Edited by: Vladimir Hedrih

"WORK AND FAMILY RELATIONS AT THE BEGINNING OF THE 21ST CENTURY"

Subconference

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Plenary lecture, Original scientific paper

FAMILY AND WORK RELATIONS AT THE BEGINNING OF THE 21ST CENTURY[2]

Plenary lecture

Abstract

In the last 100 hundred years, large changes affecting both the structure and dynamics of society in Europe have happened. These processes included changes to both family structure and relations and the way work and work environments are organized. Due to this, relations between work and family roles of an individual have been a topic of significant scientific interest. The lecture will reflect on the current theoretical and empirical situation in the area of work-family relations as well as on the results of "The study of work and family relations in Serbia at the beginning of the 21st century" in an attempt to incorporate these into a perspective that takes into account historical changes in families and organizations and existing diversity in patterns of family and organizational functioning. Adopting an eclectic approach to the area of work-family relations I will attempt to describe and summarize the most important changes in family and organizational functioning, societal changes in which these changes happen, stress the resulting diversity and describe how and why it is important to take this diversity into account when building psychological theories of work-family relationships. Concluding suggestion is that work-family relation issues are very rarely singular, as many modern theories implicitly stipulate, but rather tend to vary greatly depending on the properties of family and properties of the work environment. Therefore theoretical generalizations of work-family relations should always specify properties of work environments and properties of family units they are valid for. They should also specify the general cultural environment in which they are valid.

Keywords: work-family relations, work, family, roles.

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Introduction

Back in 2010, when the team of researchers of what was to become the project 179002 – „Models and indicators of work and family role synchronisation" was still making plans for the research program that was to take place in the scope of the project, we were reviewing the literature on work-family relations. We were well aware that there exists a multitude of theories describing work family relations. In one of our early literature reviews (Hedrih, Todorović, & Ristić, 2013) we lidentified six distinct and seemingly competitive theories or theoretical approaches describing the relations between work and family roles. These were theories of spillover, work-family conflict, compensation theories, segmentation theories, instrumentation theories, integrated theories and there are probably more. Thinking that these theories are competetive and hoping that further studies, on bigger and larger samples could provide more data and better insight into which of these theories better represents the realt interactions between work and family roles, we set out to design a big study that was to encompass as much variables as possible, on as big and as representative a sample as we can manage to obtain with the project resources. Hence, „The study of work and family relations in Serbia at the beginning of the 21st century", as we named it, was created. Reviewing the literature, we noticed that one shortcoming of the existing research data is that practically all of the empirical studies so far included only a limited selection of variables and samples from specific populations that could generally not be expected to be representative of the general population. In an effor to overcome these shortcomings we designed a study that we would: 1) Conduct on a big sample from a general population, one as representative of the general population of Serbia as can be obtained; 2) Assess a large number of different variables from area of work and work relations, family and family relations and a number of personal variables. But to achieve this using existing instruments would require a prohibitively large number of items and questionnaires, and thus we would not be able to have a large and representative samples. Encouraged by results of other authors who experimented with extreme shortening of psychological assessment instruments (e.g. Donnellan, Oswald, Baird, & Lucas, 2006; Rammstedt & John, 2007) and results of some of our own research into psychometrical qualities of construct assessment through extremely short scales, holistic measures (e.g. Hedrih & Pedović, 2016) and what we called marker questions, we decided to construct a battery of extremely short scales and marker questions for measuring a large array of different variables from the area of work and family relations. Thus, the PORPOS battery was created. Some of the measures within it were created by taking items with best item-total correlations from existing scales and some measures in it were constructed from scratch. But in spite of that, a lot of discussion inside the research team ensued about which measures to include, which not to include and what could the maximum reasonable length of the battery be. In the end it consisted of 389 items, measuring more than a hundred different variables. Pilot testing showed that it could be completed by a typical examinee in 30-40 minutes. A geographical cluster sample

of Serbian population was planned (excluding the province of Kosovo and Metohija, at the time not under the control of the government of the Republic of Serbia). And so the data collection started. After the pilot study, for which data collection was conducted in the city of Niš and some of the neighbouring villages, some changes were introduced to the battery and data collection strategy was tested. The main data collection phase moved forward. Data collection was planned to be conducted by visiting people's homes. This was done during the weekend in order to increase the chances of finding employed people at home. A number of data collection teams lead by researchers of the project and employing students of psychology from Niš, Belgrade, Novi Sad and Novi Pazar as interviewers travelled to various towns and villages throughout Serbia, in accordance with the sampling plan and interviewed people. In the end, several months later, a sample of something over 2200 people was collected. Data processing could start. Our first worry, that the short scales and marker questions would not have adequate psychometrical properties was shown to be unfounded. Various analysis conducted showed that most of the measures used had sufficiently good reliability and validity to be considered a usable assessments of the constructs they were intended to assess.

Now that we had the data, the analysis part commenced. What we were hoping was that the results would enable us to test and support or disprove some of the competing theories of work-family relations, and create an integrative model describing relations and interactions of numerous variables proposed as relevant for work-family relations by various authors. But the results were a surprise. The most important find was that, when the entire sample was considered, most theoretically significant correlations was very low. A more thorough analysis showed that correlations between variables varied based on many factors. Most importantly, those relations that were most important for the topic of our study tended to vary greatly between subsamples, often even switching directions. Variables that were correlated for females were not correlated for males and vice versa. Variables positively related on younger subsample would be unrelated or negatively related on the subsample of older participants. Work environment properties that would seem to have protective effects against burnouts on participants without children would have no effect on parents. And the list of moderation effects and variables having moderating effects on others goes on. It became clear that one single model of relations that would fit all groups and the entire sample could not be made.

It would seem that various groups of people live in different „psychological worlds", and that what consistent results previous studies obtained came from the fact that most of the previous studies involved homogenous samples, selected based on some common property, thus obtaining a specific set of relations between variables in the study. But, review of the literature found no satisfactory systematic theory of when are which relations between variable accurate. Also, the conclusion that study led to – that there are different groups of people that live in different „psychological world" was a powerful one, especially given the fact that such notion and its implications are practically not considered in modern psychological

science at all. Reviewing existing psychological theories, it is obvious that they rarely, almost never, specify groups of people they are valid for (except maybe when age differences are taken into account), but are generally formulated as applying to all people everywhere. A reconsideration of the approach, and nature of these differences is definitely needed.

Organizations, families and psychological theories

Organization is on of the central notions in the important area of psychology that is called organizational psychology. It is defined as „A social unit of people that is structured and managed to meet a need or to pursue collective goals. All organizations have a management structure that determines relationships between the different activities and the members, and subdivides and assigns roles, responsibilities, and authority to carry out different tasks. Organizations are open systems--they affect and are affected by their environment.“ (http://www.businessdictionary.com/definition/organization.html). Or „An organization is an entity comprising multiple people that has a collective goal and is linked to an external environment“ (https://en.wikipedia.org/wiki/Organization) .

Organization defined in this way is the topic of study of organizational psychology. On the other hand, family, another important concept, well-known to everyone, but also very difficult to define, as there is still no general consensus on it's definition is studied by family psychology, developmental psychology and other disciplines. As things are, families are not studied in the scope of organizational psychology.

But, if we look at the definition of an organization, it is clear that a family meets the criteria for an organization. Family is an organization! Then how is it, that families and other types of organizations are considered to be something different? It is of course clear, that families have many specific psychological properties that other types of organizations do not. But so does every specific type of organization have its own special properties. We can also notice that this duality pervades most of the European society and is also reflected in laws, psychological division between private and professional life spheres, customs etc. But where did this distinction between families and non-family organizations come from? Was it always there, or is it a new development?

If we take a look at what is known from ancient history and what types of organizations existed, it can be concluded that in the ancient times, this distinction between two spheres of life – family and professional one did not practically exist. Forms of organizations one could find were: 1) Family organizations and 2) Organizations that excluded families. Looking through history family organizations were the first type of organizations to develop. These include entities ranging from nuclear families, similar to the ones we have today, and nuclear families with multiple partners, over extended families, family clans and tribes, to complex

kin-based organization or so-called kin-based corporate entities (Goldschmidt & Kunkel, 1971; Martin, 1996). These types of organizations were the dominant types of organization and the only types of organizations for most of the people throughout history. In many parts of the worlds these types of organizations remain prevalent and are also often the only organizations people participate in. Oftentimes, these family organizations included non-kin either through adoption, or through ownership of slaves or servants. Servants were often considered members of the household and thus effectively parts of the family organizations, although of different status. Their inclusion in the family organization was lifelong. One should bear in mind that for example monarchies are also kin-based and therefore family organizations. What is important for this discussion is that these family organizations provided all the necessities of life for their members. What was needed for life was produced inside the family or traded with the outside. Family members did not participate in other organizations, hence there were no work-family relations issues in the modern sense.

Organizations that excluded families were comparatively rare through history, including relatively few people compared to family based organizations. Such organizations included primarily various military and religious organizations, but also some state bureaucracies. What was typical for them is that having a family was explicitly forbidden to their members. For example, imperial Roman legions were one such organizations. When a person entered a Roman legion, he also took an obligation to not marry. If he was already married at the time of admission to the legion, his marriage would at that time become void, and his wife's family was entitled to the return of their dowry. At the same time all of his obligations to his family ceased. And while Roman legionnaires were known to have had informal wives and children outside camps, these families were not officially recognized, and legionnaires had no legal obligations towards them (Acemoglu & Robinson, 2013). Another example of organizations that exclude families are various religious and monastic orders such as for example catholic Christianity or Christian monks in general, or priestesses of the goddess Vesta, so called Vestal Virgins of ancient Rome. Membership in these family exclusive organizations was typically very long and in many cases lifelong. As members of these organizations did not have a family, again issues of work-family role synchronization did not appear in the current context.

What can be observed from this review is that practice of a person being a member of various organizations and having to split time and synchronize roles between his non-family organization and his family is a concept that is relatively recent from a historical perspective.

Appearance of the system of dual organization membership similar to work-family dualism that we have today, for most people did not happen before the industrial revolution and the birth of capitalism. Industrial production required large number of workers and these were mostly recruited from non-kin. Market economy also required the organizations to be able to quickly increase or decrease the numbers of its members (i.e. numbers of workers), following the market demands, and this

was something that could not be achieved through family based organizations, as family membership is a lifelong commitment. One does not get fired from a family!

Expansion of industrial production and availability of mass produced goods, clothes and textiles at first, and other types of goods later, started replacing internal production that traditionally occurred within the family. But to acquire these goods people needed money. And to obtain money, they needed jobs outside the family. This way, jobs in industry led to a greater availability of monetary resources to people which they could use to purchase needed goods instead of producing them inside the family. And this in turn lead to ever greater outsourcing of methods for provision of family needs. Transition from largely self-sustained family and kin-based social units producing goods for their own use to modern family units that seek most of the goods and services a family needs from the outside has begun. Currently, modern family units outsource the provision for most of their family needs – from provision of physical goods, over education and child care to meal preparation and house cleaning. But to sustain this level of outsourcing, families need the means to purchase all of this from the outside, meaning they need money, and to obtain money they need to interact with the outside world in a way that would provide. For most people that means having a job outside the family. But they also need to remain a part of the family. This way, modern issues of work-family relations arise.

It should be noted that in many places and with many families, activities needed to obtain monetary resources for the family are not arranged through division of time between family and work roles, but through having family members completely devoted to outside activities. In earlier times, particularly before the enactment of modern laws regulating worker rights and limiting working time in formal organizations, working conditions were such that some family members were practically "given away" to outside organizations to work for them so that the family could obtain money for it. Such family members would spend practically all of their time working for the outside organization, while the needed work inside the family was done by other members who did not work outside. Family members employed by outside organizations were typically adult males, but were often also children, or younger adult males or unmarried adult males in more complex family organizations. This remains the case even today in many places, with some family members being devoted to outside work and provision of financial resources, while others work inside the family exclusively. Sometimes this division includes complete separation of the member working outside from the family that lasts for years or is even lifelong, such as in the case of for example migrants working in foreign countries (e.g. Khalaf & Alkobaisi, 1999; Parreñas, 2005; Section, 2017; Sönmez, Apostolopoulos, Tran, Rentrope, & Apostopoulos, 2011).

Comparing the economic model of the so called "modern family" which is a typical family studied in psychological literature, and which arose during the 20th century and became widespread in "developed" countries during the second part of the 20th century with the traditional family models, three differences are strongly observable: 1) Double employment – modern nuclear families have typically both

partners working outside the family, 2) Almost total outsourcing in families – unlike families of old or traditional families which produced most of the goods needed themselves and provided most of the services by family members, modern families outsource almost everything. Due to double employment i.e. all adults working outside family, this outsourcing is facilitated as more money is available for paying the provision of outsourced goods and services. 3) Child care became increasingly intensive – as parents spend large parts of the day working, children are given to non-family members specialized in child care – baby sitters, kindergartens, schools, sports clubs, afternoon courses etc. This provision of child care by people who are not family members in institutions caring for many children from different families is a modern development, not typically found in families only some centuries ago and in many traditional families today. Child care and welfare of children is also the focus of work of various highly educated specialists – health workers, psychologists, education specialists and others working in institutions specialized for providing child care.

Having established that families are in essence organizations, in further text we will call organizations other than family – non-family organizations.

Diversity of organizations and families, what changed?

Reviewing the literature on work-family relations, one can also notice that one important aspect not considered enough for purposes of theory development is the vast diversity of both existing organizations and families. Far from being all the same, organizations differ in many ways. They can differ in various psychological aspects of relations between their members such as strength of ties (Granovetter, 1973), they can be extractive and inclusive by their nature, and somewhere in-between (Acemoglu & Robinson, 2013), they differ on dimensions of organizational culture (Hofstede, 2011), values (e.g. James, 2014). They also differ in legal status, ownership, their organizational goals and purposes and other aspects.

When families are considered it can be noted that there is also no singular definition of what constitutes a family today. Apart from the "nuclear family" consisting of two partners and their children, there exist various forms of extended families (more than two generations of ancestors/offspring in the same household), family clans, polygamous family groups, group marriages and groups of various other compositions functioning as families. And in all this, what is important for work-family relations considerations is that families can be analyzed along the same lines as other organizations, save for some aspects that are more or less constant for families can differ in other types of organizations.

And on top of this, when considering diversity of organizational and family units, one should bear in mind that a lot of changes have happened both to organization and family functioning and status in society at large in the recent century. What changed?

The most obvious are probably the legal changes i.e. changes in legal regulations:

1) Family exclusive policies have been banned to organizations in many countries – for example Serbian laws explicitly prohibit organizations to consider family related matters in a negative way of an employee when deciding on work related matters about him. Laws also proscribe various special rights and protection measures to employees for special events from the family sphere – maternity leave, days off when children are ill etc.

2) Family members are banned from preventing professional development or employment of other family members – choice of profession is free, and actions to prevent a family member from pursuing a profession of his choice can fall under family violence laws and be prosecuted.

3) Emphasis on free personal choice – changes in various laws have enabled people the free personal choice both in family and non-family organizational matters. Subject of laws became individuals and not families. It became easier to leave undesired organizations, and also choices about family forming became a personal choice. Marriage became a personal choice, not something that person could be forced to by the family.

4) Total legal criminalization of use of force of coercion both in workplace and in family. Use of force or coercion against employees in non-family organizations is now called "mobbing" and is banned by law. In Serbia, there is a separate law regulating this matter. Use of force and coercion against family members is now called "family violence" and is also explicitly banned by law. This is in stark contrast to centuries old practice of the most senior family member having a sovereign right to enforce his/her will on other members.

5) Promotion of organization building strategies based on weak ties – as opposed to traditional organization building strategies based on strong ties. Traditional ways of filling positions in organizations, by assigning relatives, friends, kinsmen to free positions are now referred to using words of negative evaluation such as nepotism, cronyism, favoritism etc. Instead laws require organization to be equally open to all individuals, independent of personal relations of organization members with them, or of their ethnic, gender and other personal properties. Laws prohibiting discrimination based on personal properties not relevant for successful performance of a particular job see to that.

6) Decoupling between business and political elites – through laws banning monopolies, cartels, conflicts of interest, and also through institutions aimed at preventing corruption.

7) Legal protection of workers – through social security, legal regulations for dismissal, through unemployment insurance and other similar institutions.

Properties of organizations also changed. These changes included:

1) Decoupling of organizations and families – while organizations historically were almost exclusively family or kin based organizations, most modern organizations in the "developed" world are not family nor kin-based organizations. In our study, 78,2% of participants stated that they do not ever work with family members. In modern Serbia, families and business organizations are two separate things for most people.

2) Decoupling between business and political elites – unlike the case of ancient or medieval times in modern Europe and many other parts of the worlds, wealthiest people are not the same as those running the country. Comparatively, leading politicians are not the wealthiest people in the country.

Promotion of weak ties and organization building strategies based on them (Granovetter, 1973). While traditional family organizations were based on strong ties between their members, modern organizations promote the strategy based on weak ties. Even more, approaches based on strong ties between people are now referred to with words of negative evaluation – nepotism, cronyism. Employment strategies emphasize consideration of merit only, without consideration for relations. Also, management strategies include dismissal of workers based solely on merit, without much consideration for ties between employees. Members of the organization are considered "human resources" instead of family members. Fluctuation between organizations is often encouraged and formation of strong ties between organizational members seen as a negative development, often a precursor to corruption. Probable result of this is lower commitment of workers to the organizations, that is subject of research of increasing number of studies.

Income distribution – in spite of fast development of technology, resulting in rising productivity, wages in the US have been found to be stagnant or declining(Bosworth, Perry, & Shapiro, 1994), especially for young men (White & Rogers, 2000).

Globalization – a factor due to which work processes and organizational structures are becoming ever more similar throughout the world. Also, competition and reach of many companies became global, reducing the number of places where organizations faced only local competition, and also removing many local monopolies.

IT revolution – influenced organizations by removing many low-skill jobs and also many of the most, repetitive, hard or dangerous. It also changed the skill sets needed by workers

Much stronger inclusion of women in organizations – average salary earned by women has grown in the last decades of the 20th century, indicating that women are taking ever more skillful positions and getting more involved in non-family organizations (White & Rogers, 2000), while becoming disproportionately represented at every level of higher education in the US (Barnett & Hyde, 2001).

Changes in family functioning were also profound:

1) Almost total outsourcing of production of goods and provision of services needed for the family is coupled with increased demand for quality of service provision to family members. A number of new profession arose or became widespread that provide service that used to be performed by members of family units in earlier times.

Stark despecialization of family roles occurred. While in earlier times, a division of family roles was prevalent, usually with males working outside the family and females working inside the family (Barnett & Hyde, 2001), modern families tend to have both partners working both inside and outside the family. This despecialization of roles resulted in reduced difference in average earnings between males and females (Blau & Kahn, 2000), and also in men spending more time in doing housework and childcare (Bianchi, Sayer, Milkie, & Robinson, 2012; Bond, Galinsky, & Swansberg, 1998).

Increased investment in childcare and increased quality of childcare. Almost total criminalization of infanticide (Moseley, 1985), abolition of "patria potens" and similar traditions and total criminalization of family violence.

Free choice of romantic partnerships and increased use of strategies based on weak ties (e.g. changing partners when faced with difficulties in relationships) as opposed to earlier traditions of arranged marriages and partnership strategies based on strong ties (e.g. investing in making the relationship work, longer or lifelong partnership commitments).

Families became smaller and the definition of family became narrower. Modern use of the word family in everyday life generally refers only to parents and their children. Also, developed world saw a sharp decline in fertility rates and therefore number of children per family (e.g. Berrington, 2004)

In spite of all these changes, it is important to note that they did not encompass all of the families and all of the organizations throughout the world. While families and organizations following these "modern" patterns are typically widespread in urban areas, in the "developed" world and in populations well integrated into the official society, traditional patterns are pervasive in less integrated or less educated groups and tend to also be pervasive in rural areas. There are also many parts of the world where these traditional patterns remain dominant.

It should also be noted that scientific study of work-family relations also seems to be divided along these lines. While psychologists tend to study families and organizations following the above described modern patterns i.e. work-family relations in western urban types of families and enterprises, study of these same topics in non-western or non-urban areas seems to have become a topic of anthropology (e.g. Goldschmidt & Kunkel, 1971) with little interaction between these two research branches.

But this division is not strict and empirical studies, including our own, show that within human populations, there exist both traditional and modern families

and organizations and also many families and organizations that are somewhere in-between. We are very far from dealing with a singular family model and singular organizational model. On the contrary, in reality there is very great diversity in properties and structure of both families and organizations. Their structure and functioning is also often quite different from typical notions of these in legal regulations and much of the psychological literature.

For example, although modern views tend to have a negative view of family members working in the same organization (nepotism), 7,5% of employed participants of our study reported working exclusively with family members. While laws and regulations explicitly protect families and family creation and there are many services supporting families with employed parents, 33% of people stated that at least to some extent their job is preventing them from starting a family or having a romantic partner. 8-10% of employed participants totally agreed with these statements. Also, in spite of laws and social services protecting and supporting families, studies show that educated women tend to have less children although they initially plan to have more children then less educate women. This happens in spite of the fact that educated women have greater resources available to them that they could use for supporting a family (Berrington & Pattaro, 2014; Testa, 2014). This result is reproduced in our own empirical data.

