents find themselves to: trust themselves (97.5%), be loyal (96.7%), be hardworking (96.7%), agree with anyone able to (80%), be loved by everyone (92.4%), honest (96%), conciliatory (87.6%), helpful (79%), unrealistic/dreamers (75.9%), open to working in the group (88.4%), innovative (86.7%). Authors offer comparison with previous generation, pointing out to similarities: both generations like to use the technology while achieving their goals, members of both generations like to participate in projects, and prefer to work in the offices (second reported choice for the pace of the work is co-working space). The difference arises from the generation Z members more intensive need that superiors listen to their ideas and value their opinion, while generation Y members show more intensive need that superiors allow autonomy in work. Krasulja et al. (2015) systematize specific characteristics of generations and find a following set of characteristic relevant for members of generation Z: networked; raised in the "culture of fear" and mobile technologies, with "helicopter" parenting and social media; expecting communication whenever and wherever they want; facing problems of lost identity; the lack of employment possibilities; and unfulfilled expectations. The flaws of the members of generation Z present overconfidence in their knowledge and expectation of prompt results. Wells et al. (2018) denote trends related to generation Z: generation Z is in many perspectives more similar to generation X than to generation Y; they declare to be spiritual, but not religious; they declare to be members of middle socio-economic status in spite of the increase in the difference between lower and higher socio-economic status (which will lead to rise of political center, according to the authors); seek purpose (which lead to emphasizing purpose in advertising messages and companies missions that target them as consumers).

However, stated conclusions have to be treated with caution, as members of the last age group just stepped into the labor market and their work-related attitudes, relations to work and consumption behavior yet have to mature. Besides, it is hard to determine a simple age limit when an individual becomes an adult, and the overview by Knežević (2018) points out that some concepts emphasize 18th year as the age limit, while others reach to the early twenties; even legally defined majority is not equally defined among countries. A part of the research about members of the generation Z was conducted during their adolescence, and the changes which individuals go through in that period can vastly influence behavior, general and specific attitudes, as well as character traits. Even though the results about the specifics of the last age group are eagerly expected, especially because its applications in business and economics, all of the conclusions remain to be reexamined and confirmed once the members reach adulthood.

A. General attitudes

Socialization represents formal and informal transfer of culture, tradition, attitudes, beliefs, norms and social rules to the individual. The listed factors become integral part of the general values and

attitudes with the process of internalization. Hanisch et al. (1998) determine scientific relevance of the general attitudes in individual repeated behaviors, and authors Chen, Goodard and Casper (2004), Bye et al. (2011), Parks and Guay (2012) Tagiuri (1989), Young (1992) and Kaže (2010a, 2010b), point out to connection between general attitudes and consumer behavior and labor market behavior.

The most commonly used universal division of general attitudes was created by Spranger (1928). Rokeach's (1973) and Schwartz's (1992) general attitudes divisions are also frequently used. Given the number of the observed variables, the fact that Rokeach's division has elements already present in personality traits, and the dimension that emphasizes determining differences between cultures, Spranger division's simplicity represents the optimal choice for the purpose of this research. According to that division, general attitudes are derived by scaling general values. Spranger divides general attitudes as individualistic (I), theoretical (T), traditional (Tr), social (S), economic (E) and aesthetical (A) general attitude (Table 1 offers a systematization according to Spranger (1928) and Klassen et al (2009)).