In spite of laws and accepted social values protecting freedom of work and vocational choice, when we asked unemployed participants in our study if their family obligations prevent their professional development or continued schooling, 61-63% percent refused to answer this question, and of those that did 46% to some degree agreed to the statement that their family obligations prevent their professional development or continued schooling, while 40% stated that at least to some degree they are unable to find work outside home or a job because of family obligations. 19% and 17,9% of unemployed participants of our study who answered this question agreed somewhat or completely with these two statements respectively.

All this shows that much greater diversity exists both in family units and in organizations than is typically recognized in psychological literature dealing with work-family issues and this needs to be taken into account in future, both for empirical studies and theory development

Conclusion

All of this leads to the following conclusions:
- Except for maybe some most trivial issues, no singular conclusion of work-family relations can be drawn anywhere. Work-family relations and issues depend on concrete properties of the work environment and the family unit in question. Great existing diversity of work environments and family units provide for a great variety of outcomes when work-family relation issues are considered.

- Changing properties and diversity of societies, families and organizations through time need to be taken into account when encountering and integrating differing results of empirical studies of work-family relations. But researchers should always be aware that trends of change in the society do not influence all families and organizations equally, and that many keep following traditional patterns of behavior, even when these become outlawed.
- Theoretical generalizations of work-family relations should always specify properties of work environments and properties of family units they are valid for. They should also specify the general cultural environment they are valid for.

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NOMOLOGICAL NETWORK OF RIASEC TYPES: INTERESTS, PERSONALITY TRAITS, WORK VALUES AND LIFE ROLE SALIENCE[2]

Abstract

The aim of this study was to investigate the relations between RIASEC interest types, personality traits, work values and life roles salience. Participants were 981 students in their final year of high school in Zagreb and other Croatian cities (12th grade, 18 years old, 67.2% females). PGI-Short was used to measure RIASEC interests, HEXACO-60 was applied to measure personality traits, abbreviated version of Values Scale was used to measure work values, and short version of Salience Inventory was applied to measure salience of life roles. All applied measures showed adequate reliability and structure. The observed relations between constructs mainly confirmed theoretical expectations. The most prominent relations were found between interests and personality traits, which is particularly due to the strong importance of Openness to experience for explaining Artistic and Investigative interests and Emotionality for explaining Social interests. Work values had additional contribution for explaining interests, which was mostly expressed for Adventurous value orientation, due to its incremental validity in explaining Realistic and Conventional interests. The relations between RIASEC interest types and life role salience were weak and mostly negligible, indicating the relative independence of these constructs.

Keywords: vocational interests, RIASEC types, work values, life roles, personality traits

Background

Choosing an occupation is one of the most important life choices because it directly affects future satisfaction and success, both in professional and personal life. Career counselors aim to help people to select the most suitable career that will lead

to personal self-realization. Typically counselors focus on interests (what a person likes to do) and abilities (what a person can do) in order to achieve congruence of personal traits and characteristics of their working environment. It is widely believed that such congruence (or person-environment fit) contributes to job satisfaction, better job performance, lower stress levels, longer stay in the workplace and more successful career.

One of the most famous theories of career choice is Holland's theory of personality traits and working environments, which defines 6 types of vocational interests and commensurate 6 types of working environments (Holland, 1966, 1997). Holland referred to them as RIASEC types (*realistic, investigative, artistic, social, enterprizing* and *conventional* types). Holland adopted Parsons' view on congruence and proposed that, for example, a Realistic person would benefit most in Realistic working environment. By now Holland's theory has been thoroughly investigated and it's structural, construct and concurrent validity has mainly been confirmed (Nauta, 2013).

RIASEC types

Holland described six RIASEC types through broad set of related preferences, competences, traits, believes, goals and values that are typical for a person that belongs in particular type. Conveniently they are known as interest types, but Holland also refer to them as personality types, which stresses their broadness. RIASEC types represent theoretical models or prototypes with which people can be compared to in order to estimate their resemblance to each (proto)type. They develop through interaction of personal and cultural factors, such as biological heritage, influence of parents, peers, social status and physical environment.

Realistic type is mechanically or technically inclined, interpersonally reserved, pragmatic, straight, conventional, inflexible, and is lacking social skills. Investigative type is scientifically inclined, rational, intellectual, scholarly, curious, shy, and independent. Artistic type is inclined toward artistic endeavors, expressive, creative, sensitive, imaginative, emotional, open to new ideas, and unconventional. Social type is inclined towards helping others, friendly, socially responsible, extroverted, agreeable, and dependent. Enterprising type is inclined towards leading or persuading others, socially dominant and adventurous, energetic, extroverted, and enthusiastic. Conventional type is inclined toward organizational or computational activities, conformist, associated with traits ad conformity and orderliness, practical, cautious, and traditional (Holland, 1985).

Due to their characteristics, some types are more similar than the others. For example both Investigative and Artistic types both like to explore new ideas, while Realistic and Social type differ a lot according to their preference to work with people. Therefore, Holland postulated structural hypothesis about relations between RIASEC types. He proposed hexagonal model which reflects similarity of types (Fig. 1). In Holland's hexagon peaks represent RIASEC types, while spatial

closeness and distance between the types reflect their likeness and diversity. Types that are spatially closer are psychologically more similar, while conversely types that are more distant are psychologically more distinct. Hence, the most similar interests are at adjacent hexagon peaks, such as Realistic and Investigative interests, while interests at opposing peaks are mutually different, such as Conventional and Artistic interests.
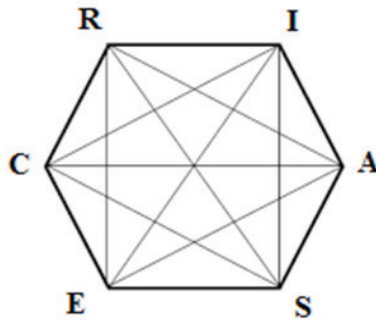
Fig 1. Hexagonal model of RIASEC types

Measurement of RIASEC types

In order to estimate resemblance of a person to the six vocational interest types, typically interest questionnaires are used. After filling out interest items, a client gets a score on 6 interest scales, which can be interpreted on several levels. First, it is possible to determine the dominant RIASEC type of the individual, or the most pronounced RIASEC type in the total profile. However, an individual is characterized by all six RIASEC traits and not just by the dominant one, so other RIASEC types should also be considered in order to get clearer picture of one's interests. Hence, often three most prominent RIASEC types are used, which is referred to as high-point codes. For example, a person can be described with IAS high-point code, which specifies that person's interests are dominantly investigative, but also to some extent artistic and social. However, high-point codes do not reveal any information on the level of endorsement of these types, neither do they provide any data about remaining three interest types. Therefore the most complete description of someone's RIASEC personality includes the similarity of a person to all six types, forming the full RIASEC profile. Through RIASEC profile it is possible to see fine differences in pronouncement of different types, and also a general profile elevation.

Among number of existing RIASEC questionnaires, the most famous are Holland's Self-directed Search (SDS; Holland, 1994) and Vocational Preference Inventory (VPI; Holland, 1985). Also, nowadays is also available Tracey's Personal Globe Inventory in its longer or shorter form (Tracey, 2002, Tracey, 2010), which yield scores on spherical interest scales, but also provide scores on RIASEC interest

types. However, RIASEC types can also be determined by observing one's behavior. RIASEC types manifest themselves through one's vocational choice, choice of area in which the person is educated, person's current employment and working history or a combination of all of the above mentioned data (Holland, 1997).

Over the last 20 years, a number of measures of vocational interests have been adapted for Croatian population or developed in Croatia. We translated and evaluated Holland's Self-directed search (Šverko & Babarović, 2006), Tracey's Personal Globe Inventory (Šverko, 2008), and Personal Globe Inventory-Short (Šverko & Babarović, 2016). We also developed Pictorial and Descriptive Interest Inventory (Šverko, Babarović & Međugorac, 2014), and two versions of Inventory of Vocational Interests - IVI-48 (Šverko & Babarović, 2016) and IVI-96 (Černja, Babarović, Šverko, 2017). Rich research experience systematically confirmed theoretical and practical validity of adapted and developed measures.

Personality traits and vocational interests

Holland (1966, 1997) claimed that career choice is a reflection of personality. Both interests and personality traits have important motivational function and guide ones' career behavior. When describing RIASEC types, Holland (1997) named number of personality traits which are typical for each type. He also integrated some personality items in Self-directed Search (Holland, 1994, e.g. "I am a careful and meticulous person" for C type or "I can be very persuasive" for E type) and also claimed that interest inventories frequently include large number of items relating to personality, just as personality questionnaires include large number of items relating to vocational interests and preferences (Costa, McCrae and Holland, 1984). Therefore RIASEC vocational interests can be interpreted as an expression of personality traits and Holland (1997) even refers to his theory of career choice as a theory of personality.

Great number of studies was conducted in order to evaluate relationship between personality traits and vocational interests and observed relations were apparently consistent with Holland's theoretical propositions (e.g., Costa, McCrae & Holland, 1984; Defruyt & Mervielde, 1997; Larson & Borgen, 2002; Holtrop, Born, & de Vries, 2015; Pozzebon, Visser, Ashton, Lee & Goldberg, 2010; McKay & Turner, 2012; Šverko & Babarović, 2016). Meta-analytical studies stress that Investigative and Artistic types were consistently related to Openness to Experience; Social and Enterprising types to Extraversion; and Conventional type to Conscientiousness (Barrick, Mount & Gupta, 2003; Larson, Rottinghaus & Borgen, 2002). Furthermore, the HEXACO traits were more closely related to vocational interests than Five-Factor traits, even when the Honesty/Humility dimension was excluded (McKay & Tokar, 2012).

Work values and vocational interests

Holland (1966, 1997) also lists a set of specific values and life goals for each RIASEC type. According to Holland, values characterize each RIASEC types and they crystallize along with interest differentiation. Interests and values are both preferences that guide our behavior. When thinking about personal career, people are usually concerned with what they would like to do in their future job and what they find important to achieve through their career. These concepts are closely interrelated, as people mainly like to engage in activities that lead to the satisfaction of their important values. For example, it is very likely for people who like to engage in many social activities to also stress big importance of social interaction and close social relations.

Research studies have to the some extent confirmed this view. According to the data, interests and values are quite distinct psychological constructs which overlap in a logical way. Studies revealed weak, expected correlations between interests and values (e.g., Astin & Nichols, 1964; Gordon, 1975; Laudeman & Griffeth, 1978; Tan, 1998), and also theoretically funded differences in values of different RIASEC types (e.g., Super, 1962; Ivey 1963; Baird, 1970; Salamone & Muthard, 1972; Breme & Cockriel, 1975; Super, 1995). For example, among most prominent findings were positive relations between individualistic values and artistic interests, universalism and social interests, utilitarian values and enterprising interests, self-actualization values and investigative, artistic and social interests, and negative relations between social values and realistic interests, which have also been confirmed in previous study conducted on Croatian adolescent samples (Šverko & Babarović, 2006).

Life roles salience and vocational interests

Holland hasn't explicitly related vocational interests and life role salience, but according to his broad description of RIASEC types it is possible to develop hypothesis on their relations. People place particular importance on life roles which provide opportunity for following their interests and fulfilling their values. Such reasoning is funded in cognitive, expectancy-theory approach which has previously been adopted in Šverko's (1989) model of work-importance determinants. Šverko has confirmed that importance of work role is determined with perceived opportunities for attaining important values in work. This approach was further applied in development of Salience Inventory (Super & Šverko, 1995) and Life Values Inventory (Brown & Crace, 2002).

By relying on these ideas we can develop hypothesis on relations between role salience and interests. We can think of people who are socially oriented and like to engage in family social relations, and of people who are more prone to achievement and like to work hard in order to advance in a short time. Their interests and values will very likely reflect in their personal salience of different

life role. People who are more family-oriented will likely place more salience on their family role, while people who are more achievement-oriented will possibly stress the importance of their work role. Knowing the characteristics of RIASEC types it is very likely that Social types would be very committed to Family role, while Investigative and Enterprizing type would strongly engage in Work role. However, there is a lack of research on relations between interests and life roles salience. Engagement in different life roles directs one's career and personal life and knowing salient life roles for each RIASEC type would help understanding interest types and would therefore increase the effects of career counseling.

Nomological net of RIASEC types

This paper aims to provide information on nomological net of RIASEC types. Although a great number of studies investigated relations between interests and personality traits or interests and work values, there is a lack of research considering relations between interests and life role salience. Also, studies typically focused on relations between just two constructs, which neglected more thorough view on interconnectedness between constructs that are associated to Holland's descriptions of RIASEC types. Therefore, we will explore relations between RIASEC interests, personality traits, work values and life role salience in adolescent sample and develop a short list of determinants of RIASEC types which can be considered important in career choice process. Such detailed exploration of nomological net of RIASEC types would contribute to comprehensive understanding of vocational interests and individual differences, and would therefore provide important information for career counseling.

METHOD
Participants

The study involved 981 last grade students from grammar schools and vocational secondary schools from Zagreb and other North-western Croatian cities. In sample predominated girls (67.2%), and participants were mainly 18 years old. A heterogeneous sample of schools was selected to represent different fields of work.

Instruments

The Personal Globe Inventory-Short (PGI-S; Tracey, 2010) was used as a measure of vocational interests. The questionnaire consists of 40 items that represent different work activities and occupations (e.g., "Prepare financial reports", "Help others with personal problems", or "Repair cars"; "Musician", "Biologist", or

"Bricklayer"). The participants' task is to evaluate a) how much they like each activity or occupation and b) how competent they feel in each activity, using 1-7 Likert-type scale (1-strongly dislike/unable to do to 7-strongly like/very competent). The PGI-S provides results on ten basic interest scales and two prestige scales (Social Facilitating, Managing, Business Detail, Data Processing, Mechanical, Nature/Outdoors, Artistic, Helping, High prestige, and Low Prestige) which can be transformed into results on Holland's RIASEC types and dimensions of People-Things, Data-Ideas and Prestige. Previous studies confirmed good psychometric properties of PGI-S (Tracey, 2010; Zhang, Kube, Wang and Tracey, 2013). As reported previously, internal consistency and spatial organization of ten PGI-S scales was adequate (alphas in range .79 to .91, *CI* = .94, *p* = .0004; Šverko & Babarović, 2016). The circular structure of six RIASEC scales was also fully confirmed, as correspondence index was almost of maximal value (*CI* = .97, *p* = .02; Černja, Babarović & Šverko, in press).

The HEXACO-60 (Ashton & Lee, 2009) was used as a measure of personality traits. HEXACO-60 measures six personality factors: Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience. The questionnaire consists of 60 statements, 10 per each personality factor. The participants' task is to indicate how much they agree or disagree with a certain statement (e.g., "I would be quite bored by a visit to an art gallery.", "On most days, I feel cheerful and optimistic." or "People think of me as someone who has a quick temper.") using 5-point Likert-type scale (1-strongly disagree, 5-strongly agree). For each of the 6 personality factors, average scores are calculated, which can therefore range from 1 to 5. A higher score on a particular scale indicates a stronger expression of a particular trait. HEXACO-60 has shown adequate psychometric characteristics (Ashton and Lee, 2009). Studies conducted on Croatian samples clearly confirmed psychometric properties of both HEXACO-60 (Šverko & Babarović, 2016) and HEXACO-PI-R (Babarović & Šverko, 2013). As reported previously, the six-dimensional solution of HEXACO-60 was fully confirmed and internal consistency was adequate (alphas in range .72 to .81; Šverko & Babarović, 2016).

The Values scale (Super and B. Šverko, 1995) was used as a measure of 20 work values: that can further be combined into five broad value orientations: Utilitarian (achievement, advancement, economic security, prestige); Social (altruism, social interaction, social relations, cultural identity, participation in decision making, working conditions) Self-actualizing (ability utilization, aesthetics, creativity, personal development); Individualistic (authority, autonomy, lifestyle, variety); and Adventurous orientation (physical activity, risk). The original Values scale consists of 100 items, but for the purpose of this study the short 60-item version was developed. Items are simple statements presenting various goals such as "to do work that takes advantage of my abilities (ability utilization), "to get ahead" (advancement), "act on my own" (autonomy), "help people in need" (altruism), "have a high standard of living" (economic security), "living according to my ideas" (life style), etc. Participants are asked to indicate the importance of each value on a 4-point Likert-type scale, and their scores are derived by averaging their importance ratings over

all items composing each value or value orientation. Psychometric properties of abbreviated version follow parameters obtained on full version, both in international (e.g., Coetsier & Claes, 1990; Fitzsimmons, Macnab, & Casserly, 1986; Langley, du Toit, & Herbst, 1992; Nevill & Super, 1986b; Super & Šverko, 1995) and in Croatian samples (Šverko, 1987; Šverko & Babarović, 2006). As reported in this volume, the internal consistency estimates of 20 values scales were adequate (alphas in range .80-.83) and five dimensional solution was clearly confirmed (Babarović, Šverko & Crnko, this volume).

The Salience Inventory (Super & Šverko, 1995) was used to measure the salience of life roles. The original Salience Inventory (SI) measures participation in, commitment to, and value expectations from each of the five roles: student, worker, citizen, homemaker, and leisure-seeker. The SI comprises three subscales: the Participation scale measures the time and effort devoted to activities or thinking about various roles, the Commitment scale measures how affective attachment to various roles, while the Values Expectation scale measures perceived opportunity for the realization of 20 values from Values Scale in each life role. In this study the abbreviated and modified version of Salience Inventory was applied. First, as scales were applied on secondary school students that have generally not been engaged in working and homemaking role, life roles were combined and reduced to just three – learning and work, family and home, and leisure. Also a number of items in each subscale was also reduced, so Participation and Commitment scales comprised 5 items each, while Value Expectation scale still contained 20 items reflecting 20 values from Value Scale. Participants have to rate the salience of each of three life roles on 30 items of 4-point Likert type scale. Life roles salience is calculated by averaging all responses related to each life role, making the theoretical range 1-4. Previous studies confirmed adequate psychometric properties of Salience Inventory (*e.g.* Coetsier & Claes, 1990; Fitzsimmons, Macnab, & Casserly, 1986; Langley, 1990; Nevill & Super, 1986a). In this application the expected three-dimensional structure was confirmed, along with good internal reliability of salience of all three roles: learning and working (α=.91), family and home (α=.94), and leisure time (α=.88).

RESULTS

Descriptive data on vocational interests indicated the strongest preferences for Enterprising and Social domain. Similar pattern was observed for work values. The most pronounced were Utilitarian, Social and Self-actualization values. The Agreeableness was at least expressed personality trait in comparison to others. The most salient life role was Leisure time, when compared to the salience of Learning and working or Family and home life roles.

Table 1. Descriptive statistics of RIASEC scales, HEXACO traits, value orientations and life roles salience

	M	Sd
Vocational interests		
Realistic	25.18	10.31
Investigative	32.37	10.86
Artistic	26.26	12.34
Social	35.68	9.25
Enterprizing	36.59	7.69
Conventional	26.85	8.59
Personality traits		
Honesty/Humility	3.36	0.66
Emotionality	3.31	0.69
Extraversion	3.29	0.62
Agreeableness	2.96	0.61
Conscientiousness	3.34	0.55
Openness to experience	3.34	0.69
Work values		
Utilitarian	3.27	0.45
Social	2.95	0.46
Self-actualizing	2.98	0.45
Individualistic	2.57	0.49
Adventurous	2.15	0.68
Life role salience		
Learning and working	2.97	0.45
Family and home	3.11	0.51
Leisure time	3.27	0.38

The correlations between RIASEC types and explored constructs were weak to moderate, but still all constructs were related in expected and logical way (Table 2). Personality traits shared a bit more variance with RIASEC types than work values and life role salience, as Openness to experience achieved prominent correlations with Investigative and Artistic interests ($r=$ .42 and $r=$.59, respectively), and Emotionality was noticeably related to Social type ($r=$ .40). Bivariate correlations in Table 2 indicated expected and logical relations between interests, personality traits, work values and life roles salience. Investigative interests were moderately positively related Openness to experience ($r=$.42), Artistic interests were moderately related to Openness to experience ($r=$.59), Social interests were moderately related to Emotionality ($r=$.40), Social values ($r=$.32), and salience of Family and Home life role ($r=$.37). For Realistic, Enterprizing and Conventional types only weak correlations with other constructs were observed.

Table 2. Intercorrelations between RIASEC interests, HEXACO traits, value orientations and life roles salience

	R	I	A	S	E	C	HH	EMO	EX	AG	CON	OP	UT	SOC	SA	IND	ADV	LW	FH
Realistic																			
Investigative	.28																		
Artistic	.12	**.45**																	
Social	-.07	.18	**.36**																
Enterprizing	.11	.00	.08	**.57**															
Conventional	**.91**	.24	.06	.08	**.40**														
Honesty-Humility	-.15	.06	-.13	.16	.01	-.16													
Emotionality	-.28	-.04	.03	.16	-.10	-.02	.16												
Extraversion	.03	-.05	-.13	.15	.25	.09	-.09	-.09											
Agreeableness	.08	.01	.01	.12	.00	.19	-.02	-.03	.07										
Conscientiousness	.08	.08	.00	.01	.16	.13	-.09	.02	.03	.03									
Openness to exp.	.04	**.42**	**.59**	.10	-.05	.07	.07	-.11	.23	.00	.12								
Utilitarian	-.07	-.04	-.04	.07	.21	.02	**-.36**	.11	.15	-.13	.15	.00							
Social	-.18	-.14	-.05	.07	.25	-.11	.05	**.39**	.22	.03	.06	-.07	**.46**						
Self-actualizing	-.05	.10	.24	.15	.11	-.02	-.04	.09	.17	-.02	.14	**.31**	**.55**	**.52**					
Individualistic	.03	-.03	.05	-.02	.07	-.08	**-.31**	-.08	.12	-.11	.06	.12	**.52**	**.38**	**.33**				
Adventurous	.22	.06	-.01	.14	.11	-.08	-.08	.22	.25	.12	**.31**	-.06	**.49**	.22	.25	.20			
Learning/Work	.02	.11	.09	.25	.26	.12	.05	.22	.25	.05	**.31**	.12	.16	.29	**.33**	**.32**	.20		
Family/Home	-.04	-.10	-.05	**.37**	.28	.04	.13	**.33**	.14	.12	-.14	.16	**.33**	**.40**	.18	.06	.21	**.41**	
Leisure time	-.02	-.06	-.02	.11	.12	-.02	-.08	.03	.15	-.02	-.05	.05	.19	.19	.19	.21	.12	.12	**.30**

Note. All correlations greater than .07 are statistically significant at .05. Correlations greater than .30 are printed boldface.

Six hierarchical regression analyses were conducted in order to explain variability of six RIASEC scales. Predicting variables were entered in three blocks – personality traits in the first block, work values in the second block, and life role salience in the third block. Three sets of constructs explained 16% to 40% of variance of RIASEC interest scales (Table 3). Artistic type was most thoroughly explained with personality traits, work values and life role salience (R^2 = .40). All three sets of constructs had unique part in explaining RIASEC variance, but the observed incremental validity was stronger for work values and then for life role salience. Work values explained additional 2 to 6% of RIASEC variance over and above personality traits, while the effect of life roles salience was very weak, as life roles salience additionally explained just 1 to 3% of RIASEC variance over personality and values (Table 3). This is not surprising due to the observed correlations between work values and life roles salience (Table 2). Beta coefficients obtained in the last step of hierarchical regression analysis (Table 3) stressed the most prominent bivariate correlations (Table 2). For Realistic type important contribution of Emotionality (β=-.21) and Adventurous values (β=.23) was found. The most important determinant of Investigative type was Openness to experience (β=.41). Artistic type was strongly explained by Openness to experience (β=.57). Social type was dominantly explained by Emotionality (β=.31). Enterprizing interests were explained by Emotionality (β=.20). For Conventional type the most important contribution was observed for Adventurous values (β=.20).

Table 3. Contribution of personality, values and life role salience for explaining RIASEC interests: Standardized regression weights in the third step of hierarchical regression analysis and contribution of each block of predictors (R^2 and R^2 change)

	R	I	A	S	E	C
Honesty/Humility	-.18*	.01	-.01	.04	-.13	-.18*
Emotionality	**-.21***	.05	.08*	**.31***	**.20**	-.14*
Extraversion	-.03	-.05	-.14*	.10	.18	.01
Agreeableness	.06	-.01	.00	.05	.01	.07*
Conscientiousness	.11*	.01	-.07*	-.08*	.10	.16*
Openness to exp.	.04	**.41***	**.57***	.19*	.00	-.02
Utilitarian	-.12*	.00	-.07*	-.03	.04	-.05
Social	-.10*	-.14*	-.06	.14*	.05	-.12*
Self-actualizing	-.04	.03	.16*	-.01	-.11	-.07
Individualistic	.01	-.08	-.04	-.09*	.07	.05
Adventurous	**.23***	.14*	.05	.12*	.03	**.20***
Learning/Working	.06	.12*	.04	.05	.08*	.12*
Family/Home	.05	-.06	.05	.18*	.11*	.07
Leisure time	-.05	-.06	-.06*	-.02	.02	-.06

	R^2	ΔR^2	R^2	ΔR^2	R^2	ΔR^2	R^2	ΔR^2	R^2	ΔR^2	R^2	ΔR^2
Block 1	.11*		.18*		.38*		.23*		.16*		.11*	
Block 2	.17*	.06*	.21*	.03*	.40*	.02*	.28*	.04*	.18*	.02*	.15*	.04*
Block 3	.18*	.01	.23*	.01*	.40*	.01*	.30*	.03*	.20*	.02*	.16*	.02*

Note. p < .05. Important contributions are printed boldface (β > .20). Regression coefficients are presented only for the third step of hierarchical regression analysis.

Block 1 = personality traits, *Block 2* = personality traits and value orientations, *Block 3* = personality traits, value orientations, and life role salience.

To observe relation between all four sets of variables, we have conducted multidimensional scaling (Proxscal method). The organization of variables in two-dimensional space reveled logical nomological network between constructs (Figure 1). The RIASEC types were organized in an ordered and circular way, close to the theoretical postulations. The spatial organization of RIASEC types was somewhat more ellipsoid than circular. This is likely due to the inclusion of all variables in MDS at the same time, which added the method variance, observable in the first dimension. Further, the relations between RIASEC types and other constructs was also as expected. Artistic and Investigative interests were close to Openness to experience; Social interests were close to Emotionality, Honesty-Humility, Conscientiousness traits and Family and Home and Learning and Working life roles, Enterprizing type was close to Extraversion and Adventurous values, and also to Self-actualization, Individualistic and Utilitarian values, while Conventional and Realistic type were close one to each other and also to Adventurous values.

Figure 1. Two-dimensional spacing of RIASEC interests, personality traits, work values and life role salience (Multidimensional scaling)
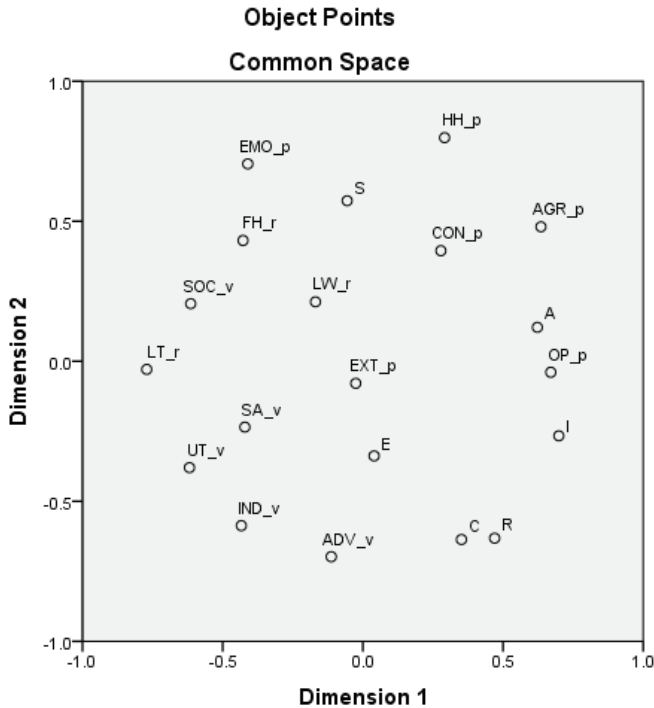
Note. Different measures are indicated by sufix *p* for personality (HH – Honesty-Humility, EMO – Emotionality, EXT – Extraversion, AGR – Agreeableness,

CON – Conscientiousness, OP – Openess for Experience), *v* for values (SA – Self-Actualization, UT – Utilitarian, IND – Individualistic, SOC – Social, ADV – Adventurous) and *r* for life roles (LW – Learning and Working, FH – Family and Home, LT – Leisure Time).

Discussion

Reported results clearly confirmed Holland's (1985) description of RIASEC types. The relations between RIASEC types, personality traits, work values and life role salience were very close to the theoretical descriptions of RIASEC types given in the Background section. As observed on bivariate and multivariate relations between constructs, most prominent relations are in line with theoretical expectations.

RIASEC interests shared common variance with both personality traits, work values, and life roles salience. The strongest relations between constructs were found between interests and personality traits, which is particularly due to the strong importance of Openness to experience for explaining Artistic and Investigative interests and Emotionality for explaining Social interests. Personality traits have shown to be important determinants of all RIASEC types, although for Realistic and Conventional type the observed contribution was very weak. However, work values had additional contribution for explaining Realistic and Conventional interests. Both Realistic and Conventional interests were related to Adventurous value orientation.

Although the correlation between Conventional interests and Adventurous value orientation could look surprising, it is not. Personal Globe Inventory measures Conventional interests with items referring to computer programing (Data processing and Business details PGI scales). It is somewhat different from Holland's Conventional type which is more oriented towards office work. Therefore, PGI-Conventional interests are more typical for males and also more related to Realistic interests, which we also observed earlier (Šverko, 2008; Šverko & Babarović, 2016). Thus, the relation between Conventional interests and Adventurous values is actually very reasonable.

Further, life role salience did not provide important contribution for explaining RIASEC types. Although Social type showed moderate relation to salience of Family and Home life role, in the regression model its contribution vanished, due to the moderate interrelatedness to Social values. Actually, life roles were related to values, which is not surprising due to the measurement of life role salience (Super & Šverko, 1995). The Value expectancy subscale of Salience Inventory reflects the perceived opportunity for fulfilling work values in different life roles, and it certainly strengthens the relations between values and life role salience.

The close interconnectedness between work values and life role salience is also clearly observed in Figure 1, where different types of measures were separated along Dimension 1. Work values were closely related to life role salience and also more separated from interests. The close relatedness between interest and personality was also obvious in their spatial closeness.

The descriptions of RIASEC types by using personality traits, work values and life role salience is very close to the theoretical descriptions given in the Background section. As observed on bivariate and multivariate relations between constructs, most prominent relations are in line with theoretical expectations. Realistic type is characterized by lower Emotionality and stronger Adventurous values; Investigative and Artistic types are defined by stronger Openness to Experience; Social and Enterprizing types are described by greater Emotionality, while Conventional type is labelled by stronger Adventurous values. Observed relations between interests and personality are strongly funded in previous research, both on Big Five (Barrick et al., 2003; Larson et al., 2002) or HEXACO theoretical framework (Holtrop et al., 2015; McKay & Tokar, 2012; Pozzebon et al., 2010). Also, the weak relations between interests and values were also previously found in numerous research (e.g. Astin & Nichols, 1964; Gordon, 1975; Laudeman & Griffeth, 1978; Tan, 1998), and also the relation between Realistic interests and Adventurous values was previously observed (Šverko & Babarović, 2006). The relations between RIASEC interest types and life role salience haven't been yet explored. Our findings suggest week and mostly negligible indicating the relative independence of these constructs.

The limitations of these findings can be mostly attributed to characteristics of the sample included in this study. The participants were high school students and the measure of life role salience was adapted for this population. In particular, the high school students are not engaged in working role and this scale vas adapted to "Learning and Working" subscale with somehow different meaning. The subscale measuring the homemaking role has different meaning for students comparing to adults. The most of high school students live in households with their parents, and don't have to play actual role of the homemaker. Thus, these results can be generalized to students' population, but the generalizations on adults is limited, especially for the relations between life role salience and other constructs.

Our results clearly confirm Holland's theoretical propositions on relations between RIASEC interests, personality traits, and work values. From the practical point of view, our results stress the incremental contribution of work values, which also provide important information on RIASEC types.

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DOES TYPE OF WORK ENVIRONMENT CORRELATE WITH BURNOUT? A CROSS-SECTIONAL STUDY[2]

Abstract

The goal of the current paper was to explore the relations between the type of work environment according to Holland's RIASEC theory and burnout and test if this relationship is moderated by gender and parental status. This was explored on a sample of 1444 employed residents of Serbia, 805 (55,7%) of which were female. They constituted a subsample of the geographical cluster sample of 2023 participants of the Study of diversity of family and job relations in Serbia. Work environment was assessed using the responses to HOL-H, administered as a part of the PORPOS battery. Other data used included the scores on the short burnout scale included in the PORPOS battery, and answers of participants to questions about age, gender and parental and partnership status. The results showed that level of expression of burnout symptoms is in statistically significant negative correlations with the extent to which a participants job contains elements of Artistic ($r=-.10$, $p<.01$), Social ($r=-.07$, $p=.01$) and Conventional ($r=-.07$, $p=.01$) work environment types. Level of burnout symptoms was lower with participants with children but only at the 26-35 age group ($rpbis=-.16$, $p<.01$). When subsamples by age and gender were considered results showed that structures of correlations with work environments differed for males and females and for different age groups. While resemblence of participants job to the Artistic type work envornment had the biggest correlation in employees up to 25 ($r=-.24$, $p<.01$), becoming insignificant in oldest age groups, correlations with other environment types became significant with age. The results demonstrate that structure of relations between work environment type and burnout differs with age, parental status and gender of employees.

Keywords: burnout, work environment type, RIASEC, Holland, gender.

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Introduction

Burnout was a concept first introduced by Freudenberg (Freudenberger, 1975) and Maslach (Maslach, 1976) to describe a specific type of response to chronic emotional and interpersonal stressors and the job. It was first observed and considered to be most intense in professions providing human services and healthcare. These jobs primarily focus on providing aid and services to people in need, which can then be characterized as emotional and interpersonal stressors. The term burn-out or burnout itself was proposed by Freudenberger (Freudenberger, 1975), who, upon observing the phenomenon in free clinic workers in the US, including himself, labeled it with the term. He stated that the term refers to becoming exhausted by making excessive demands on energy, strength or resources, and argued that this is what the phenomenon of burnout is alike to. It was later defined as a three-dimensional construct, consisting of exhaustion, cynicism and inefficacy related to the performance of one's job (Maslach, Schaufeli, & Leiter, 2001), with exhaustion being the most visible manifestation, but with the other two also being necessary to identify the phenomenon. According to researchers (e.g. Maslach et al., 2001) burnout happens when the excessive emotional load of the job a person performs exceeds the persons capacity to absorb or cope with other mechanisms. When this happens, the person tries to deal with the excessive emotional load by moderating the compassion for clients, decreasing own emotional involvement, manifesting so called "detached concern" in order to protect themselves from intense emotional arousal. In this way cynicism develops, which is the second dimension of burnout. A combination of excessive detachment and little concern leads to the person responding to clients in negative and dehumanized ways, thus becoming inefficient at his/her job of providing aid.

Although scientific interest in the phenomenon of burnout started in the 1970s, the real increase in empirical research dealing with the phenomenon of burnout started in the 1980s and has remained substantial ever since. One key point in this development was the development of the Maslach burnout inventory or MBI (Maslach & Jackson, 1981), an instrument that is to become probably the most used instrument for assessing burnout. It conceptualized burnout as a three-dimensional construct.

In the time since, researchers have explored various aspects, correlates, manifestations and consequences of the burnout phenomenon, as well as programs to prevent or deal with burnout. It was found that people most effected by burnout are those working in professions that involve a lot of emotionally intense human interactions, especially those that involve a lot of negative feedback (Maslach et al., 2001). Probably the most prominent populations in terms of research interest were, for this reason, those of medical workers (Arrogante & Aparicio-Zaldivar, 2017; Brasileira et al., 2017; Elmore, Jeffe, Jin, Awad, & Turnbull, 2016; Elst et al., 2016; Fang, 2017) and teachers (Boujut, Popa-Roch, Palomares, Dean, & Cappe, 2017; Fiorilli et al., 2015; Foley & Murphy, 2015; Kabadayi, 2015; Kim, Youngs, & Frank, 2017; Ko Sir, Tement, Licardo, & Habe, 2015; Lauermann &

Onig, 2016), but with other populations coming into focus also, as interest in the burnout phenomenon increased (Craiovan, 2015; Lee, Choi, & Chae, 2017; Shi & Zhang, 2017). One of the populations also included in the research were parents. As child rearing can also include much emotional and interpersonal stress, burnout in parents attracted attention of researchers (Le Vigouroux, Scola, Raes, Mikolajczak, & Roskam, 2017). It was also found that individual susceptibility to developing burnout is related to one's dispositional factors, with some personality traits like high neuroticism (N), low agreeableness (A) and low consciousness (C) of the big five or narcissistic personality traits or depression making a person more prone to developing burnout (Le Vigouroux et al., 2017; Schwarzkopf et al., 2016), and other properties such as belonging to Artistic and Social types proposed by Holland's theory acting protectively towards burnout (Orkibi, 2016).

And while empirical research has identified a number of professions under high risk of burnout, studies systematically examining the relationship between job properties and burnout seem to be lacking in the literature. One major issue when designing such a study would be systematizing the many different job existing in the world into a number of categories that can be included in a study, but in a systematic way. For this purpose, a possible solution is presented by the theory proposed by John Holland (Hogan & Blake, 1999; Holland, 1959, 1994). This theory proposes that people can be divided into six types according to personality characteristics that predispose them to like to perform or participate in certain activities and dislike performing and participating in others. The theory also proposes that, corresponding to these six types of personalities, there exist six types of work environment – Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E) and Conventional (C). In his theory, types of personality and types of work environment are named equal as they are considered to be counterparts to each other. This theory stipulates the importance of the person-environment fit, stating that having a person work in an environment that corresponds to his/her personality type will have a lot of positive effects, while a non-fitting environment would produce negative effects. Holland's theory also proposes precise relationships between these type making the theory testable, and also enabling practitioners to predict what activities a person does not like, based on the activities a person likes and vice versa. Later author's have taken Holland's theory to be a theory of vocational interests and as such it's postulates have been researched by a large number of researchers throughout the world (e.g. Hedrih, 2008; Hedrih, Stošić, Simić, & Ilieva, 2016; Long & Tracey, 2006; Rounds & Tracey, 1996). Studies performed in the Balkans regions have so far strongly confirmed propositions of the Holland's theory (V. Hedrih & Šverko, 2007; Vladimir Hedrih, 2008; Vladimir Hedrih et al., 2016; I. Šverko & Hedrih, 2010; Iva Šverko, 2008). Research into the relations of the Holland's types and basic personality traits have also demonstrated stable relations between these two groups of constructs (Vladimir Hedrih, 2009; Larson, Rottinghaus, & Borgen, 2002; McKay & Tokar, 2012; Iva Šverko & Babarović, 2016; Tokar & Fischer, 1998).

The goal of the current paper was research into the relations between the type of environment according to Holland's theory a person work's in and the level of

burnout. While there is ample knowledge of relations between specific jobs and specific job conditions that are related to burnout, question posed in this study was if there are systematic relations between the broad qualities of job i.e. work environment type and occurrence of burnout. Another question was also if these relationships are stable or are they different for different subpopulations like people of different gender or different parental status.

Methodology

Sample and procedure

Sample used in this study was a subsample of a geographical cluster sample of 2023 residents of Serbia who participated in the Study of diversity of work and family relations in Serbia (Hedrih, Todorović, & Ristić, 2013). The sample was collected in 32 rural and urban settlements distributed across administrative districts of Serbia.

Subsample used in the current study consisted of 1444 employed residents of Serbia, 805 (55,7%) of which were female.

Instruments

Participants were asked to complete the PORPOS battery (Hedrih, Todorović & Ristić, 2013). This battery is a compilation of short scales and marker questions created for the purpose of assessing a number of different constructs regarding: 1) conative psychological dispositions, 2) family and partner relations and roles, 3) functioning in workplace and functioning related to workplace; 4) work and family relations (conflict and permeation), and also questions regarding sociodemographic variables and one's job characteristics. Scales and questionnaires included in PORPOS battery were either constructed for the purpose of this study or made by adaptation of already existing ones.

In the current study, work environment was assessed using the HOL-H (Hedrih & Pedović, 2016; Hedrih et al., 2013), a six-item scale administered as part of the PORPOS battery where the task of the participant is to evaluate the extent to which the job he/she is performing involves the activities typical of each of the six Holland RIASEC types.

Job burnout was assessed using a four item marker scale constructed for the purposes of this study and included in the PORPOS battery, asking the participants for symptoms of exhaustion and inefficiency. The scale used a five-point Likert type scale for registering responses. Cronbach's alpha of the scale on the sample used in this study is .836.

Results

First correlations between the extent to which the job environment resembles each of the RIASEC types and burnout were calculated. The results were first calculated on the entire sample, and then on subsamples by gender and by parental status separately. These are presented in table 1.