Table 1 - The Overview of Description and Indicators of General Attitudes

General attitude	The description of values and characteristics related to the general attitude	Terms/ indicators of general attitude
Theoretical general attitude (T)	pursuit of the truth; gaining the new information; revealing regularities; eagerness for gaining, evaluation and systematization of the knowledge; aspiration to understanding; tendency to empirics, evidence-base, critical thinking and rationality	Rationality, objectivity, learning, problem solving, intellectual strength, analyzing, clarity, importance of the knowledge
Individualistic general attitude (I)	gaining power, influence, competitiveness; aspiration for status and prestige; tendency to control; tendency to stand out, be unique and special	Power, control, influence, competitiveness, managing, independence, status, respect, responsibility
Social general attitude (S)	love for people; care for others; altruism and empathy; aspiration to general well-being and emphasis on interpersonal relationships	orientation to others, support, help, action to improve society, generosity, selflessness, compassion
Aesthetical general attitude (A)	striving for harmony, form, beauty, pleasure and fun; aspiration to achieve balance; enjoying the moment and subjective understanding of the experience	expressiveness, harmony, predominance of the form over the essence, balance, tolerance, creativity, self-fulfillment, beauty, subjectivity
Economic general attitude (E)	decision-making based on profits and benefits; estimates the investment of the effort, time and resources with respect	practicality, financial interests, efficiency, usefulness, productivity, profit maximization, results

	to the expected profit; evaluation of the environment and self, based on economic and material indicators; striving for practical solutions and applications
Traditional general attitude (Tr)	respect for rules, hierarchy, systematics, routines, rows, established forms; aspiration to tradition, structure, focused, unity, generally accepted ways rules, principles and values; striving to establish order, structure and routines; respect for the system;

Source: adjusted from Kostelić (2017), systematization according to Spranger (1928) and Klassen et al. (2009).

B. Personality traits

Besides the general attitudes, personality traits also represent relatively permanent psychological constructs. Most commonly used models are the five-factor model (also known as the Big Five model) and Jung’s (1929) personality typology. The first model is more frequently used for the assessment of the psychiatric population, because it contains neuroticism trait. Jung’s typology of personalities is the framework on which is based later developed model by Keirsey and Bates (1984) and Myers -Briggs Type Indication (abbreviation: MBTI; Myers, McCaulley, Quenk and Hammer, 1998). Furnham

(2006) examines and compares stated typologies and finds significant correlation between the four traits of five-factor model and Myers – Briggs model. The only uncorrelated trait is the neuroticism trait, which appears only in the five-factor model.

Jung’s personality typology was further developed by Myers and Briggs, and Keirsey and Bates. It consisted of four personality trait and each of them has opposite poles and consists of positive and negative characteristics. Table 2 offers systematization of the personality traits according to Jung (1971) and Myers et al (1998).

Table II
Table-2 Overview of Characteristics for Each Personality Trait Pole

Extraversion (E)	Introversion (I)
Initiators	Reserved
Expressive	Retained
Social	Intimacy
Active	Reflective
Enthusiastic	Quiet
Sensing (S)	Intuitive (N)
Specific	Abstract
Realistic	Imaginative
Practical	Conceptual
Experimenters	Theorists
Traditional	Original
Thinking (T)	Feeling (F)
Logical	Empathetic

Reasonable	objective analysis	Compassionate	emphasize the basic values
Questioning	truthfulness, defining causes and consequences, respect for principles	Approving	tactical, sympathetic, loyal
Critics	precision, challenges, seek debate	Receptive	approve, agree, desire harmony
Demanding	skeptical, looking for evidence, critical	Gentle	tolerant, believe, praise
Judging (J)	firm, sharp, goal-oriented	Perceiving (P)	gentle, gentle-hearted, meaning-oriented
Systematic	neat, structured, do not like diversion	Informal	relaxed, comfy, disruptions are welcome
Planning	future-oriented, plan ahead, create solid plans	Open	oriented to the present, make flexible plans, follow the development of the situation
Early starters	motivated by self-discipline, steady progress, delay causes stress	Pressure boosted	motivated by pressure, work spurts and at times, an early start discourages them
Scheduled	seek routines, create lists, procedures to help them	Spontaneous	seek variety, enjoy surprises, hinder the procedures
Methodical	plan specific activities, write sub-tasks, organized	Emerging	leap in the unknown, allow the strategies to appear on the go, adaptable

Source: adjusted from Kostelić (2017), systematization by Jung (1971) and Myers et al. (1998).

Personality traits as psychological variables are derived from the answers to questionnaire, which is formed in a such way that enables connection of the answers to the certain pole of the trait. The combination of personality traits creates personality types. Given the traits' number and poles, there are 16 personality types (Myers et al., 1998). It is common to replace the trait poles with abbreviations: extraversion (E), introversion (I), sensing (S), intuitive (I), thinking (T), feeling (F), judging (J), perceiving (P). The use of general attitudes and personality traits enables determination of typical characteristics and individual behavior, but also the content of that behavior.

III. METHODS AND ANALYSIS

A. Data collection and description

For the purpose of a previous research, original questionnaire was created and tested, and offered

online for completion, in period from March 2013 to May 2015. In that period, 244 completely filled-in questionnaires were collected for the Croatia area. The same questionnaire was distributed to first year students in 2017/2018 academic year, in Pula (Croatia), when additional 89 responses were collected. Given that it is convenience sample, conclusions mustn't be generalized, but they can be used in order to gain insight to situation.

The responses to questions about personality traits and general attitudes are compiled and the respondents age was corrected based on the year when respondent filled-in the questionnaire. Collected data is classified according to the age groups.

Table III - Relative Frequencies of Personality Traits and General Attitudes for Each Age Group

Age group	Number of respondents	Respondents age	I-E	N-S	F-T	P-J	T	I	A	Tr	S	E
(1) 1996 - 2000	97	18 - 22	0.55 85	0.49 88	0.47 03	0.60 70	0.63 34	0.73 39	0.71 39	0.54 19	0.49 42	0.49 42
(2) 1980 - 1995	201	23 - 38	0.55 34	0.46 24	0.45 19	0.63 33	0.63 90	0.82 46	0.65 02	0.53 61	0.57 28	0.51 55

(3)												
196												
0 - 35	38 - 58	0.53	0.45	0.45	0.62	0.63	0.83	0.63	0.53	0.59	0.50	
197		92	38	29	81	40	17	92	48	29	34	
9												

Source: Author's calculation.

Table 3 describes average general attitude and personality traits for each age group expressed in relative frequencies. In continuation, age groups will be referred as the first, second and third age groups for respondents born in periods 1996 – 2000, 1980 – 1995 and 1960 – 1979, respectively.

The most frequent personality type is ENFJ. The comparison of average expression of each age group traits and general attitudes reveals that the extraversion is slightly more expressed for the first age group, while the judging trait is expressed less.

Regarding the general attitudes, it can be noticed that individualistic, social and economic general attitude are expressed less for the first age group, while the aesthetical general attitude is expressed more in comparison to the other two groups. The hierarchy of the general attitudes for the first age group is IATTrSE (Individual, Aesthetic, Theoretical, Traditional, Social and Economic), while hierarchy for the second and third age group is: IATSTrE (Individual, Aesthetical, Theoretical, Social, Traditional, Economical). Stated points out to change in frequencies of the general attitudes and consequently change in the hierarchy of the general attitudes at respondents of the first group compared to other two groups. In order to examine statistical significance of the changes, observed deviations have to be tested.

B. Data analysis

To determine statistically significant differences among the personality traits and general attitudes given the three age groups, one-way analysis of variance will be applied. Observed data was measured at interval scale and recorded as continuous variable. The data is classified according to the three age groups. The observations are mutually independent (the responses of one respondent do not influence the responses of other respondents). In order to achieve no outlier assumption, answers of five respondents are removed from further analysis. Given that each group has different number of observations, a homogeneity of variances assumption needs to be confirmed. Based on Levene test, the hypothesis that the variances of personality traits and general attitudes given the age groups are equal is not rejected at 5% statistical significance level. Based on the Kolmogorov-Smirnov test, at the 5% statistical significance, the hypothesis about normal distribution can be rejected for most of the variables. Distributions skewness is in the interval of [-0.621, 0.37], and kurtosis [-0.63, -0.124], which

shows relatively small deviation from the normal distribution (values are calculated using SPSS, and approximately normal distribution is assumed for skewness values in the interval [-2, 2] and for the kurtosis in the interval [-7, 7]). As all of the other assumptions are met, the one-way analysis of variance will be applied to the data, following with additional confirmation with non-parametric Kruskal-Wallis test (one-way ANOVA on ranks), which is not sensitive to distribution normality, with satisfied assumption of similarly shaped distributions.