Table 1. Correlations between burnout and job environment type for the whole samples, and for the two gender subsamples and parent status sample separately

Job environment types	Total sample	Male	Female	Parents	No children
Realistic (R)	-.05	-.10*	.01	-.08	-.02
Investigative (I)	-.05	-.07	-.03	-.05	-.04
Artistic (A)	-.10**	-.11*	-.09*	-.05	-.25**
Social (S)	-.07*	-.06	-.06	-.03	-.18**
Enterprising (E)	-.01	-.08	.05	.02	-.07
Conventional (C)	-.07*	-.06	-.03	-.10**	-.07
*- p<.05 ; ** - p<.01					

As the results showed pronounced differences in correlations with Realistic types for males and females and also for Artistic and Social types for participants who were parents and those without children, significance tests of these moderation effects were tested through the process of hierarchical regression. The model in which GenderXR interaction term was added to gender and R type as predictors, showed that the interaction term does not reach statistical significance but is close (genderXR beta=.05, sig=.08). The model in which ParentXA and ParentXS interaction terms were added to parent status and A and S types as predictors, both interaction terms were statistically significant if entered separately (ParentXS beta=-.07, sig=.025, and ParentXA beta = .10, sig<.01). But if these two interaction terms are entered together, ParentXS stops being statistically significant, while the statistical significane of ParentXA remains.

Correlation matrices were also calculated for male and female parents and male and female participants without children, but these revealed no new correlations patterns, so are not presented in the paper.

As in the subsample of parents, almost all the correlations between job environment type and burnout were negative, the total sample of parents from the Study of work and family relations (not just the sample of employees included in the study) was consulted and it was found that on that sample, there is a strong difference in the burnout level between the employed and unemployed parents with unemployed parents scoring substantially higher on average than employed parents (rpbis=--.451, p<.001).

After this, the sample was divided into 4 age groups – up to 25, 26-35, 36-45 and over 45 years of age and correlations were calculated for each of these separately. Correlations on these age subsamples are given in table 2 and 3.

Table 2. Correlations between burnout and job environment type for subsamples by age.

Job environment types	Age group			
	Up to 25	26-35	36-45	Over 45
Realistic (R)	.09	-.02	-.09	-.09
Investigative (I)	-.04	-.03	-.06	-.07
Artistic (A)	-.24**	-.18**	-.04	-.08
Social (S)	-.14	-.09	-.02	-.11*
Enterprising (E)	-.11	-.04	.05	.02
Conventional (C)	-.00	-.10*	-.11*	-.05
*- p<.05 ; ** - p<.01				

Table 3. Correlations between burnout and job environment type for subsamples by parent status within each age category

Job environment types	Age group							
	Up to 25		26-35		36-45		Over 45	
	Parents (N=16)	No children	Parents	No children	Parents	No children (N=40)	Parents	No children (N=22)
Realistic (R)	.18	-.01	-.02	-.04	-.10	-.10	-.10	.05
Investigative (I)	.12	-.06	.01	-0.7	-.06	-.16	-.10	.48*
Artistic (A)	-.30	-.26**	-.01	-.25**	-.02	-.32*	-.10	.06
Social (S)	-.05	-.16	.06	-.19*	-.00	-.28	-.13*	-.16
Enterprising (E)	-.22	-.08	.05	-.09	.06	.06	.01	.01
Conventional (C)	.04	-.03	-.09	-.16*	-.11	-.09	-.08	.16
*- p<.05 ; ** - p<.01. Number of participants is listed below the name of the group for groups smaller than 100 participants.								

Discussion

The most visible of the results is the one showing that Artistic (A) environment type has a protective effect relative to burnout symptoms. It is the largest correlation, it is a negative one and present for both males and females. This finding is in line with previous results showing the artistic personality type is negatively correlated with burnout (Orkibi, 2016). Of course, this finding is about artistic personality having a protective effect and not the environment, but given the person-environment fit theory of vocational choice, it can reasonably be expected that people working in artistic environments tend to be artistic personality types. This protective effect is also a somewhat theoretically expected one i.e. Artistic environment types are environments where one gets to express oneself as part of a job, practically meaning that one does what one likes and enjoys doing. But inspection of results on subsamples reveals first that this correlation seems to disappear in the two groups above 36 years of age, and inspection subsamples by parent status shows that this disappearance

does not seem to be so much about age, as it is about parent status. This correlation seems to exist only in participants who have no children, while in participants with children no correlation between the Artistic environment type and burnout is found. And hence, as the percentage of people with no children becomes smaller and smaller with age, so does the correlation with the Artistic type on whole age subsamples. This moderating effect of the parental status on the relationship between the Artistic environment type and burnout can possibly be explained by the fact that Artistic type jobs, although tend often to be very competitive with unpredictable and unstable financial results compared to other job types for most people and with only a small proportion of best artists having secure and large financial outcomes. Artistic jobs also tend to have irregular working times and work hours that are incompatible with working hours of child care institutions (e.g. working in the evenings, at night or during holidays). This might not present a problem to an artist if he needs only take care of himself like is the case with participants with no children allowing the artistic environment to have a buffering effect against burnout, but can reasonably be expected to be a huge problem to a parent who needs stable finances to be able to support children and whose childcare options are complicated due to these properties of artistic work environments. So, what can be expected is that in participants working in artistic environments while having children, protective effects of this job environment are negated by other properties of this same environment that make it much more demanding and stressful for parents. Thus, the observed effect of no correlation between the Artistic job environment and burnout.

The second most pronounced correlation is with the Social environment type. Social environment type constitutes of jobs where a person has extensive interactions with other people helping them, teaching, taking care of other people etc. Inspection of correlations on subsamples also shows that this environment seems to be related with less burnout, but again not in all subpopulations. The most substantial correlations between the S environment and burnout are on subsamples of participants with no children of all age groups (although not always statistically significant due to small number of participants without children in older age groups) and in the subsample of parents only in the oldest age group. A possible explanation for this is that being that Social type jobs provide people with ample opportunities for human contact and interaction, and also puts a person in an environment that is populated by people of Social personality type i.e. willing to help, altruistic, open to experience etc. which can than act protectively to people who might have less human interactions outside of their job, such as people with no children, many of whom also have no partners, or parents in the phases of life when children have grown up and moved out (empty-nest phase).

As for the correlation with the R type in males, obtained on the whole sample, it can be probably explained by the fact that R type jobs are generally more preferred by males than females. Hence, males working in R type jobs are probably more likely to be in good fit with the environment, thus satisfied with their job and that might be acting somewhat protectively towards the appearance of burnout. The results concerning the C type might be due to prevalently structured and unambiguous

nature of this type of jobs having protective effects from burnout, by providing clear demands and work tasks, thus creating less stress, but this correlation is small and not reaching statistical significance in most subsamples.

One most peculiar result and the highest correlation obtained is between the I type and burnout. This result was obtained on a small group of 22 participants of the oldest age group who had no children. A possible explanation for this is that this is created by participants working in very personally demanding and involving jobs, demanding very long education and extreme personal commitment (I type), like for example jobs in the area of science and some areas of the medical profession, who then experience burnout due to such working conditions, but investing less in other areas of life, thus having less of the buffering effects social support from friends and family might provide.

Lastly, important thing to note is that much more correlations and also higher correlations were obtained on subsamples of participants with no children than on participants with children. Looking for a possible explanation for this, it was found that there exists a very pronounced difference in the level of burnout between unemployed parents and parents who are employed with unemployed parents having a much higher level of burnout on average than employed parents. This could mean that for a parent who needs to provide support and care to his children the most protective factor against burnout is having a job and thus a source of income he can depend on and thus removing or reducing the stress suffered by parents who have to take care for themselves and their children without stable source of income. Alternatively, given that this is a correlation and thus causality remains unknown, it might also be a case that parents with less symptoms of burnout are able to obtain and keep their jobs better, than those manifesting higher symptoms of burnout who due to this leave their job or get fired from them, as inefficiency and poor performance are integral parts of burnout.

It can be concluded that Artistic and Social types of work environments were found to be in the highest negative correlations with burnout i.e. people working in environments that have more properties of these two types experiencing less burnout on average, but that this relation is moderated by parental status of a person, with the correlation only existing in people without children and not in parents, save for the Social environment type and the oldest age group. Results generally lead to the conclusion that there is no singular relation between job environment type and burnout, but that this relation depends on other factors like parental status, gender and age of the employees.

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Original scientific paper

PERSONAL AND SOCIODEMOGRAPHIC CORRELATES OF RESILIENCE IN EMPLOYEES[2]

Abstract

The goal of the current study was to determine if resilience varies between people with different demographic and socioeconomic status and to investigate to what extent do these variations remain when personality traits are taken into account. These relations were explored on a sample of 1444 employed residents of Serbia, 805 (55,7%) of which were female. These constituted a subsample of the geographical cluster sample of 2023 participants of the Study of diversity of family and job relations in Serbia. Participants were asked to complete the PORPOS battery, a compilation of short scales and marker questions created for this study. Data used in the current study included the short scales measuring resilience and the Big Five personality traits, and participants' responses on question about their education, gender, partner status, family income, age and also data on the type of settlement they live in (urban or rural settlements). Results showed that mean values of resilience were different for males and females (t=2.136, p=.033), and for people from rural and urban areas, with people from rural areas achieving somewhat higher average scores (t=4.209, p<.001). All of the basic personality traits save for Agreeableness were found to be correlated with Resilience with correlations ranging from -.447 with Neuroticism, which was the highest absolute value) to .118 with Openness to experience. Hierarchical regression analyses showed personality traits to be much more influential predictors of resilience than the examined demographic properties, although these two types of predictors explained different parts of variance of resilience. It can be concluded that the studies demographic properties and resilience independently contribute to explaining the variance of resilience in the studied population.

Keywords: resilience, gender, basic personality traits, demographic properties.

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Introduction

In the course of their lives many people encounter endangering situations or even find themselves in some way life threatening circumstances. In their paper Kessler, Sonnega, Bromet, Hughes, & Nelson (1995) report an estimate of the lifetime prevalence of trauma exposure. According to their results 60,7% of men and 51,2% of women reported at least one traumatic event.

Adaptation and coping with these situations is easier when person is resilient. Although there is no universally accepted scientific definitions of resiliency, according to Wald et al. (Wald, Taylor, Asmundson, Jang, Stapleton, & McCreary, 2006), all of the existing ones similarly implicate that resiliency is connected with human strengths, positive outcomes following exposure to adversity, growth, adaptive coping.

According to Connor & Davidson (2003, p. 77) the notion of resilience *embodies the personal qualities that enable one to thrive in the face of adversity*. Resilience is seen as a personality characteristic that serves as a moderator to the negative effects of stress and can also promote adaptation (Wagnild & Young, 1993, according to Wells, 2012). Becoña, E. (2006) argues that the most accepted definition of resilience is the one that in his paper gave Garmezy in 1991 where he defined resilience as *the ability to recover and maintain conduct adaptive after abandonment or inability starting at the beginning of a stressful event*. Bonnano (2008, p.102) explains that *resilience reflects the ability to maintain a stable equilibrium,* and is often seen *in terms of protective factors that foster the development of positive outcomes and healthy personality characteristics…*

On the basis on the research review, Campbell-Sills, Forde, & Stein (2009), state that, psychological and environmental factors are amongst others, those factors that determine individual's level of resilience. Personality traits fall into category of one of the most salient psychological factors. According to Friborg, Barlaug, Martinussen, Rosenvinge, & Hjemdal (2005), the most prominent, widespread and validated method for the assesment of personality traits is the well-known McCrae's and Costa's Five Factor Model (McCrae and Costa, 1997). This model suggests that five broad dimensions are sufficient to describe individual differences in personality – openness to experience, neuroticism, extroversion, agreeableness and conscientiousness.

Stojiljković and Hedrih (2013) relied on Knežević's, Džamonja-Ignjatović's and Jočić's paper (Knežević, Džamonja-Ignjatović and Jočić, 2004) and gave following description of these dimensions.

Neuroticism could be seen as general tendency for person to experience negative emotions such as sadness, fear, sorrow, guilt, etc. This tendency can make person prone to emotional instability and cause adaptation difficulties and diminish person's capacities for overcoming stressful situations. On the other hand, low scorers on this dimension are emotionally stable, relaxed and capable of dealing adequately with stressful situations

Domain of extroversion includes two qualities: interpersonal engagement and overall energetic level of a person. That is, extroverted person is sociable, assertive, careless, active and loves excitements. Bad side is that those persons can often lose their temper, so they can be impulsive, if not aggressive. On the contrary, introverted would rather be alone, and is quiet introspective and reliable.

Openness is manifested in the deepness, wideness and openness of consciousness. This dimension is reflected in imagination, intellectual curiosity, unusual and new ideas, behavioral flexibility, and deepness of emotional experience. People who are open to experience are, open to emotion, and willing to try new things. When compared to closed people, they tend to be more creative and more feelings-aware and also they are more likely to be open-minded and hold unconventional beliefs.

Agreeableness is domain somewhat similar to extroversion because it is concerned with interpersonal tendencies of a person. It reflects the the extent to which person enjoys to be in other people's company and also attitudes towards other. Person will gain high score on this dimension if she is altruistic and capable of empathy, have the need to help and believes that other people are basically good and generous and consequently would reciprocate. On the contrary, because they don't have such nice opinion on others, low scorers tend to be egocentric and skeptic, and could easily mislead and manipulate them.

Conscientiousness is manifested in the processes of planning, organizing, duties execution, self-discipline and striving for achievement. That is conscientious person have strong will and self-control, is goal-oriented, precise and reliable. People scoring lower on this dimension could be hedonistically oriented.

In their paper Friborg, Barlaug, Martinussen, Rosenvinge, Hjemdal (2005) introduce numerous research results and conclude that that all of them show evidence for *the resilient personality profile being characterized by a high score on all the Big Five factors* (str. 30). For example, in their research with 560 Chinese subjects Yu & Zhang (2007) obtained the results that show statistically significant positive relationships of resilience with extraversion, openness to experience, agreeableness, and conscientiousness, and a negative one with neuroticism factor.Fayombo's (2010) research confirmed these results. Further, he found that personality traits jointly contributed 32% of the variance explained with conscientiousness being the best predictor of resilience while agreeableness, neuroticism and openness to experience were other significant predictors. Only extraversion did not contribute significantly.

Luthar, Cicchetti, & Becker (2000) state that at one period of time research on resilience expanded to include socioeconomic disadvantage and associated risks (Garmezy, 1991, 1995; Rutter, 1979; Werner & Smith, 1982, 1992)

For Bonnano et al. (Bonanno, Galea, Bucciarelli, & Vlahov, 2007) it is clear that, both in children and adults, multiple protective factors foster resilience to adversity. He (Bonanno, 2005; Bonnano et al., 2007) argues that the nature of phenomenon of adult resilience is still relatively poorly understood, and that majority of the existing research dealt with person centered variables. In their research, Bonnano with his associates (Bonnano et al., 2007) tried to overcome this deficit by including certain

sociodemographic variables such as about age, gender, race/ethnicity, educational attainment, income, marital status, household size, caretaker status, number and ages of children, and geographic location of residence. On a sample obtained from a random-digit-dial phone survey (N = 2,752) in the New York City they came to the results that the prevalence of resilience was uniquely predicted by participant's gender, age, race/ethnicity, education an income change. Surprisingly, they found that a lack of education decreased the prevalence of resilience in their sample.

Multiple regression analysesresults in an investigation conducted by Campbell-Sills, L., Forde, D. R., & Stein, M. B. (2009) on a sample of 764 of respondents showed that gender, education level, and income level uniquely predicted subjects' resilience. Taken together, these factors explained approximately 11% of the variance in resilience. In some studies it has been found that resilience levels are associated with income (Wagnild, 2003; Hardy et al., 2004, according to Wells, 2012). In her research on Resilience in older adults living in rural, suburban, and urban areas, Wells (2012) found no differences in resilience levels across the three locations. But the results of regression analysis showed that amongst other lower household income is significantly associated with high resilience levels.

Connor and Davidson (Connor & Davidson, 2003) while reporting results obtained during the development of their scale (CD‐RISC), found neither gender, nor age differences in resilience levels.

On the other hand some research results speak in favor of decreasing resilience with age. For example, Stawski, Sliwinski, Almeida, & Smyth (2008) found that the self-reported exposure to daily stressors decreases with age. Similar findings were obtained in a research conducted by Diehl, & Hay (2010). They found that older adults, in general have lower levels of average daily negative affect, and that age also moderated the effect of perceived control.

Results obtained by Mroczek and Almeida (2004), that association between daily stress and negative affect is stronger for older than younger adults, according to them, speak in favor heightened reactivity to stressors in older adulthood.

Considering the importance for health and quality of life, research on resilience in the past two decades are in the constant growth (Želeskov Đorić, 2013). To our knowledge, until now, there is no other research that investigated resilience and its correlates on a large sample of Serbian residents.

The goal of the current study was to determine if resilience varies between people with different demographic and socioeconomic status and to investigate to what extent do these variations remain when personality traits are taken into account

Methodology

Sample and procedure

Sample used in this study was a subsample of a geographical cluster sample of 2023 residents of Serbia who participated in the Study of diversity of work and

family relations in Serbia (Hedrih, Todorović, & Ristić, 2013). The sample was collected in 32 rural and urban settlements distributed across administrative districts of Serbia.

Subsample used in the current study consisted of 1444 employed residents of Serbia, 805 (55,7%) of which were female. Mean age of participants was 38.84. Employees were defined as anyone who claims that he does work for which he receives financial compensation, regardless of his or her legal status. The oldest such participant was 17 and the oldest was 75 years of age.

Distribution of education of the subsample used in the current study was the following: did not finish elementary school – 4(0,3%), elementary school – 46(3,2%), secondaryschool – 806(55,8%), college– 195(13,5%), faculty or master degree or a university student – 380(26,3%), phd – 13(0.9%). Residents of rural settlements were 459 (31,8%) participants, while 985 (68,2%) lived in urban areas.

Instruments

Participants were asked to complete the PORPOS battery (Hedrih, Todorović & Ristić, 2013). This battery is a compilation of short scales and marker questions created for the purpose of assessing a number of different constructs regarding: 1) conative psychological dispositions, 2) family and partner relations and roles, 3) functioning in workplace and functioning related to workplace; 4) work and family relations (conflict and permeation), and also questions regarding sociodemographic variables and one's job characteristics. Scales and questionnaires included in PORPOS battery were either constructed for the purpose of this study or made by adaptation of already existing ones.

In the current study, personality was assessed through an array of short scales based on the Big Five personality model, consisting of 4 to 7 items per personality dimension. Resilience was operationalized with a 4 item scale. All of these scales used a five-point Likert scale for answering. Internal consistencies of these scales expressed as Cronbach's alpha ranged from .52 to .82.

Results

Considering the relative large number of sociodemografic variables in current research, first step was to investigate zero-order relationships of resilience and these variables. This analysis was conducted in order to determine potentially statistically significant predictors that should be included into regression model. For the same purpose correlations of basic personality dimensions and resilience were calculated.

Table 1. Correlations between gender, household income per family member, age and type of participants settlement with resilience.

Correlations (rpbis, Pearson)	Resilience	
	r, rpbis	sig.
Income per household member of the participant's household	.031	.288
Age	-.014	.606
Gender	**-.059**	**.027**
Type of settlement the participant lives in	**-.106**	**<.001**

Further analyses have shown that there are no statistically significant differences between groups of different partner status and education level in mean scores on the resilience scale.

Table 2. Correlations between the Big Five personality traits and resilience

Correlations	Resilience	
	r	sig.
Neuroticism	**-.453**	**<.001**
Extraversion	**.367**	**<.001**
Openness to experience	**.114**	**<.001**
Agreeableness	-.012	.639
Conscientiousness	**.229**	**<.001**

Next, a hierarchical regression model was created that included gender and type of settlement the participant lives in and the four personality traits that were found to correlate with resilience. In the final stage of analysis, interaction terms were tested also. Results are shown in tables 3 and 4.