General expression for analysis of variance of personality traits for three observed age groups is:

$$H_0 \dots \sigma_{t1}^2 = \sigma_{t2}^2 = \sigma_{t3}^2$$

$$H_1 \dots \sigma_{t1}^2 \neq \sigma_{t2}^2 \neq \sigma_{t3}^2,$$

Where t denotes a trait, t = {IE, NS, FT, PJ} and the index number denotes age group.

Research null- hypothesis are:

H₁: there is no statistically significant difference between variations in extraversion-introversion traits among observed age groups

H₂: there is no statistically significant difference between variations in sensing-intuitive traits among observed age groups

H₃: there is no statistically significant difference between variations in thinking-feeling traits among observed age groups

H₄: there is no statistically significant difference between variations in judging-perceiving traits among observed age groups

General expression for analysis of variance of general attitudes for three observed age groups is:

$$H_0 \dots \sigma_{a1}^2 = \sigma_{a2}^2 = \sigma_{a3}^2$$

$$H_1 \dots \sigma_{a1}^2 \neq \sigma_{a2}^2 \neq \sigma_{a3}^2,$$

Where a denotes general attitude a = {T, I, Es, Tr, S, E}, and the index number denotes age group.

From the stated, research hypothesis follow:

H₅: there is no statistically significant difference between variations in theoretical general attitude among observed age groups

H₆: there is no statistically significant difference between variations in individualistic general attitude among observed age groups

H₇: there is no statistically significant difference between variations in aesthetical general attitude among observed age groups

H₈: there is no statistically significant difference between variations in traditional general attitude among observed age groups

H₉: there is no statistically significant difference between variations in social general attitude among observed age groups

H₁₀: there is no statistically significant difference between variations in economic general attitude among observed age groups.

According to the hypothesis, a test is applied, and the results are presented in the Table 4.

Table IV - One-Way Analysis of Variance of Personality Traits and General Attitudes Given the Age Groups

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Introversion – Extraversion personality trait	Between Groups	.193	2	.097	1.955	.143
	Within Groups	16.119	326	.049		
	Total	16.313	328			
Intuitive – Sensing Personality trait	Between Groups	.064	2	.032	1.513	.222
	Within Groups	6.942	326	.021		
	Total	7.006	328			
Feeling – Thinking Personality trait	Between Groups	.038	2	.019	.667	.514
	Within Groups	9.207	326	.028		
	Total	9.245	328			
Perceive – Judging Personality trait	Between Groups	.042	2	.021	1.063	.347
	Within Groups	6.469	326	.020		
	Total	6.512	328			
Theoretical General Attitude	Between Groups	.038	2	.019	.817	.443
	Within Groups	7.646	326	.023		
	Total	7.684	328			
Individual General Attitude	Between Groups	.440	2	.220	13.331	.000***
	Within Groups	5.383	326	.017		
	Total	5.824	328			
Aesthetical General Attitude	Between Groups	.410	2	.205	8.101	.000***
	Within Groups	8.255	326	.025		
	Total	8.666	328			
Traditional General Attitude	Between Groups	.071	2	.036	2.415	.091*
	Within Groups	4.796	326	.015		
	Total	4.867	328			
Social General Attitude	Between Groups	.321	2	.160	6.538	.002***
	Within Groups	7.996	326	.025		
	Total	8.317	328			
Economic General Attitude	Between Groups	.009	2	.005	.212	.809
	Within Groups	7.132	326	.022		
	Total	7.141	328			

Note: Statistical significance denoted with *,** and ***; for 10%, 5% and 1% statistical significance, respectively.

Source: Author's calculation using SPSS.

Additionally, Welch test is applied, which points out to statistically significant differences in individual, aesthetical and social attitude at 5% statistical significance. The Tahmane post-hoc test was applied to reveal more detail differences. Tahmane test showed that at 5% statistical significance there are differences in averages of individualistic and aesthetic attitudes which derive from the differences of the first and second, and first and third group, as well as the differences in average social attitude which derive from the differences between the first and second age group.

Table V- Result of Kruskal-Wallis Test Applied to Distributions of Personality Traits and General Attitudes Given the Age Groups

Null Hypothesis	Test	Sig
The distribution of Extraversion-Introversion trait is the same across categories of Age group	Independent samples Kruskal-Wallis Test	0.17
The distribution of Sensing-Intuitive trait is the same across categories of Age group	Independent samples Kruskal-Wallis Test	0.234
The distribution of Thinking-Feeling trait is the same across categories of Age group	Independent samples Kruskal-Wallis Test	0.518
The distribution of Judging-Perceiving trait is the same across	Independent samples Kruskal-	0.464

categories of Age group	Wallis Test	
The distribution of Theoretical general attitude is the same across categories of Age group	Independent samples Kruskal-Wallis Test	0.59
The distribution of Individualistic general attitude is the same across categories of Age group	Independent samples Kruskal-Wallis Test	0.000* **
The distribution of Aesthetical general attitude is the same across categories of Age group	Independent samples Kruskal-Wallis Test	0.000* **
The distribution of Traditional general attitude is the same across categories of Age group	Independent samples Kruskal-Wallis Test	0.095*
The distribution of Social general attitude is the same across categories of Age group	Independent samples Kruskal-Wallis Test	0.002* **
The distribution of Economical general attitude is the same across categories of Age group	Independent samples Kruskal-Wallis Test	0.674

Source: author's calculation using SPSS.

RESULTS

In order to determine if the personality traits and general attitudes of the respondents differ given the age groups, collected data is tested in order to reveal the source of the data variability over the age groups. Based on the applied test and the results (One-way analysis of variance, Welch test, Tamhane post-hoc test and Kruskal-Wallis test), following conclusions are made for the observed sample:

H₁: the extraversion-introversion traits variations among observed age groups are equal. Analysis points put that at the 5% statistical significance level null-hypothesis is not rejected and the conclusion is that there are no statistically significant differences in variations of extraversion-introversion trait over the age groups.

H₂: the sensing-intuitive traits variations among observed age groups are equal. Analysis points put that at the 5% statistical significance level null-hypothesis is not rejected and the conclusion is that there are no statistically significant differences in variations of sensing-intuitive trait over the age groups.

H₃: the thinking-feeling traits variations among observed age groups are equal. Analysis points put that at the 5% statistical significance level null-hypothesis is not rejected and the conclusion is that there are no statistically significant differences in variations of thinking-feeling trait over the age groups.

H₄: the judging-perceiving traits variations among observed age groups are equal. Analysis points put that at the 5% statistical significance level null-hypothesis is not rejected and the conclusion is that there are no statistically significant differences in variations of judging-perceiving trait over the age groups.

H₅: the theoretical general attitude variations among observed age groups are equal. Analysis points put that at the 5% statistical significance level null-hypothesis is not rejected and the conclusion is that there are no statistically significant differences in

variations of theoretical general attitude over the age groups.

H₆: the individualistic general attitude variations among observed age groups are not equal. Analysis points put that at the 5% statistical significance level null-hypothesis is rejected and the conclusion is that there are statistically significant differences in variations of individualistic general attitude over the age groups. The interpretation of the result can be extended with Tamhane's post-hoc test and insights from Table 3, which point out that in the first age group occurs the change in the frequencies of individualistic general attitude, which is less expressed for this age group than in other two age groups.

H₇: the aesthetical general attitude variations among observed age groups are not equal. Analysis points put that at the 5% statistical significance level null-hypothesis is rejected and the conclusion is that there are statistically significant differences in variations of aesthetical general attitude over the age groups. The interpretation of the result can be extended with Tamhane's post-hoc test and insights from Table 3, which indicate that the difference arises from the change in aesthetical general attitude in the first age group.