Table 3. Hierarchical regression analysis – predicting resilience based on personality traits, gender and type of settlement, model summary statistics

Model number	R	R square	Adjusted R square	F	Statistical significance of F change
1	.499	.249	.246	92.123	<.001
2	.512	.262	.258	70.449	<.001
3	.513	.263	.257	41.248	.751
4	.518	.269	.260	29.794	.082
Models: 1 – Personality traits as predictors only, 2 – gender and type of settlement added (binary variables), 3 – genderXpersonality interactions added, 4 – type of settlementXpersonality interactions added					

Table 4. Hierarchical regression analysis – predicting resilience based on personality traits, gender and type of settlement, regression coefficients

Model number	Predictors	Beta	t	Statistical significance
1	Neuroticism (N)	-.351	-13.087	<.001
1	Extraversion (E)	.167	5.893	<.001
1	Openness to experience (O)	-.005	-.181	.857
1	Agreeableness (A)	-.029	-1.058	.290
1	Conscientiousness (C)	.129	4.632	<.001
2	Neuroticism (N)	-.345	-12.954	<.001
2	Extraversion (E)	.162	5.769	<.001
2	Openness to experience (O)	.012	.415	.678
2	Agreeableness (A)	-.036	-1.327	.185
2	Conscientiousness (C)	.136	4.887	<.001
2	Type of settlement	-.086	-3.724	<.001
2	Gender	-.072	-3.042	.002
3	Neuroticism (N)	-.345	-12.865	<.001
3	Extraversion (E)	.162	5.719	<.001
3	Openness to experience (O)	.011	.362	.718
3	Agreeableness (A)	-.036	-1.307	.191
3	Conscientiousness (C)	.132	4.673	<.001
3	Type of settlement	-.087	-3.738	<.001
3	Gender	.148	.666	.506
3	Gender X N	-.065	-.784	.433
3	Gender X E	.069	.447	.655
3	Gender X O	-.068	-.395	.693
3	Gender X A	-.009	-.068	.369
3	Gender X C	-.151	-.899	.946
4	Neuroticism (N)	-.338	-12.545	<.001
4	Extraversion (E)	.172	5.977	<.001
4	Openness to experience (O)	.015	.492	.623
4	Agreeableness (A)	-.033	-1.209	.227
4	Conscientiousness (C)	.134	4.706	<.001
4	Type of settlement	-.349	-1.645	.100
4	Gender	.171	.768	.443
4	Gender X N	-.067	-.812	.417
4	Gender X E	.093	.592	.554
4	Gender X O	-.093	-.537	.592
4	Gender X A	-.044	-.312	.409
4	Gender X C	-.140	-.825	.755
4	Type of settlement X N	-.012	-.150	.881
4	Type of settlement X E	-.198	-1.202	.230
4	Type of settlement X O	.278	1.679	.093
4	Type of settlement X A	.178	1.320	.187
4	Type of settlement X C	.022	.132	.895

The results show that personality traits of Neuroticism, Extraversion and Conscientiousness are statistically significant predictors of resilience, predicting

independent parts of variance of this construct and that they remain statistically significant predictors even after additional predictors are entered. Gender and type of settlement seem to be also statistically significant predictors of resilience, independent of personality traits, with males and rural residents achieving somewhat higher average scores on Resilience. But these two predictors cease being statistically significant predictors after introduction of interaction terms into the equation.

Discussion

Comparing current results with those obtained by previous researchers of relations between resilience and the Big Five personality traits (Fayambo, 2010; Yu&Zhang, 2007; Friborg et al (2005) it can be seen that the total variance of resilience accounted for by the personality traits is 24,9% and lower than the amount reported by Fayombo (2010). While Conscientiousness was the best predictor of resilience in his study was, in the current study it was Neuroticism, with Conscientiousness being just one of the significant predictors. Inspection of zero-order correlations between Resilience and the five personality traits shows that Conscientiousness does not even have the second highest correlation with resilience, but only the the third strongest correlation. Contrary to Fayombo's (2010) results, Agreeableness and Openness to Experience were not significant predictors in the current study while Extraversion was a statistically significant predictor. Comparing the directions of relation of these personality traits with resilience, results of the current study agree with results of the listed authors – all personality traits that are statistically significant predictors of resilience are in a positive relation with resilience save Neuroticism which is negatively related. Considering possible explanations for these results, it must be noted that a part of the explanation might lie with the fact that instruments used in the current study are different from the ones used in the reference studies, and hence some of the differences in the results. Another possible explanation might come from the fact that these results were obtained on different populations and different cultures and that resilience is indeed related differently with personality traits in various human populations. It might be just be possible that structures of relations between psychological traits and constructs are different for different human populations.

Considering the relations between resilience and sociodemographic variables included in the study it can be noted that unlike the results reported by Campbell-Sills et al. (2009) and partly by Wells (2012) neither household income nor age were found to be correlated or monotonously related to resilience. Apart from the possible explanation of this results with cultural differences between studied populations, it might also be that a part of explanation lies in the range of values of these variables. Income levels in the current study include those typically found in Serbia, which is a middle income economy, while both reference studies were conducted on samples from the US, which is a high income economy. Also sample of our study included working age adults whose mean age was somewhat below 39, while the results obtained by Campbell-Sills et al were from a significantly older sample – average age was above 47, while the study conducted by Wells was on a sample of people over 65.

Considering the relations of gender and type of settlement with resilience in this study, the most prominent result is that although zero-order correlations of both of these variables are significant, they are very low. Variance of resilience accounted for by these two variables seems to be independent of personality traits. The apparent discord between the correlation with gender obtained here and the results reported by Connor & Davidson (2003), who found no correlation with gender can be explained by the fact that sample used in this study is much bigger than theirs while the obtained correlation with gender is very low. On a sample of their size, correlation of this size would not be statistically significant. It should also be noted that although correlations between gender and the type of settlement are statistically significant, when these two variables are added to the regression equations, it can be seen that they increase the total variance of resilience accounted for by predictors by less than 2%. making their contribution to explaining resilience almost negligible compared to the variance explained by personality traits.

It should also be noted that addition of interaction terms to the regression equation yielded no statistically significant results i.e. none of the interaction terms was a statistically significant predictor of resilience, thus showing no indication of an interaction effect between personality and either of these two variables existing.

Conclusion

It can concluded that the personality traits have shown to be a rather influential correlate-predictor of resilience, accounting for almost 25% of resilience variance. The most influential predictor of resilience was Neuroticism, followed by Extraversion. Conscientiousness was also a statistically significant predictor of resilience but it's correlation with resilience was lower. Openness to experience has a positive zero-order correlation with resilience, but was a statistically non-significant predictor in the regression equation. All of the mentioned personality traits are positively correlated to resilience save for Neuroticism, correlation of which with resilience was negative.

Gender and type of settlement (rural-urban) contribute independently to explaining variance of resilience in the studied population, but account for less than 2% of additional variance. Examination of possible moderation effects yielded no moderation effects between personality traits and gender nor between personality traits and settlement type in relation to their correlations with resilience.

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WORK VALUES OF CROATIAN ADOLESCENTS: VALUE HIERARCHY AND IMPORTANCE OF FAMILY BACKGROUND[2]

Abstract

The study aims to examine work values of Croatian adolescents of different family background. A total of 937 participants were included in the study. Participants were senior students from grammar (n=308) and vocational schools (n=629) coming from city of Zagreb and other north-western Croatian towns. There were 630 girls and 307 boys in the sample. Data was collected via online assessment tool set on website http://www.putkarijere.hr. The short version of *Values Scale* (Super & Nevill, 1985)was used as a measure of work values. Family background was assessed by Intellectual-cultural orientation subscale from Bloom's (1985) *Family Functioning Scale* and composite measure of family socioeconomic status. The results showed that the most prominent values among students were Achievement and Ability utilization, whereas the least important ones were Risk and Authority. The most prominent value orientations of Croatian adolescents were Utilitarian, followed by Self-actualizing and Social, while the least expressed value orientation was Adventurous. Students with higher family socio-economic status expressed somewhat higher Utilitarian and Individualistic values, and find Social values less important. Students with higher family cultural orientation expressed higher Self-actualizing values. These findings provide an insight into hierarchy of work values of the new generation of adolescents coming from different family background. It could also help career counselling practitioners to adapt career guidance interventions to better meet today's adolescents' needs.

Keywords: work values, adolescents, family, career

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Introduction

In this paper, we focused on the work values of Croatian adolescents with respect to some of their family characteristics. Work values are general and relatively stable goals that individuals strive to achieve through their work (Super & Šverko, 1995). Work values have become an important research topic in the field of vocational psychology in the 1950's, and since than become an indispensable characteristic of vocational personality, together with the abilities and interests (Šverko, Babarović & Šverko, 2008). The most of contemporary theories of occupational choice put emphasis on the values. Values indicate what a person considers important in his work and can serve as predictors of career decisions and career choice (Super et al., 1995). Fulfilment of important work values within the job should lead to fewer work changes during career and to greater job satisfaction.

Values represent stable characteristics of an individual and do not change much from early adolescence to early adulthood (Low, Yoon, Roberts & Rounds, 2005). Therefore, it is important to determine work values of adolescents as a workforce of the future. Such information can help in better understanding of young people's occupational choices, and could be a useful tool in career counselling and guidance. In addition, information about the work values of adolescents can help employers to be better prepared for the new workforce. They could adjust working conditions, develop new ways of motivating employees and change work climate. It is especially important if today's youth have a different hierarchy of values comparing to the previous generations of workers.

Structure of work values

One of the first insights in the work values taxonomy is given by Super (1970) who developed Work Values Inventory. The WVI contained 15 value dimensions: altruism, aesthetics, creativity, intellectual stimulation, achievement, independence, prestige, management, economic returns, security, surroundings, supervisory relations, associates, way of life, and variety. Wollack, Goodale, Wijting and Smith (1971), relying on Protestant work ethic developed Survey of Work Values (SWV). They indicated that work values are related to social status of job, activity preference of worker, upward striving, attitude toward earnings, pride in work, and job involvement. In the Theory of Work Adjustment (Dawes, & Lofquist, 1984), work values play a central role. Lofquist and Dawis (1978) have used the Minnesota Importance Questionnaire to extract six different dimensions of values: altruism, achievement, autonomy, safety, status, and comfort.

Over time, there was a lot of research on work values. Studies mainly pointed to the existence of two major groups of values: intrinsic and extrinsic (e.g. Degenais, 1998, Post-Kammer, 1987). Intrinsic values relate to the work process itself, to the ability to use creativity, to receive intrinsic rewards, and to use own potentials. On the other hand, the extrinsic values refer to job outcomes such as pay, advancement and status. Some studies suggested that the structure of work values

can be organized through several higher-level values. Ros, Schwartz, and Surkiss's (1999) distinguished intrinsic values (autonomy, interest, growth), extrinsic values (job security, income), social values (social relations, contribution to society), and prestige (power, authority, influence).

Researchers came to the conclusion that there are few wider dimensions of work values and several primary values within each dimension. Most of instruments developed and used for measuring work values indicated the existence of about twenty primary work values (Šverko et al., 2008), with fewer latent value dimensions. The wide cross-cultural research within Work Importance Study (Super et al., 1995) indicated twenty universal work values: ability utilization, achievement, advancement, aesthetics, altruism, authority, autonomy, creativity, economic rewards, lifestyle, personal development, physical activity, prestige, risk, social interaction, social relations, variety, working conditions, cultural identity, and economic security. Stable five-factor structure of 20 work values was found in different cultures, and five value orientations were named: Utilitarian, Self-actualizing, Individualistic, Social and Adventurous orientation.

Hierarchy of work values

The values are hierarchically organized within the individual according to the degree of subjective importance. Hierarchical organization of values enables choice between different goals and behaviours and helps to resolve conflicts (Rokeach, 1979). Contemporary studies stress the importance of assessing the change in value hierarchies over the time and between different generations to better understand and adapt to forthcoming generation of workers (Smola and Sutton, 2002, Twenge et al., 2010). Smola and Sutton (2002) compared different generations of workers and found that newer employees were generally less loyal to the company and more self-oriented, wanted to be more quicklypromoted, and don't find working role highly salient in their life. Twenge et al. (2010) found that younger generations value more leisure time and extrinsic values while social and intrinsic values decreased over the generations. Maslić, Šverko and Galić (2005) compared the hierarchy of work values of Croatian employees in the 1990s and 2000s, and found that the hierarchy of work values did not change significantly in that period. Both in 1990s and 2000s, employees highly valued high earnings, fair pay, good managers and good relationship with associates. Babarović (2005) investigated changes in Croatian adolescents' work values, comparing the results from 1983, 1993 and 2002. In the observed period, the importance of life style, independence, economic security, advancement and prestige increased. On the other hand, the importance of participation in decision making, aesthetics, altruism and physical activity decreased. The differences were small between 1993 and 2002, while the hierarchy of values changed considerably from 1983 to 1993.

Work Values and Socioeconomic Family Status

Socioeconomic status (SES) is found to be an important factor in the development of children values. In particular, work values can be seen as an outcome of the social status of the family (Mortimer, Lorence and Kumka, 1986). It is revealed that parental values are shaped by family SES and that parental values further determine the educational aspiration of children (Gecas, 1979). Research has shown that people with higher SES give more importance to intrinsic values and prestige, while putting lower importance to extrinsic values and security (Lacy, Bokemeier and Shepard, 1983; Kohn & Schooler, 1983). Such findings have also been confirmed in the research conducted by Johnson (2002) showed that young people who grew up in rural environments and had a lower financial status, gave greater importance to security and extrinsic values than those lived in the cities with more stable financial situation. If the effect of socioeconomic status on youth work values is considerable, career guidance programs should be focused on educating parents on determinants of career development. Parents should be informed how to contribute to professional development of the child, taking into account the importance of their family socioeconomic status.

Work Values and Family Climate

The skills and abilities of family members and their problem-solving skills affect the personal growth and development of the child. The family is a critical environment for children associated with a broad range of social and emotional outcomes. Family climate is determined by various factors, from characteristics of family members to external stressors and circumstances, and all influence the values that children will develop (Desforges & Abouchaar, 2003). An intellectually oriented family will encourage a child in school-related tasks and increase his or her academic aspirations. Also, such families prepare a child for more demanding career opportunities and challenges. On the other hand, the family with good interpersonal relations can influence on child awareness of social issues and encourage altruistic behaviour. Unfortunately, the empirical findings on the direct relationship between family climate and children work values are scarce. Therefore, we find it interesting to examine to what extent the family climate can impact on the value system of adolescents.

Aims

Given that there is no recent research on adolescents' work values in Croatia, the aim of this study is to examine the structure and hierarchy of youth work values, and to compare it with previous findings. We will also examine the differences in work values of adolescents with regard to their family characteristics. According to the previous findings, we assume that students from the family of higher socioeconomic status will have more pronounced utilitarian and individualistic work values, while

students of lower socioeconomic status have more prominent social and adventurous values. Likewise, we expect that students from families with a higher cultural climate will have more prominent self-actualizing work values.

Method

Participants

The respondents were 937 students enrolled in 12th grade of secondary school (age 18). The sample included 30 secondary schools situated mostly in city of Zagreb and north-west Croatia. Schools differed by educational profile and prestige level. Students were approached during their regular classes and invited to participate in the survey. Those willing to participate have left their e-mail addresses and were invited to fill in online questionnaires (http://www.putkarijere.hr). The students were motivated to participate by providing electronical feedback on their career-related characteristics and by valuable lottery incentives which they could win after the data collection (smartphones, tablets). The final sample consisted of 630 girls and 307 boys, and of 308 students from grammar and 629 students from technical and vocational schools.

Instruments

The Values scale (VS; Super & Nevill, 1985) was developed as part of the multinational Work Importance Study (WIS; Super & B. Šverko, 1995). The Croatian version of Value scale (Šverko, Jerneić, Kulenović, & Vizek-Vidović, 1995) measures 20 work values combined into five broad value orientations: Utilitarian orientation (achievement, advancement, economic security, prestige); Social orientation (altruism, social interaction, social relations, cultural identity, participation in decision making, working conditions) Self-actualizing orientation (ability utilization, aesthetics, creativity, personal development); Individualistic orientation (authority, autonomy, lifestyle, variety); and Adventurous orientation (physical activity, risk). In this study we have used short 60-item version where each value was measured by three items. The short version was derived from our previous research findings on VS (Šverko & Babarović, 2006) choosing the items that contribute the most to scale internal consistency and those which support expected five-factor structure of the instrument. Items are simple statements presenting various goals such as "Use all my skill and knowledge" (ability utilization), "Get ahead" (advancement), "Act on my own" (autonomy), "Help people with problems" (altruism), etc. Completing the Values scale requires respondents to indicate how important the value is to them using a four-point scale ranging from "little or no importance" to "very important." The scale scores are calculated as average of importance ratings across all items composing a value or value orientation. Psychometric properties of Values scale are good, both in international (Nevill & Super, 1986; Super & Šverko, 1995) and in Croatian samples (Šverko, 1987; Šverko & Babarović, 2006). The internal

consistency of value orientation scales was clearly confirmed also this study and range from α = .803 for Self-actualizing to α = .827 for Individualistic orientation.

The socioeconomic status (SES) of the family was measured by three indicators. The family education level was expressed as average of mother's and father's education level ("What are the highest levels of education reached by your parents"). Further, we have used two estimates of family financial status. A subjective estimate of the household's financial status (''How does your family relate to the income they have'') measured by five-point Likert-type scale, and objective estimate of household income ("Estimate your net monthly household income after paying all taxes and deductions') with responses ranged from less than 3000 Kuna to 17000 Kuna and greater. Reliability of this short composite SES measure was mediocre (α = .648), but acceptable, since it is only three items scale. In this research family SES was recoded into three SES categories: "Low", "Middle" and "High", with approximately equal number of respondents by category.

Family cultural climate was assessed using Intellectual-cultural orientation subscale from Bloom's (1985) Family Functioning Scale (FFS). The Intellectual-cultural orientation subscale is short, five items measure (e.g. we rarely went to lectures, plays, or concerts (R); we were very interested in cultural activities) with adequate reliability in this sample (α = .752). The total score on this scale is recoded into three same-size categories representing students with "Low", "Middle" and "High" cultural climate in the family.

Results

Structure and hierarchy of work values

The structure of 20 work values from Values scale was examined by EFA; Principal Component analysis with Varimax rotation. The Kaiser-Guttman criterion of eigenvalues over one, and Parallel analysis results converged to a five-factor solution (the results can be sent on request). Table 1 present factor structure matrix after the rotation. As it can be seen, the structural configuration of values largely resemble previous findings (Šverko, 1995). The Individualistic orientation is primarily defined by values of autonomy, authority, and lifestyle, and also to some extend with creativity and variety. The orientation toward Self-actualization has salient loading on ability utilization, achievement, and personal development. The Social value orientation is mostly related to social relations, cultural identity, and social interaction. The Utilitarian orientation is largely defined by extrinsic values as economic security, prestige and advancement. Finally, the Adventurous orientation highly saturates values of physical activity and risk. Therefore, it can be concluded that 20 values of Croatian adolescents can be organized and represented by this five higher-order value orientations. The factorial invariance of our data obtained

on short Croatian version of Values scale also enable comparison of this results to hierarchies of values found in other research.

Table 1. Factor structure of the 20 Value scale work values
(Principal Component Analysis with Varimax rotation)

Values:	Value orientations				
	IN	SA	SO	UT	AD
autonomy	.790				
authority	.654			.417	
lifestyle	.629				
participation in decision-making	.625		.325		
creativity	.596	.456			
variety	.491				.392
aesthetics	.473				
ability utilization		.804			
achievement		.782			
personal development		.656			
working conditions			.696		
social relations		.361	.691		
cultural identity			.681		
social interaction			.593		.469
altruism		.318	.454	-.334	.422
economic security				.770	
prestige		.358		.630	
advancement		.503		.528	
risk					.768
physical activity					.744

IN-Individualistic orientation; SA-Self-actualizing orientation; SO-Social orientation; UT-Utilitarian orientation; AD-Adventurous orientation; saturations <.30 are suppressed

The obtained hierarchy of work values (Figure 1) shows that the five most prominent values of Croatian adolescents were achievement, ability utilization, social relations, advancement and economic security, while the least endorsed values were risk, authority, aesthetics, variety and autonomy. Three out of the five most prominent work values belong to Utilitarian value orientation. Also, three out of the five least important work values belong to individualistic value orientation. It should also be noted that the value of the risk from the adventurous value orientation is by far least important for adolescents.

Figure 1. Hierarchy of values of Croatian adolescents
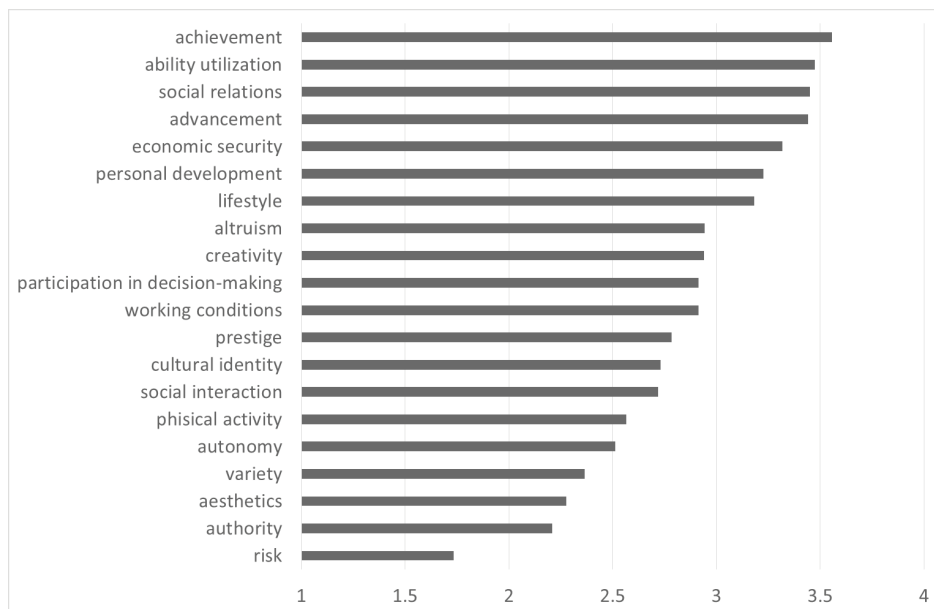
The hierarchy of value orientations (Figure 2) clearly shows that Utilitarian value orientation is most prominent in high school students' sample. Social and Self-actualizing value orientation are also quite pronounced, while the least emphasized value orientation among high school students is Adventurous.