H₈: the traditional general attitude variations among observed age groups are equal. Analysis points put that at the 5% statistical significance level null-hypothesis is not rejected and the conclusion is that there are no statistically significant differences in variations of traditional general attitude over the age groups.

H₉: the social general attitude variations among observed age groups are not equal. Analysis points put that at the 5% statistical significance level null-hypothesis is rejected and the conclusion is that there are statistically significant differences in variations of social general attitude over the age groups. The Tamhane's post-hoc test and Table 3 point out that the social general attitude is less expressed at the first age group than in other age groups.

H₁₀: the economic general attitude variations among observed age groups are equal. Analysis points put

that at the 5% statistical significance level null-hypothesis is not rejected and the conclusion is that there are no statistically significant differences in variations of economic general attitude over the age groups.

DISCUSSION AND CONCLUSION

In analyses of psychological and sociological characteristics of a certain age group or generation, usually the emphasis is on determination of specificities and differences. Those insights are used in market segmentation and strategies, as well as labor market analysis and the field of human resources. This paper focuses on questioning relatively permanent psychological constructs: personality traits and general attitudes, and their comparison over the age groups.

The results point out that there are no statistically significant differences among respondents' personality traits' variations, given the different age groups. The findings indicate that no statistically significant change can be noted for the behavioral patterns of respondents from the first age group (1996 – 2000) in relation to other two age groups.

However, the results show that there are some statistically significant differences in the behavior content between the groups, given the noted differences in individualistic, aesthetical and social general attitude. In addition, the change in average frequencies of the general attitudes point out to change in the general attitudes' hierarchy. Most of the observed data variations derives from the differences in the first age group in relation to other two groups.

Given the observed changes in individualistic general attitude at respondents of the first age group, their content of the activities will be less inclined toward gaining power and influence, aspiring to status, control, standing-out, gaining responsibility, and achieving uniqueness and distinctiveness. That might indicate that respondents from this group will be, on average, less ambitious, less standing-out, and less inclined to gaining responsibility, which can be used as a reference while employing members from this group and additional cue for human resource for recreation motivation measures, as well as adjustment of the work demands. In addition, for most of the members of this group, it is unlikely that they will engage in entrepreneurial endeavors. The possible implications of this general attitude for purchase behavior indicate, for example, that companies might want to be step back from the status and prestige in their promotional messages if they want to engage members of this group into purchase behavior. Ozkan and Solmaz (2015b) state comparison of generations Y and Z, where the first prefers autonomy in work, while the later seeks validation of their ideas and listening of their ideas. Stated remark is in line with observed decrease in individualistic general attitude frequency. Krsulja et al. (2015) state overconfidence

in own knowledge as a characteristic of the generation Z, which is not in line with the findings regarding the decrease of the individual general attitude at individuals born between 1996 and 2000 in this research. However, Ilišin and Gvozdanović (2016) state that individual autonomy as a value rises with the rise of the social competencies in youth. Based on the stated and the fact that it requires time to gain social competencies, it can be concluded that the increase of the respondent's individualistic attitude intensity is possible in the future.

Based on the changes in the aesthetical general attitude, respondents born in period 1996 – 2000 will strive to harmony, beauty, comfort, tolerance, achieving balance, enjoying the moment, self-fulfillment and subjective understanding of the experiences more, in comparison to other two age groups. Stated is in line with the search for the lost identity, which Krsulja et al (2015) state as one of the characteristics of the generation Z. Ozkan and Solmaz's (2015b) characteristic of the generation Z – self-perception as unrealistic/ dreamer, can be related to this general attitude. The implications of this general attitude can be observed through the employment and purchase behavior. As members of this group (respondents) value comfort, tolerance, etc., employers should strive to create harmonic company climate and use experiences and comfort as guidelines for creating motivational policy. As age group that has this general attitude more expressed than the previous two, it is likely that the experiencing the world through own experiences will incline them to travel more than members of other two groups. Wells et al. (2018) stated that generation Z seeks purpose, and results of this analysis for the members of the same age group confirms that. The authors also state that this characteristic led to increase of the purpose statements in promotional messages, which seems as appropriate strategy. The respondent's strive for beauty, tolerance and enjoyment in the moment, also present possibility for marketing approach to them.

The determined variations in social general attitude are statistically significant and derive mostly from the frequency distribution of the respondents from the first age group and the smaller average of that attitude. That means that the respondents from the first group will, on average, demonstrate less orientation to others, altruism, empathy and action to improve society. That might indicate that they will be less inclined to teamwork, social activities and joint actions in comparison to previous two age groups. From the business perspective, if they employ a respondent from the first group, they might need to adjust the work setting to allow more individual work and decrease gatherings and social activities. The stated is accordant with Karakas et al. (2015) about the lack of social engagements of the members of new generations. The characteristics such as loyalty, agreeing with others, reconcilability, helping others

and willingness to work in a group, were examined by Ozkan and Solmaz (2015b). They determined moderate to high self-assessment of those characteristics at their respondents, which is contrary to the decrease of the average social attitude in this research. However, high estimates from Ozkan and Solmaz (2015b) research can be explained by using the self-assessment technique.

The stated changes in general attitudes also manifest in the hierarchy of the average frequencies, following the rotation of social and traditional attitude at fourth and fifth place. The traditional general attitude, which gained the fourth place, denotes obeying the rules, system, hierarchy, established patterns, order, structure, principles, as well as aspiration to systematicity and routine.

In spite of the smaller changes in the average frequencies, first three attitudes did not change a position and remain, respectively: individualistic, aesthetical and theoretical general attitude. The average frequencies of social and economic general attitudes are equal for the first age group. As analysis did not point out to any statistically significant difference for the economic attitude among the age groups (in contrast to the difference in social general attitude), the economic general attitude is given the last place, the same as with the other two age groups. That means that to respondents is least important the decision-making based on benefit and profit, valuation of environment and themselves based on economic and material indicators, as well as aspiration to practical solutions and applications.

It is interesting to also notice the small deviations in the personality traits and general attitudes of the respondents born in the period from 1996 to 2000 compared to respondents born in period from 1980 to 1995. The observation points out to conclusion that more detail examination of the similarities and differences of those two age groups is required, just as reexamination of reference framework for defining age groups in Croatia. As most of the proposed time references for age groups definitions is taken from the foreign authors. In spite of globalization processes, different socio-economical environments from each country can influence the specific set of experiences in individuals' formation periods, thus influencing a set of characteristics which (among the age groups) define each generation.

General attitudes and personality traits have theoretical and practical application in employee analysis in human resources and internal marketing, as well as in negotiation analysis and purchase behavior. Even though the noted changes have to be confirmed with extensive research on representative sample, experts and scientists can use stated results as insights during adjustment of the motivation and delegation system, as well as promotion and sales approach to persons born in period 1996 – 2000 in Croatia. Those individuals became of age, they are starting to make decisions on their own, engaged (or

soon will engage) into the labor market, which will increase their purchase power, and their share in the population (and market) will continue to grow.

Based on the discussion, it can be concluded that, even though certain differences were proved between the age groups, those differences are relatively small in overall behavior and they relate to the changes in individualistic, aesthetical and social general attitude (of the 10 observed characteristics). The results also show that there are more similarities than differences among the age groups considering the relatively permanent psychological constructs. That leads to further consideration of possibility that most of the differences arises from the environmental influences, and not essential psychological differences, which deserves necessary attention and examination in future research. Besides that, noted differences may arise from the difference in the age, and there is a possibility that those differences diminish with maturing of the respondents of the last age group, which should also be examined in future research.

Given the fast technological changes and continually changing environment that result in different life experiences, while overcoming the differences it might be helpful to emphasis discovered similarities.

The research limitation derives from the use of the small convenience sample from Croatia, which disables generalization of conclusions. The results may serve only as an insight into similarities and differences in general attitudes and personality traits among the observed age groups. Stated leads to recommendation for future generalization of the findings, and detail examination of the similarities and differences of personality traits and general attitudes, not just between age groups, but to extend the research to the generations.

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