Figure 1. Hierarchy of value orientations of Croatian adolescents
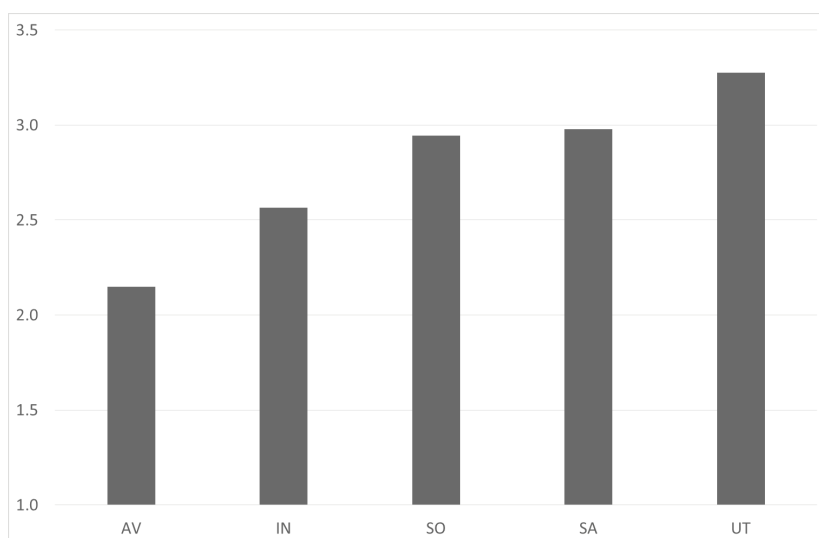
IN-Individualistic orientation; SA-Self-actualizing orientation; SO-Social orientation; UT-Utilitarian orientation; AD-Adventurous orientation

Value orientations and family characteristics

We have tested whether there are significant differences in the expression of five different value orientations among high school students of different SES and of different family cultural climate. We used two-way multivariate variance analysis (MANOVA) to test the main effects of SES and family climate and to test possible interaction effects of family characteristics on values. The precondition for MANOVA, which assumes the equivalence of the covariance matrices was met (Box M = 132.98; F = 1.08; p = .261), and participants are evenly distributed in the groups.

The results in the Table 2 are organized by the main effects of SES and cultural family climate, while for the interaction effects only the F tests are presented. The multivariate effects show that family characteristics did not shape youth values considerably. The effect of SES was up to 2.2%, the effect of family cultural climate was up to 1.5%. The interaction effect was insignificant, meaning that observed effects of SES on the values does not depend on the family cultural climate and vice versa.

Table 2. Comparison of the value orientations' salience between adolescents of different socio-economic status and family cultural climate.

			SA		IN		AV		UT		SO	
		N	M	SD	M	SD	M	SD	M	SD	M	SD
SES	low	273	2.92	.46	2.52	.48	2.12	.69	3.27	.43	3.00	.43
	middle	274	2.95	.42	2.52	.46	2.13	.65	3.21	.44	2.96	.44
	high	272	3.03	.44	2.62	.51	2.16	.70	3.31	.47	2.89	.48
	F		1.986		3.429		.239		3.539		4.369	
	p		.138		.033		.788		.029		.013	
	η^2		.005		.008		.001		.009		.011	
Family Cultural Climate	low	393	2.93	.45	2.56	.50	2.10	.67	3.28	.45	2.96	.46
	middle	335	2.95	.44	2.55	.48	2.21	.69	3.26	.44	2.94	.46
	high	253	3.09	.43	2.59	.49	2.15	.70	3.28	.46	2.94	.47
	F		5.714		.162		2.332		.503		.415	
	p		.003		.851		.098		.605		.660	
	η^2		.014		.000		.006		.001		.001	
Interact.	$F_{SESxFCC}$		1.085		.886		1.539		.459		.572	
	p		.362		.472		.189		.766		.683	
	η^2		.005		.004		.008		.002		.003	

IN-Individualistic orientation; SA-Self-actualizing orientation; SO-Social orientation; UT-Utilitarian orientation; AD-Adventurous orientation.

Multivariate tests:
Wilks' Λ_{SES} = .956; F = 3.69; p = .000; η^2 = .022
Wilks' Λ_{FCC} = .969; F = 2.53; p = .005; η^2 = .015
Wilks' $\Lambda_{SESxFCC}$ = .977; F = .94; p = .541; η^2 = .006

On the univariate level the significant differences (p < .05) between SES groups can be found for Social, Utilitarian and Individualistic value orientation, but the effect sizes were very small. Bonferonni post hoc tests confirmed the significant difference between students of high SES and low SES in their Social value orientation, where adolescents with higher SES express somewhat lower Social values. Group differences in Individualistic values point out that students with higher SES had higher Individualistic values than two other groups. Interestingly, the significant difference in Utilitarian values was found between groups of students of high and middle SES, where students with higher socioeconomic status expressed also a higher Utilitarian work values.

The groups of adolescents coming from families of different cultural climate significantly differed only by their Self-actualizing values. The post hoc Bonnferoni comparisons revealed that significant difference in Self-actualizing values can be found between students with high familly cultural climate and other two groups, where students with better cultural background had higher Self-actualizing values. However the observed differences were very small.

Discussion

Hierarchy and structure of work values

The hierarchy of work values gives us a general picture of work goals that high school students strive to achieve in their work. Achievement, ability utilization and advancement are the most prominent values, while the risk, variety and authority are among the least important for Croatian adolescents. The observed hierarchy of work values in our sample is largely expected (Šverko et al., 1995). Similar hierarchies of values were observed in Babarović (2005) research, especially if comparing our results to the value hierarchy of the Croatian youth cohort assessed in 2003. Comparing the results from the 1980's, 1990's and 2000's (Babarović, 2005) with our results, continuous trend of increase of Utilitarian values can be observed, accompanied with continuous decrease of Self-actualizing values.

The economic security was the most important work value of Croatian workers in the post-war period in Croatia (Maslić Seršić et al., 2005). It was explained by the economic and political crisis at that time. In our high-school sample economic security is the fifth in value hierarchy, and still of a high importance. Given the fact that Croatia is in "economic depression" since 2009 (Vedriš, Letica & Letica, 2012) the high position of economic security value among students is understandable.

Finally, we want to stress that the most prominent value in our sample is achievement, typically set within the Utilitarian value orientation (Šverko, 1995). However, looking into factor structure of our values it should be noticed that achievement is saturated highly with Self-actualizing value orientation, not with Utilitarian. Comparing it to the previous research findings in Croatia (Babarovic, 2005; Šverko, et al., 1995) it is novelty. The belonging of achievement to Self-

actualizing orientation and its reliance more to intrinsic than extrinsic values was already noticed in some countries of the "new world" as Australia, USA, Canada and South Africa (Super & Šverko, 1995). It seems that a globalized work culture, Protestant work ethics and liberal economy have huge and fast impact on structure of youth values in post-transitional country as Croatia.

When talking about value orientations, the most prominent is Utilitarian, while the far least prominent is Adventurous. Adolescents found less important to have a job that include risk and physical activity, while they highly value jobs that enable advancement, achievement and financial security. Physically demanding and more hazardous jobs are often associated with lower educational level, while occupations that require higher education are usually associated with better earnings and the possibility of advancement. As our sample consisted of students that are finishing high school, and have already attained the secondary educational level, this findings probably reflect their higher educational aspirations.

Work values and family characteristics

Family characteristics, according to the obtained data, do not determine students' hierarchy of values greatly. However, small but significant differences in values related to family status confirmed our initial expectations.

The expected relationship between socioeconomic status and work values was confirmed. Students from the families of higher SES had more pronounced Individualistic and Utilitarian work values. This is in line with earlier findings that people of higher social status incline to higher prestige, advancement and individuality (Johnson, 2002, Lacy, Bokemeier and Shepard, 1983; Kohn & Schooler, 1983). Interestingly, for the Utilitarian value orientation a significant difference is obtained only between high and middle SES students while low SES students have equally high Utilitarian values as those with high SES. It is possible that high SES students tend to maintain their own high status, and that low SES students, due to their relative economic deprivation, strive for a better economic standard. It is in accordance with findings that the persons from lower financial status put greater importance in some aspects of Utilitarian values (Johnson, 2002). In the case of Social value orientation, it was expected that it will be less pronounced in the lower SES group. It could be explained by a greater 'sensitivity' to the financial needs of others and better insight into the different conditions in which people live that low SES students have. These expectations were confirmed in this study. Students from the lower SES group had somewhat higher Social work values compering to high SES group.

Considering the finding that families with high cultural and intellectual capital are more ambitious and highly encourage personal development of children (Wagner Jakob, 2008), it was expected that Self-actualizing values would be more prominent in group of adolescents coming from families with higher cultural climate. Although to a small extent, this is proved for Self-actualising value orientation. Students with high family cultural climate differ from the others by putting a greater importance on Self-actualizing work values.

The findings presented here indicate that the effects of family characteristics on youth values are small. Most likely, the values of adolescents are significantly affected by other factors that are not covered by this research. It is possible that other family features, not covered in this study, may have some effect. It is also definite that peers, media and school have huge impact on value formation in adolescence. However, we believe that the career counselling and guidance interventions should not ignore the family factors. Family is still the primary social environment for adolescents. Special attention should be given to the high importance that Utilitarian values have for young people and to family factors that enhance it. Keeping this in mind, adequate guidance and counselling can be offered, both to adolescents and their parents, to help them adjusting their expectations to better fit the real world-of-work in Croatia.

Limitations of the study

The mayor problem of this study is related to operationalization of family constructs. Firstly, it is questionable how well high schools students can estimate financial status of their family. Secondly, only one measure of family climate was used in the study. The Intellectual-cultural orientation subscale of Bloom's FFS, used in this research, cover just a segment of a plethora of family characteristics potentially relevant for formation of values.

Other problems are related to the convenient sample of participants assessed in this study. The students were contacted in schools that were geographically close and in which approval for testing was obtained. Only those students who wanted to give their e-mail address and were interested in the research were included. Consequently, in our sample, there are more girls than boys and students more often attend vocational schools than grammar schools. Therefore, the presented sample does not represent population of high school students in Croatia, and hierarchy of values should be interpreted with limitations on population level.

Conclusion

The most important values for adolescents were achievement, ability utilization, social relations, advancement and economic security. The least important were risk, authority and aestheticism. Accordingly, the most prominent value orientations were Utilitarian, followed by Self-actualizing, and Social, while the least important was Adventurous value orientation.

Socioeconomic status had a small but significant effect on the value orientations of adolescents. This effect is evidenced for Utilitarian and Individualistic value orientations where adolescents from high SES families had those values more pronounced. By contrast, adolescents from the lower SES families give more importance to Social value orientation.

The family cultural climate also had small effect on value orientations. This effect is manifested through a Self-actualizing orientation which is more important for adolescents coming from families with higher cultural climate.

Acknowledgements

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Original scientific paper

DOMESTIC VIOLENCE IN THE JUDICIAL DISCOURSE OF THE REPUBLIC OF SERBIA[1]

Abstract

Domestic violence in contemporary society is considered one of the most severe forms of violence, since its manifestation violates the basic human rights and freedoms of family members However, the meaning of violence in the family can be constructed in various ways and in various types of discourse. The aim of this paper is to study the construction of the meaning of domestic violence in the judicial discourse of the Republic of Serbia. The research approach to the problem is qualitative and includes the use of discourse analysis.

The analysis of judicial discourse indicates the constructionist nature of the phenomenon of domestic violence which is illustrated in the monitoring of changes in the definition of the meaning of violence in various legal documents. The analysis included certain articles of the law which define the meaning of domestic violence (Law on Public Peace and Order from 1994, The Law on Amendments to the Criminal Law from 2002, The Criminal Code from 2005, Family Law from 2005, Law on Combating Domestic Violence from 2016) and the National Strategy for Preventing and Combating Violence against Women in the Family and in Intimate Relationships passed in 2011. The analysis indicates that there has been a change in the meaning of domestic violence that occurred during the studied period. Changes in meaning are constructed by a change in the meaning of violent processes which will be considered violent, as well as changes in the identifying the consequences that such violence leads to.

Key words: domestic violence, discourse, discourse analysis, meaning

Introduction

Discourse represents a set of statements, rules, metaphors, representations, images, stories, which in some way constitute the reality of a phenomenon. Discourses define what will be stated about a phenomenon, give it status – and thus make it manifest (Ber, 2001; Fuko, 1998). That is why we say that discourses as social practices have powerful "real" effects. They have the power to regulate and normalize

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the behavior and activities of people, define what is normal, and what is not in various social environments and for various groups of people, legitimize certain practices, certain forms of authority, constitute certain "truths" about "reality"(Walkerdine, 1986, according to: Malson, 2005). Every object, event, person, can be surrounded by many various types of discourse. Discourses on the same phenomenon can often be mutually opposed (Mills, 1997) and can differ in terms of power and authority. Dominant discourses seem "natural" as well as rational and tend to constitute the subjectivity of a great many people (Gavey, 1989). Discourses determine the way in which people act, think and feel, and on the other hand, the discourses themselves are constituted through language, in people's speech and their activities. Discourses provide us with a framework for the interpretation of the world and provide ways for us to present ourselves. Our feelings regarding who we are and what is or is not possible for us to do, what is right and what suitable for us to do, and what is wrong and inappropriate for us, all this is derived from the dominant discourse (Ber, 2001). However, these "truths" which are produced within the discourse on a certain phenomenon are not absolute and are historically produced under certain conditions. That is why our experiences of ourselves will be shaped in accordance with the ideas and practices which have been pointed out and which are relevant for a specific historical moment.

A concept which is also constructed and produced in a specific historical context and which is surrounded by various and opposed discourses is also the concept of domestic violence.

Domestic violence can be defined in various ways, and how we define violence has significant implications. The definition of a term such as domestic violence marks certain acts negatively, while ignoring ones or approving others. Terms such as domestic violence provide people with words with which to describe and understand their own experiences. The way the concept is defined will affect how people will mark, explain, evaluate and assimilate their own experiences (Muehlenhard & Kimes, 1999). Furthermore, it provides an understanding about which forms of behavior to consider unacceptable – worthy of public condemnation, and which forms are normal and acceptable, which forms will warrant research and legislative initiatives. Thus, narrow definitions of violence, reduced only to extreme physical violence can lead to violence being considered rare or as being perpetrated by deviant individuals. Contrary to that, more encompassing definitions will lead to the problem being viewed as a broad one, and thus could contribute to maintaining the status quo (Muehlenhard & Kimes, 1999).

The definition of domestic violence can be constructed for various reasons and in various contexts. Violence can be defined by several actors: the one who experienced the violence (the victim[2]), the perpetrator of violence (the violent

[2] Feminist organizations suggest using the term *"survivor"* which places emphasis on the strength of a woman and the positive aspects which provide an exist from a violent situation (Ignjatović, 2011). In this paper, we will use the term *victim* because it is a still frequently used term that denotes an individual who is suffering violence.

offender[3]), by those who deal with the problem of violence (scientists, judges, advocates, social workers, psychologists) or those studying violence (Hearn, 1998; Hearn & McKie, 2010). Agreement and discord among them are of vital importance since they will influence practical interventions, the development of policies[4], the work of professionals included in the process of victim protection, and especially the understanding of violence by those who are directly involved the perpetrators and the victims. Understanding the cause and explanation of violent behavior will influence the explanation, apology or justification of violence on the part of the perpetrator, but also on the part of the victim (Hearn, 1998).

The initial thesis in this paper is that the concept of domestic violence is socially constructed and that it changes over time. From the perspective of social constructionism, a single, universal and true definition does not exist. The definition of a certain term will depend on who is defining it, and will reflect the interests of people in power (Muehlenhard & Kimes, 1999). Thirty years ago, acts of violence were considered to occur between those who did not know each other, not within the family or as a part of other close relations (Bergern, 1998, according to: Muehlenhard & Kimes, 1999). Even though the changes which have happened over the past thirty years can be considered positive, this does not mean that scientists or political activists have found a "true" definition of domestic violence. Something of this sort, from the standpoint of social constructionism, does not exist. The phenomenon of violence within the family and intimate relationships can be constructed by various discourse means and in various types of discourse. One of the dominant discourses constructing domestic violence is in fact the judicial discourse.

Domestic violence and judicial discourse

Changes in how domestic violence is seen, ranging from a private to a social problem, is reflected in the introduction and determination of domestic violence in legal documents.

The law is an important social discourse which at the same time is a part of the construction of social phenomena and our understanding of the given phenomena (Niemi-Kiesiläinen, Honkatukia & Ruuskanen, 2007, according to: Burman, 2010). The Criminal Code is a powerful social and moral discourse which constructs what is right or wrong, by assigning responsibility and guilt for activities which are damaging to an individual and unwanted in society (Burman, 2010). Thus, the role of the law and judicial decisions are especially important in the social construction of norms and deviations from norms.

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[3] In addition to the term *offender* the term *perpetrator of violence* is also frequently used. Using this term enables us to make a distinction between violent behavior and the person perpetrating violence. Both terms are used in this paper.

[4] What we consider *politics* in this paper is the group of procedures, measures, strategies which at the national level are carried out with the aim of eliminating and sanctioning domestic violence.

The Criminal Code defines the norms of acceptable and unacceptable behavior. As a result, the legal definitions which are established by the official government, which may seem like real definitions and bear the stamp of objectivity. However, there is nothing objective in the law. The law is prescribed by a legislative body which is mostly made up of people from higher socio-economic groups who see this problem from their own perspective. The question of who has the right to define is inextricably linked to politics and power (Muehlenhard & Kimes, 1999). What will depend on how domestic violence against women is defined in a normative framework (through laws, declarations or other important documents) is what is considered domestic violence against women and what policies, laws and other measures will be fashioned so that this occurrence could be socially regulated (Babović, Ginić, Vuković, 2010). The ways in which violence is conceptualized and defined will determine what will be visible, and recognizable as violence, and what will or will not be done in politics[5] and in practice (Itzin, 2000; according to: Murray & Powell, 2009). Therefore, the definition of domestic violence within the legislature is of special importance.

In the Foucauldian sense, (Fuko, 1994, 1997) those who write the laws control the production of discourse and thus create a certain "truth", while at the same time excluding other potential truths. Discourses and constructions in the law are neither static nor unchangeable. The law has a special place in the definition of a phenomenon since it can overcome or discredit alternative knowledge and discourses on the defined phenomenon (Smart, 1989, according to: Bell, 2002). This would at the same time mean that other types of knowledge and different interpretations of events, which could exist both in the legal process and outside of it, could only selectively be "heard". The extent to which these different types of knowledge could be heard depends on how significant they are for the *legally* defined problem. If they are not significant, then they are excluded (Bell, 2002).

In this paper, our intention is to study how the phenomenon of domestic violence is determined in the legislature of the Republic of Serbia, as well as whether some aspects of domestic violence are more emphasized in the law compared to others, which would indirectly, influence the shaping of the problem (the phenomenon) of domestic violence itself. By monitoring the changes in the definition of domestic violence over time we can illustrate the social constructionist nature of the phenomenon itself, and the fact that this phenomenon does not possess a fixed and unchanging meaning.

The goals of the research

The aims of this study are:
-   The analysis of discursive constructions of domestic violence in various laws of The Republic of Serbia

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[5] What we consider *politics* here is the group of procedures, measures, strategies which at the national level are carried out with the aim of eliminating and sanctioning domestic violence.

-   The analysis of changes in defining the meaning of domestic violence in the laws passed in different years.

The analysis aims to show that the meaning of domestic violence has changed over the years, that is, that the meaning of domestic violence is social construct, and that the phenomenon itself does not possess a fixed and unchanging meaning. Hence, the analysis covers all articles of the laws which define domestic violence, from its first incrimination up to the present day.

The sample

- The Law on Public Peace and Order passed in 1994, Article 6, published in the Official Gazette of the Republic of Serbia no.48/94/1497;

- The Law on Amendments to the Criminal Law passed in 2002, Article 118a, published in the Official Gazette of the Republic of Serbia, no. 10/2002 of 1.3.2002 and 11/2002;

- The Criminal Code of the Republic of Serbia passed in 2005, Article 194; published in the Official Gazette of the Republic of Serbia, no.85/2005 of 6.10.2005, 88/2005 and 107/2005;

- The Family Law of the Republic of Serbia passed in 2005, Article 197; published in the Official Gazette of the Republic of Serbia, no. 18/2005;

- The National Strategy for Preventing and Combating Violence against Women in the Family and in Intimate Relationships passed in 2011; published in the Official Gazette of the Republic of Serbia, no. 27/2011 of 20.4. 2011;

- the Law on Combating Domestic Violence passed in 2016; published in the Official Gazette of the Republic of Serbia, no. 94/2016.

Data collection procedure

Laws on domestic violence and the National strategy for the Preventing and Combating Violence against Women in the Family and in Intimate Relationships were accessed via the website www.propisi.net .

Data analyses

To analyze the discursive constructions of domestic violence, we used discourse analysis. As the basis for the analysis we used the first three stages of this type of analysis, as suggested by Carla Willig (Willig, 2001):

1. stage - *Discoursive constructions*: Stage one of the analysis includes the identification of various ways in which the discursive object is constructed in the text.

2. stage – *Discourses*: Once we have identified all the parts of the text which contribute to the construction of the discursive object, we can focus on the differences between the constructions. The second stage is aimed at locating various types of discursive constructs of objects into broader discourses.

3. stage - *Action orientation*: An understanding of what the various discursive constructions of the object are able of achieving in the text, for example: to ascribe responsibility, release from responsibility, justify remaining with a violent partner.

The researcher's reflections on the research approach

In the analysis of the judicial discourse, the implemented approach can be located into those approaches which negate the possibility of an objectively learned reality, which exists outside of the discourse and deals with the analysis of the ways in which discourse and discursive resources are constructed, rather than how they reflect their objects. This research deals with the analysis of the ways in which discourses as social practices construct certain truths, certain realities and subjectivity and thus reproduce certain (gender) relations of power.

In accordance with social constructionist approach to understanding reality, the results which follow represent only one of the possible ways of understanding domestic violence, which is created in the judicial discourse.

An overview of the data analysis and the interpretations

Prior to incriminating violence in the family, as a criminal activity, cases of domestic violence were treated within the framework of disturbances of the peace. Article 6 of the Law on Public Peace and Order from 1994 includes several offences which contain elements of physical or psychological violence: arguing and shouting which disturb the public peace or threaten the safety of the citizens; threatening the safety of another person by threatening attacks against his life or body, or the life and body of a person close to him; threatening the safety of the citizens, or disturbing the peace of the citizens, or disturbing of the public peace by insulting or abusing someone else by performing acts of violence against another person, instigating a fight or participating in it.

Reports which pertained to arguments or violence within the family system were viewed as disturbances to others, disturbances of the public peace, and not in relation to the individuals who were experiencing the violence. Thus, domestic violence should have been punished primarily for the sake of others, and not for the consequences which violence leaves on an individual, whether physical or psychological.

This view of family violence has had multiple implications. Firstly, none of the participants in a specific event are viewed as either the perpetrator or the

victim, and thus both are responsible for the occurrence of violence, which is also indicated using the term *argument.* Strategies for preventing this type of violence set up by the system were not to be found, and the state had no obligation to prevent this type of violence. In this case, institutional responses were reactive, based on punishing the perpetrated act. Preventive measures for the recurrence of this type of violence did not exist. Subsumed under the category *disturbing the public order and peace,* domestic violence was equated with other offences within this domain such as gambling, prostitution, ticket scalping, etc. By not defining the emotional relationship between the attacker and a second party, violence against family members within the scope of this law was treated the same way as both violence between unfamiliar or emotionally indifferent individuals. Sexual violence against a family member was not recognized within the scope of this law, nor was the gender dimension of violence in the family.

Domestic violence in Serbia was legally sanctioned and incriminated for the first time in the Law on Amendments to the Criminal Law of the Republic of Serbia from 2002 (Article 118a).

According to this law (herein LACL 2002) an individual can be prosecuted for the criminal act of domestic violence if they:

> *Use of violence or serious threat of attack against life of body injures or endangers the physical or mental integrity of a family member.*

In this case domestic violence is defined by citing forms of violence which will be sanctioned, and the consequences which the violence might lead to.

This definition defines domestic violence as the *use of force and serious threat of attack against life or body*. It does not clearly imply which type of force is referred to, but it could be concluded that it is a case of physical violence, bearing in mind an additional clarification found in Paragraph 2 of this article which reads:

> *If during the perpetration of the act from Paragraph 1 of this article a weapon, deadly weapon, or implement for inflicting serious injury to the body or health is used.*

The second form of a violent act which is defined and sanctioned is *grievous threat and attack on an individual's life and body.* What is problematic about this definition of a violent act is that it refers only to one form of psychological violence, issuing threats, and specifically only to the threat of a physical assault. Thus, the very meaning of a threat is very narrowly defined. The second problematic aspect is the clarification of the severity of the threat, that is, an indication that the threat should be *serious* to be considered a violent act which is subject to punishment.

How do we tell the difference between a serious threat of attack against one's life and body from a less serious threat of attack against someone's life and body? Who makes this decision Is it the policeman intervening and evaluating the threat that focuses his interventions or is it the individual who is being threatened? Who has the power to define? These kinds of formulations leave room for a vague understanding of the forms of violence which should be sanctioned and a different

understanding of the problem of domestic violence of all the parties involved in the process of sanctioning violence, from the victim itself, to the representatives of social institutions.

The following definition of the meaning of domestic violence can be found in legal documents from 2005, with the passing of the Criminal Code and the Family Law.

According to the Criminal Code of 2005 (herein CC 2005), Article 194, the individual accused of the criminal act of domestic violence is:

> *Whoever using violence, threat of attacks against life or body, insolent or ruthless behavior endangers the tranquility, physical integrity or mental condition of a member of his family.*

Compared to the determination of the meaning of domestic violence in the LACL 2002, a broadening of the meaning of domestic violence in the CC 2005 was achieved by an expansion of the meaning of a violent process which is sanctioned and the consequences which violence might lead to.

A violent process is defined as the *use of force, threat of attacks against life or body, insolent or ruthless behavior. The use of force* is replaced by the term *use of violence.* The meaning of force implies physical force, while the use of violence can include various forms of violence. *A serious threat* that someone would attack an individual's life or body is substituted by the *threat* of attack against someone's life or body. The meaning changes significantly, since it indicates that each threat will be considered and sanctioned as a form of violent behavior. The fact that this is another narrow definition of a threat is also reflected in the explicit mention of a threat which refers to injuries to the body or to endangering one's life.

Insolent and ruthless behavior introduces a new expansion in the understanding of violent behavior, since it points to actions which are quite different from physical violence, even though there is no explicit mention of what is considered by this. Insolent and ruthless behavior does not imply physical contact and could be linked to psychological or economic violence.

The consequences of violence are defined as: *endangering the tranquility, physical integrity or mental condition of a member of the family* whereby the previous determination in the LACL 2002 is replaced: *harming and endangering the physical or mental integrity of a family member.*

Endangering mental integrity is replaced by *mental condition* which does not indicate a clear difference in the change in meaning, but the broadening of the meaning of the consequences of violence is reflected in the introduction of a new consequence of violence - *endangering tranquility.* The meaning of tranquility is not indicated, but it certainly refers to an internal and psychological experience, which emphasizes even more the consequences of violence on one's psychological well-being, and thus the clearly recognizable need to sanction psychological violence.

In 2005, in addition to the Criminal Code, the Family Law was also passed. Within in, Article 197 stipulates that domestic violence is:

Behavior by which one member of a family endangers the physical integrity, mental health or tranquility of another family member.

This determination is equivalent with the consequences of violence in the CC of 2005. *Mental condition* was replaced by *mental health* which does not indicate a clear change in meaning.

However, the meaning of violence was expanded. Physical violence is clearly indicated by the determination of violence as *infliction or attempt to inflict injury to body.* Defining violence as *provoking fear with threat of murder or infliction of bodily harm to a family member or other close person, limiting freedom of movement or prohibiting communication with a third party, insulting, or any other form of insolent or ruthless behavior* points to psychological violence. The meaning of psychological violence was expanded significantly, since it indicates forms of violence which are now for the first tune being incriminated – insulting, limiting freedom of movement and prohibition of communication with a third party. On the other hand, indicating that a process is considered violent if it provokes fear emphasizes the importance of psychological violence in addition to physical violence, which, traditionally, is usually recognized (Burmana, & Chantler, 2005). *Insolent or ruthless behavior* represents typical legal standards, whose content the courts need to complete with their value judgments and which represents social constructions which are based on certain value assumptions and socio-cultural standards which define the relationship one has towards a family member. Insolence and ruthlessness can be determined only in relation to something else – in relation to general social norms and values (Petrušić and Konstantinović Vilić, 2010).

The Family Law indicates the existence of sexual violence which is defined as *forcing into sexual intercourse or leading into sexual intercourse or having sexual intercourse with a child under the age of 14 or a helpless person.*

We can conclude that domestic violence defined in the Family Law (2005) refers to physical, psychological or sexual violence. The broadening of the meaning of violence leads to an increase of institutional work in the case of the suppression and prevention of violence. The range of what will be monitored, evaluated and punished significantly increases, and thus the number of institutions which are included in the process of solving this problem also rises.

In 2011, the National Strategy for Preventing and Combating Violence against Women in the Family and in Intimate Relationships was passed (herein the Strategy). The Strategy consists of various segments, and the analysis includes only certain parts which refer to the identification and determination of the meaning of domestic violence.

First and foremost, the very name of the Strategy - *the National Strategy for Preventing and Combating Violence against Women in the Family and in Intimate Relationships*–emphasizes the gender basis of domestic violence, and the text itself states the following:

It is a fact that family violence is the most prevalent form of violence against women, while on the other hand, it is also correct that women are most often

victims of domestic violence, both of which lead to the definition of the focus of the Strategy as predominantly, though not exclusively, violence against women in the family.

The clear identification of women as recognizable victims of domestic violence indicates the recognition of the severity of this form of violence against women. The fact that it is a form of violence most usually committed against women justifies the introduction of a gender sensitive determination of this form of violence. In addition, various studies often include terms such as domestic violence or violence against women, which are used interchangeably or synonymously, which indicates an overlap between these two items.

Domestic violence is a public, not a private problem. The state has an obligation to protect the victims of family violence. Otherwise, violence is being implicitly condoned.

When violence in the family is determined as a public, not a private problem, then it becomes a problem of society. With such a definition, the state now has the obligation of protecting the victims of violence, providing appropriate legal sanctions and their effective realization.

Domestic violence always represents abuse of power and control of family members who have less power or access to smaller resources. Violence against women is the result of an imbalance in power between men and women.

Here violence relates to control and power which within the family are usually found in favor of the men. The goal of violence is to provide control, obedience and subjugation of family members who have less power. Here violence can be redefined as a struggle for establishing and maintaining power.

In most societies, especially in traditional and patriarchal communities, men have significantly more power – not only physical, but also economic and social power.

By indicating the fact that, in traditional patriarchal communities, men have more power than women, the problem of violence against women in the family is placed in the context of a wider social-structural problem. The patriarchal ideology makes up a context in which violence against women is not sanctioned; moreover, violence represents a means of disciplining women used by men. That is why, with the aim of preventing violence against women in the family, it is necessary to establish egalitarian relations between men and women.

The Strategy includes forms of domestic violence such as physical, sexual, psychological and economic violence. The manifestations of these forms of violence are determined further:

- Physical violence includes: pushing, shoving, pulling hair, hitting, kicking, biting, choking, stabbing, physical torture, withholding necessary care and aid to women with a disability, beating and murder, but do not exclude other manifestations

as well. The severity of the injuries varies from mild to grievous (fractures, lesions, bruises), permanent injury and death.

- Sexual violence represents each non-consensual sexual activity, including: sexual teasing, unsolicited comments, unsolicited suggestions of a sexual nature, coercion to partake in or look at pornography, unwanted touching, painful and demeaning sexual acts, forced sexual intercourse, rape and incest.

- Psychological (mental, emotional) violence includes: demeaning, insulting, ignoring, abusing privilege, cursing, making fun of, mocking, chicanery, threats and coercion (with or without the use of weapons or implements which could cause serious physical injury), intimidation, isolation, contempt, harassment, blame, manipulation of children, verbal assault, but does not exclude other manifestations.

- Economic violence represents: unequal access to joint funds, depriving, that is, controlling access to funds, preventing employment or education and professional improvement, denying rights of ownership, forcing one to denounce ownership of property or requesting property that a victim of violence has waived, that is, intended to waive their right to, selling items without the consent of the owner – selling under coercions, but does not exclude other manifestations as well.

The Strategy, in addition to physical, psychological, and sexual violence also points to the existence of economic violence, and provides a detailed explanation of all forms of violence by pointing out its manifestations.

June 1, 2017 saw the ratification of the Law on Combating Domestic Violence (Official Gazette of the Republic of Serbia, no.94/2016).

Domestic violence, as defined by this law, is an act of physical, sexual, psychological or economic violence by a perpetrator…[6]

Thus, the meaning of domestic violence according to this law matches the meaning laid out in the Strategy. However, the change that the law has introduced, among other things, includes a detailed plan of work of all the authorities and institutions charged with the prevention of domestic violence, guidelines for risk evaluation, urgent measures such as removal of the perpetrator of violent acts from the home, as well as individual plans of protection and victim support.

Conclusion

The specific nature of judicial discourse is that it can determine what types of behavior are punishable (Burman, 2010). Therefore, its power in defining domestic violence is extensive. By analyzing legal documents, we have illustrated the idea

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[6] … against an individual that the offender is currently married to or had previously been married to, or is in a common law relationship or partner relations with, or against an individual who is his direct blood relation, or is his relation twice removed, or whom he is related to by law, twice removed, or against an individual whose guardian he is, or an individua who is his adopted child or foster child, or whose foster parent he is, or against any other individual he is living with or he lived with in a joint household.

of the socio-constructionist and changeable nature of the phenomenon of domestic violence.

The first change in the meaning of domestic violence refers to the change in the determination of domestic violence as a misdemeanor and its classification as a felony criminal act. The difference between a misdemeanor and a felony is in the type of punishment (sanctions) which it carries (Brkić, Janković & Stanojević, 2009). In addition, prior to incriminating domestic violence in 2002 in the Law on Amendments to the Criminal Law, domestic violence was sanctioned in reference to the damage inflicted upon others, the disturbance of public order, and not in relation to the damage it inflicted upon the victim. Following the incrimination of this "new" felony in the legislature, domestic violence was constructed by the determination of the meaning of a violent act and the consequences which these actions lead to. Over the years, with changes in the law, the meaning of both violent acts and the repercussions also changed. The meaning of violent acts in the Criminal Code (2005) and Family Law (2005) was expanded *from* the use of force and grievous threat to attack someone's life or body *over* acts of violence and threats on someone's life or body *to include* grievous bodily harm, forcing someone to have sexual intercourse, causing fear by threat of murder or causing bodily harm, limiting the freedom of movement or communication with a third party, insulting, as well as any other types of insolent or ruthless behavior. In this way, a violent act, in addition to the physical, begins to include both psychological and sexual violence.

Changes in the meaning of the consequences which violence leads went from harming the physical or psychological integrity to threatening the peace, bodily integrity, and mental condition (health). In accordance with the expansion of the meaning of the term violent offence, the consequences of violence were expanded to include psychological along with physical violence. Due to the specific nature of the legal jargon and the used constructions, the legal interpretation of various phenomena, and thus domestic violence, always leaves room for various interpretations. Thus, for example, what is considered to be insolent or ruthless behavior will also change, depending on the value judgments of those making the interpretations in relation to the general and prevailing social norms and values (Petrušić and Konstantinović Vilić, 2010).

Our analysis shows that in all the laws to date domestic violence has been determined through citing forms of violent behavior, with a tendency to precisely define the violent process, and the determination of any consequences that the violence might bring. None of the definitions present domestic violence in the context of maintaining power, subjugating family members and providing their obedience, which makes up the basis of a violent relationship. Defining domestic violence by focusing on the incident itself, and not the violent process is suitable for the criminal code, since it clearly defines the activity which is being sanctioned. This definition on the other hand sets aside the fact that violence is rarely a single incident and that violence over time escalates and worsens. These definitions mask the complexity of the dynamics of "everyday" repeat violence.

Domestic violence in our laws is a gender-neutral term, which masks the fact that the greatest number of victims of family violence are in fact women. However, in

the National Strategy for Preventing and Combating Violence against Women in the Family and in Intimate Relationships which was passed in 2011, for these reasons, the gender dimension of domestic violence is also taken into consideration, and so the focus of the Strategy is predominantly, though not exclusively, the determination of violence against women in the family. The Strategy also, unlike the law, cites an entire list of various definitions of violence against women in the family which is used to point out that the violence is a result of a lack of balance of power between men and women which in traditional patriarchal societies is in favor of the men, and so violence is always represented by the abuse of power and control over family members who have less power or access to smaller resources. Thus, violence against women is immediately placed in the wider social context which supports violence against them.

By comparing the legal definitions of domestic violence and the content of victim narratives regarding partner violence, we can reach the conclusion that the legal definition of domestic violence is not able to encompass all the aspects of violence, not in a way that the victims of violence experience it (Simić, 2014). The difference stems from the fact that legal formulations of family violence are focused on the violent act itself and not the process, as it is often described by victims of violence. Victims of violence speak of violence which is continually taking place, and acts which the perpetrator performs or incites the victim to do, which in and of themselves are a punishable offence. Such acts need not be violent, but have a detrimental effect on the woman's experience of herself and her freedom. They focus her behavior and make her submissive. Examples of such acts are telling a woman how to cook, clean the house, get dressed, take care of the children, spend money, whom she can spend time with. Evan Stark (2007) has developed a thesis of coercive control which is applicable to non-physical violence and emphasizes how these seemingly insignificant acts, which rely on existing gender norms, create micro-regulations of the victim and influence her experience of herself. He connects domestic violence and coercion and so violence is not determined by the prevalence of violent incidents, but the wife's experience that she is caught and trapped in a situation which is not bound to violence. Which is why he proposes a shift away from *an incident characterized by a limited definition of domestic violence* and proposes a redefinition of domestic violence as *a crime against liberty.*

Coercive control, the way it is described by Stark, can clearly be seen in the narratives of women who are victims of violence (Simić, 2014). However, the problem is how to implement them into the legal definition of domestic violence which would lead to punishment for this type of crime. Stark himself considers coercive control to have very little influence, since actually no one knows what to do with it. In addition, many of these techniques of micro-regulation of the victim go unnoticed, since they represent a part of the daily lives of many women, and precisely because they are supported by gender roles which are assigned to women. It is difficult to "weigh" them and thus difficult to sanction them in a legal sense.

The definitions of domestic violence cannot include the complete experience of the victims who experience partner violence, and for those who are providers of

aid[7]to be able to take part in the protection of all victims, not only those considered "extreme" in terms of experienced violence, it is necessary to consider partner violence as violence against one's identity and one's freedom (Stark, 2007). If in the recounts of the victims who are seeking help we look only for isolated violent offences, as defined by law, help and support will be withheld from all victims of partner violence. Only by understanding the experiences of abused women can we adequately identify all the strategies which violent offenders use and all the harmful experiences which women endure because of the violence they experience. For those providing aid to recognize the consequences of living in the world of an abuser, they first must understand what such a world can do, and how women learn to live in it, which strategies they use and how they deal with the fear of failure that they will not be able to satisfy the violent offenders' oftentimes unreal expectations. Only by recognizing these problems can individuals offering aid be able to provide services which will enable women to regain their self-respect, self-confidence and to exit the violent relationship.

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[7] People who offer aid include all individuals who are active participants in the process of preventing domestic violence (psychologists, social workers, pedagogues, lawyers, judges and the police).

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Original scientific paper

IRRATIONAL BELIEFS, ANXIETY AND SELF – EFFICACY AMONG STUDENTS[2]

Abstract

The main aim of this research is to determine the correlation of different aspects of irrational beliefs, anxiety and self – efficacy among students. Specific aims of the research are to test a correlation of main variables with sociodemographic variables. In this publication will be showed only main results and significant values.

There is a small number of research papers which deal with this subject, especially among student population, even though we are aware of significant impact of self-efficacy on the academic performance of people.

Irrational beliefs scale, with 4 subscales: *requirements for the absolute correctness of other and their devaluation, self-devaluation, requirements for unconditional affection and perfectionist demands on yourself* (GABS 37, Marić, 2000) and Self – efficacy scale with two subscales: *general and social self – efficacy* (Sherer, Maddux et al., 1982) were administrated. The sample consisted of 200 (100 males and 100 females) second year students (M=20.37, SD=0.48) attending different Faculties at the University of Nis. We tested a correlation of main variables with socio demographic variables (gender, faculty, academic performance, birth order, relationship status, place of residence before faculty, family structure and hobby). There are significant results which are analyzed in accordance with the relevant research and empirical framework. The results show that there is a significant positive correlation between rational beliefs and General (r=.26, p<.01) and Social (r=.30, p<.01) self-efficacy. There is a significant positive correlation between General and Social self-efficacy (r=.48, p<.01). There is a significant positive correlation between all irrational beliefs and levels of anxiety. There are significant differences in expression of Situational and General anxiety concerning gender of the students, whereby female students in comparison with male students have higher average rank on mentioned dimensions.

Key words: irrational beliefs, rational beliefs, anxiety, self - efficacy, students

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Introduction

When it seems that the world is predictable and under our control, and when we control our own behavior, thoughts and feelings, we can better face the challenges in life, build healthy relationships and achieve personal satisfaction and peace of mind. The aim of this research is to examine and discuss self-efficacy of the student population, both its general and social aspect. Irrational beliefs prevent us from adequately functioning in all spheres of life. Where there are irrational beliefs, there is usually anxiety that they are producing. Anxiety is a type of nervousness that subject feels when its entire life situation is beyond its capacity to cope. It brings us into a state of inexplicable fear, inner anguish, and, if this state persist over a long time, it can have bad consequences for our mental and physical health. Many studies have dealt with these constructs, trying to shed light on the relationship between anxiety, self – efficacy and irrational beliefs (Silverglade et al., 1994; Marcotte, 1996; Muran et al., 1989; Himle et al., 1982; Vandervoort, 2006). What has attracted attention is the relationship between these constructs with some sociodemographic variables (gender, academic performance), and these studies (Meece & Jones, 1996; Anderman & Young, 1994; Britner & Pajares, 2001; Vulić-Prtorić & Kolarić, 2011) gave an incentive to check the connection between certain sociodemographic variables with basic variables in this study.

Rational and irrational beliefs

Cognitive theory of emotions is very popular in the modern literature (Popa, 2001). Within the cognitive - corpus theory, one of the most influential schools of psychotherapy is rational emotive behavioral therapy (REBT; Ellis, 1994; Marić, 2000). Basic settings of Elis's theoretical model, in literature known as the ABC model of emotion and behavior (Marić, 2000) could be presented as follows: At the time of activating event (A), a person experiences emotions and behaves in a certain way (C), depending on their belief system (B), and not as a direct consequence of activating event, as is commonly thought. A = activating event may be any experience in which a person's reaction has emotional and behavioral consequences, for example: one's own behavior, emotions, internal bodily sensations, one's behavior and thinking, interpersonal relations, living conditions... More broadly, a triggering event may be what a person thinks (Ellis, 1994). However, what becomes a triggering event for a person is always a personal interpretation and inferential thought about any past, present or future experience. B = Beliefs make up a person's life philosophy that they live by and use when try to obtain significant life goals. C = The effects that occur as a person's response to an activating event, in fact, represent the consequences of certain beliefs and may be functional or dysfunctional for the person. An important characteristic of beliefs is that they include evaluation of self, others and life in general. Beliefs can be rational and irrational. Irrational beliefs are rigid, extremist,

non-logical, self-defeating and not in accordance with the reality. They are in a form of imperatives (beliefs that the things should be in a certain way), non-tolerance to frustration (belief that when the things are not going how it was supposed to be they are unbearable) and global rating about self, others and life in general (Dryden, 2009). Rational beliefs are not absolutistic nor extreme, they are logical, self-helping and in accordance with the reality.

Anxiety

Anxiety is one of the central and most widely studied concepts in psychology since Freud, but it is determined in different ways through different theoretical approaches. The term "anxiety" has its root in the Latin words "anxietas" which means anxiety, worries and "angere" which means to tighten. Anxiety is a type of nervousness a person feels when she/he perceives her/his entire life situation as being beyond its capacity to cope. A person is anxious when she/he feels that she/he is unable to cope with life's difficulties (Milivojević, 1993). In Serbian language, anxiety has its synonyms in the words of anxiety, a feeling of indeterminate fear, inner anguish, anxiety. In psychiatry the term is in use since the late nineteenth century (Kaličanin, 2002). There is no consciously perceived object which prevents the person to confront danger, which further increases the inconvenience and concern. Anticipation, which is an important component of anxiety, suggests what is important in this phenomenon is the future – something dangerous that will happen or could happen.

Self-efficacy

Theory of self-efficacy were set by Bandura in the 70-ies of XX century, in order to explain the changes that occur during psychotherapy (Bandura, 1977). The main idea was that the change in behavior arises due to the improvement of the assessment of subject's own abilities, and self-efficacy. Soon, the concept of self-efficacy gets an important place not only in clinical practice, but also in studies of various aspects of social and psychological functioning. Self-efficacy represents a self-evaluation construct that is often investigated as a significant internal resource for confronting. This phenomenon refers to the belief that the subject can control the unpleasant experience and their own behavior in stressful circumstances. The development of the construct of the self-efficacy is influenced by four main sources of information: one's own achievements, experiences of others, verbal persuasion and psychological state (Bandura, 1982). Smith and Bec (Smith & Betz, 2002), are referring to the collection of self-assessment of confidence in different social situations as perceived social self-efficacy. Social efficacy refers to the beliefs of individuals that they are capable of initiating social contact, and acquiring new friends (Gecas, 1989).

Relevant researches

The study who tested correlation between mechanisms of coping with stress, neuroticism and irrational beliefs among adolescents (Šafranj, 2010) gave us results who showed that irrational beliefs are in high positive correlation with all domains of neuroticism and some of the mechanisms of coping with stress.

Silverglade and associates (Silverglade et al., 1994) tested correlation between anxiety, depression, hostility and irrational beliefs. The results showed that irrational beliefs contribute to the lower emotion control and higher anxiety, depression and hostility.

There are a couple of studies that confirmed correlation between self – efficacy and anxiety. When self – efficacy is higher anxiety is lower and vice versa. (Yue, 1996, Matsuo & Arai, 1998, Murris, 2002, Malpass, Neil & Heocevar, 1999). In social cognitive theory, feeling of efficacy has the main role in a level of anxiety among students. People experience anxiety when they believe that they are not competent to get over harmful events. (Bandura, 1997)

Some of the research studies showed that males has higher attainment than females on self - efficacy (Meece & Jones, 1996; Anderman & Young, 1994), some of them that females has higher attainment than males (Britner & Pajares, 2001), while in some other researches there were no gender differences in self – efficacy (Gabelko, 1997).

Some research studies showed that girls are more anxious than boys, and one of the explanations for that is that they are biologically determined (Vulić-Prtorić & Cifrek-Kolarić, 2011).

Main aim of the research:
The main aim of this research is to determine the correlation of different aspects of irrational beliefs, anxiety and self – efficacy among students.
Specific aims:
- Determine that there is a significant correlation of levels of irrational beliefs and levels of self – efficacy among students
- Determine that there is a significant correlation of anxiety and levels of self – efficacy among students
- Determine that there is a significant correlation of irrational beliefs and anxiety among students
- Determine that there are significant differences in the expression of irrational beliefs, anxiety and self – efficacy in accordance with socio demographic variables among students.

Methodology

Sample of the research:

It was a convenience sample that consisted of 200 students of both genders who are second year students (M=20.37, SD=0.48) at different faculties (Economical, Law, Engineering, Architectonic, Faculty of philosophy, Faculty of natural sciences) at the University of Nis. The research was conducted during May 2016. The respondents were told that the participation in the research is voluntary, anonymous, and that the results will be used in scientific purposes only. The research has been conducted during lectures (before and after lectures) and via Internet.

Variables used in the research:

Concept of irrational beliefs: Different aspects of irrational beliefs are: requirements for the absolute correctness of others and their devaluation, self-devaluation, requirements for unconditional affection and perfectionist demands on yourself. (Marić, 2000; Vukosavljević-Gvozden et al., 2010)

Anxiety: In this research, anxiety is determined by theoretical and methodological postulates of Spielberger and associates in which the expression of two dimensions of anxiety: situational anxiety and general anxiety are examined and evaluated. (Spielberger, 1983)

Self – efficacy: In this research, self – efficacy is determined by two subscales: General self – efficacy and Social self – efficacy. (Sherer, Maddux et al., 1982)

Socio demographic variables: Gender, education, academic performance, birth order, relationship status, place of residence before faculty, family structure, hobby.

Instruments:

Scale of irrational beliefs (GABS-37)(Marić, 2002): There are 4 subscales: requirements for the absolute correctness of others and their devaluation (ZAK), self-devaluation (SO), requirements for unconditional affection (ZAN) and perfectionist demands on yourself (PZ). Scale has 37 items, Licert's type. (Marić, 2000; Vukosavljević-Gvozden et al., 2010)

Coefficient of internal consistency for the sub scale which is contained of irrational items is high, Cronbah alfa is 0.9, while for the subscale contained of rational items is around 0.7. Reliability of individual subscales is medium, coefficients of internal consistency are: of the *subscale of requirements for the absolute correctness of other and their devaluation* –α=0.87, *self-devaluation* – α=0.82, *requirements for unconditional affection* – α= 0.86 and of the subscale *perfectionist demands on yourself* – α=0.84.

Anxiety inventory – form Y (STAI) (Spielberger, 1983)

STAI-Form Y contains two different dimensions of anxiety: situational anxiety STAI-S (State) and general anxiety STAI-T (Trait). Both scales have per 20 items.

Scale STAI-S estimates how the person is feeling *right now*, in this moment and scale STAI-T how the person feels *generally*. In different researches, reliability of the scale is from 0.65 to 0.89.(Spielberger et al., 1983, 1990)

Self-efficacy scale (Sherer, Maddux et al., 1982)

The scale is determined by two subscales: General self-efficacy and Social self-efficacy. It has 30 items, Licert's type. Cronbah alfa coefficient for the subscale of General self-efficacy is 0.86 and for the subscale of Social self-efficacy is 0.71.

Results

Tabel 1. Correlations between irrational beliefs and dimensions of self-efficacy
(Spearman's correlation coefficient)

	RU	IU	ZAK	SO	ZAN	PZ	General	Social
RU	1	-.37**	-.30**	-.43**	-.28**	-.20**	.26**	.30**
IU		1	.79**	.76**	.76**	.72**	-.22**	-.35**
ZAK			1	.51**	.37**	.44**	-.15*	-.31**
SO				1	.51**	.52**	-.36**	-.44**
ZAN					1	.45**	-.18*	-.11
PZ						1	-.04	-.28**
General							1	.48**
Social								1

**Correlation is significant on the level p<.01
*Correlation is significant on the level p<.0

The results show that there is a significant positive correlation between rational beliefs and General (r=.26, p<.01) and Social (r=.30, p<.01) self-efficacy. There is a significant negative correlation between General self-efficacy and overall scale of Irrational beliefs (r=-.22, p<.01) and Requirements for the absolute correctness of others and their devaluation (-.31, p<.01), Self-devaluation (r=-.44, p<.01) and Perfectionist demands on yourself (r=-.28, p<.01). There is a significant positive correlation between General and Social self-efficacy (r=.48, p<.01).

Table 2. Correlation between dimensions of anxiety and self-efficacy (Spearman's correlation coefficient)

	Stai-s	Stai-t	General	Social
Stai-s	1	.87**	-.60**	-.43**
Stai-t		1	-.64**	-.36**
General			1	.48**
Social				1

**Correlation is significant on the level p<.01

The results show that there is a significant negative correlation between General self-efficacy and dimensions of General (r=-.60, p<.01) and Situational (r=-.64, p<.01) anxiety, as well as a negative correlation between Social self-efficacy and

dimensions of General (r=-.43, p<.01) and Situational (r=-.36, p<.01) anxiety. There is a significant positive correlation between Situational and General anxiety (r=.87, p<.01). The highest correlation of mentioned constructs is between General anxiety and General self-efficacy (r=-.64, p<.01).

Table 3. Correlation between dimensions of irrational beliefs and anxiety
(Spearman's correlation coefficient)

	RU	IU	ZAK	SO	ZAN	PZ	Stais	Stait
RU	1	-.37**	-.30**	-.43**	-.28**	-.20**	-.21**	-.19**
IU		1	.79**	.76**	.76**	.72**	.31**	.31**
ZAK			1	.51**	.37**	.44**	.23**	.23**
SO				1	.51**	.52**	.38**	.39**
ZAN					1	.45**	.16*	.16*
PZ						1	.23**	.18*
Stai-s							1	.87**
Stai-t								1

**Correlation is significant on the level p<.01
*Correlation is significant on the level p<.05

The results show that there is a significant negative correlation between rational beliefs and all irrational beliefs and dimensions of anxiety. There is a significant positive correlation between all irrational beliefs and levels of anxiety. The highest correlation of mentioned constructs is between sub dimension of Self-devaluation and General (r=.39, p<.01) and Situational anxiety (r=.38, p<.01).

Table 4. The differences in the level of expression of anxiety in relation to gender
(Mann-Whitney's U test)

Variables	Gender	N	Average rank	Mann-Whitney U	p
Situational anxiety	Male	100	89.38	3887.500	.007**
	Female	100	111.63		
General anxiety	Male	100	91.33	4082.500	.025*
	female	100	109.68		

**The difference is significant on the level p<.01
*The difference is significant on the level p<.05

There are significant differences in expression of Situational (U=3887.500, p<.01) and Generel anxiety (U=4082.500, p<.05) considering the gender of students, whereby female students have higher average ranking on the listed dimensions in comparison to male students.

Table 5. The differences in the level of expression of irrational beliefs related to faculty *(Mann-Whitney's U test)*

Variables	Faculty	N	Average rank	Mann-Whitney U	p
Rational beliefs	Social sciences	104	106.58	4359.500	-.121
	Technical sciences	96	93.91		
Irrational beliefs	Social sciences	104	89.80	**3879.000**	**.006****
	Technical sciences	96	112.09		
Requirements for the absolute correctness of other and their devaluation	Social sciences	104	93.18	4231.000	.062
	Technical sciences	96	108.43		
Self-devaluation	Social sciences	104	91.49	**4054.500**	**.021***
	Technical sciences	96	110.27		
Requirements for unconditional affection	Social sciences	104	91.43	**4049.000**	**.021***
	Technical sciences	96	110.32		
Perfectionist demands on yourself	Social sciences	104	91.34	**4039.500**	**.019***
	Technical sciences	96	110.42		

**The difference is significant on the level p<.01
*The difference is significant on the level p<.05

The results show that there are significant differences in expression of dimension: Overall dimension of Irrational beliefs (U=3879.000, p<.01), sub dimensions Self devaluation (U=4054.500, p<.05), Requirements for unconditional affection (U=4049.000, p<.05) and Perfectionist demands on yourself (U=4039.500, p<0.05) in relation to faculty, whereby students who study at technical faculties have higher average rank on listed irrational beliefs in comparison to students who study at faculties of social sciences and humanities.

Table 6. Differences in the levels of anxiety in relation to retaking a year at college *(Mann Whitney's U test)*

Variables	Retook a year	N	Average rank	Mann-Whitney U	p
Situational anxiety	Retook a year	23	120.98	1564.500	-.071
	Didn't retook a year	177	97.84		
General anxiety	Retook a year	23	132.15	**1307.500**	**.005****
	Didn't retook a year	177	96.39		

**The difference is significant on the level p<.01

There are significant differences in the expression of General anxiety (U=1307.500, p<.01) in relation to retaking a year at college, whereby students who retook a year in comparison with students who didn't retake a year have higher average rank on General anxiety. -

Table 7. Differences in the level of anxiety in relation to hobby
(Mann – Whitney's U test)

Variables	Hobby	N	Average rank	Mann-Whitney U	p
Situational anxiety	Yes	124	93.01	**3783.000**	**.019***
	No	76	112.72		
General anxiety	Yes	124	94.81	4007.000	.076
	No	76	109.78		

*The difference is significant on the level p<.05

The results show that there are significant differences in the levels of Situational anxiety (U=3783.000, p<.05) in relation to hobby among students, whereby students who don't have a hobby have higher average rank on Situational anxiety in comparison to students who have a hobby.

Discussion

The aim of the research was to determine the relationship between dimensions of irrational beliefs, anxiety and dimensions of self-efficacy.

The results showed that there is a significant positive correlation between rational beliefs and General and Social self-efficacy, which is expected, since the existence of rational beliefs goes hand in hand with adequate belief in efficiency. Persons with rational beliefs are self-confident so they perceive themselves as being efficient (Ellis, 2002), whether in general or social domain.

A significant negative correlation is found between General self-efficacy and Overall scale of Irrational beliefs and subscales Requirements for the absolute correctness of other and their devaluation, Self-devaluation and Requirements for unconditional affection, as well as a statistically significant negative correlation between Social self-efficacy with Overall scale of Irrational beliefs and subscales Requirements for the absolute correctness of other and their devaluation, Self-devaluation and Perfectionist demands on yourself, which is consistent with previously mentioned results or so (Ellis, 2002), that together with rational beliefs goes adequate self-efficacy and vice versa; namely, with irrational beliefs comes lower belief in efficiency. Negative thinking related to possible future failures leads to doubt in self-capacities and abilities (Spurr & Stopa, 2002).

The results show a significant correlation between General and Social self-efficacy. That means that higher General self-efficacy equals higher Social self-

efficacy. This is in accordance with the attitudes of some authors (Smith et al., 2006) that self-efficacy as personality trait predicts behavior in different domains, so in that way, successes in the social sphere will contribute to strengthening of general self-efficacy.

The results show that there is a significant negative correlation between General self-efficacy and dimensions of General and Situational anxiety, as well as a negative correlation between Social self-efficacy and dimensions of General and Situational anxiety. This finding was expected and could be explained by the fact that when the person evaluates himself and self-efficacy and that evaluation is negative, activation of anxiety occurs which involves physiological, cognitive, emotional and behavioral changes (Wells, 1977).

There are significant differences in expression of Situational and General anxiety concerning gender of the students, whereby female students in comparison with male students have higher average rank on mentioned dimensions. These findings are expected and in accordance with previous findings which show us that anxiety is more pronounced within women in comparison with men (Bamber, 1974; Croake, 1969; Croake & Knox; 1974; Kirkpatrick, 1985; Ollendick, 1983; Ryall & Dietiker, 1979; Scherer & Nakamura, 1968, according to Miščević, 2007; Tadinac, Jokić-Begić, Hromatko, Kotrulja & Lauri-Korajlija, 2006), which could be probably explained by the influence of hormonal factors, cultural differences

When it comes to the differences in the level of the expression of variables in relation to faculty, there are differences in the expression of Overall dimensions of Irrational beliefs, sudbimensions Self devaluation, Requirements for the absolute correctness of other and their devaluation and Perfectionist demands on yourself concerning faculty, whereby students who study at technical faculties have a higher average rank on irrational beliefs in comparison to students who study at faculties of social sciences and humanities. This is, in the lack of previous empirical studies on this topic, a hard to explain, but nevertheless an interesting finding, because it points that choosing a faculty, e.i. future profession is, to a certain extent, related to irrational beliefs. It would be useful to follow the dynamics of irrational beliefs in longitudinal research before admission to faculty, during the studying period and after the studies are finished with the same group of people, and to involve variables like personal traits and other variables in connection to cognitive aspects of functioning.

Significant differences were determined in the expressed levels of general anxiety with regard to retaking a year at college, where students who have retook a year had higher average rank of general anxiety compared to students who did not retake. It should be determined what is cause and what is consequence. Likewise, anxiety about other things, and therefore anxiety as a trait can trigger a range of symptoms that can cause significant interference and damage the social, family functioning (Lučev, 2006).

The results showed significant differences in the expression of the dimension of social efficacy with respect to the existence of students' hobbies, where students with a hobby compared to students without a hobby have a higher average rank of the Social Efficacy. This means that having a hobby, as an authentic experience, is related

to stronger social self-efficacy. It is considered that the personal experiences in an activity raise confidence in person's efficiency (Gist & Mitchell, 1992). If someone performs a task well in some areas, they will be motivated to try and perform tasks in other areas and vice versa (Bandura, 1977).

Conclusion

The results showed that there was a significant positive correlation between rational beliefs and General and Social self-efficacy. There was a significant positive correlation between General and Social self-efficacy. We found a significant positive correlation between Overall scale of irrational beliefs and levels of anxiety. The results showed that there was a significant negative correlation between General and Social self-efficacy and dimensions of General and Situational anxiety.

There were significant differences in expression of Situational and General anxiety concerning gender of the students, whereby female students in comparison with male students had higher average rank on mentioned dimensions. When it came to the differences in the level of the expression of variables in relation to faculty, there were differences in the expression of Overall dimensions of Irrational beliefs, sudbimensions SO, ZAN and PZ concerning faculty, whereby students who study at technical faculties have a higher average rank on irrational beliefs in comparison to students who study at faculties of social sciences and humanities. Significant differences were assessed in the expressed levels of general anxiety with regard to retaking a year at college, where students who have retook a year had higher average rank of general anxiety compared to students who did not retake. The results showed significant differences in the expression of the dimension of social efficacy with respect to the existence of students' hobbies, where students with a hobby compared to students without a hobby have a higher average rank of the Social Efficacy.

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Original scientific paper

CORRELATION OF RESILIENCE WITH THE QUALITY OF LIFE ROLES AND SUBJECTIVE WELL-BEING OF MEN AND WOMEN[2]

Abstract

Resilience is a dynamic process that, among other things, involves a positive adaptation in the context of stressful life events. Although resilience is usually associated with major life events and conditions of great stress, it is interesting to examine this concept in terms of stress in everyday life, the so-called micro-stress. The challenge of the contemporary man is a successful balance between important life roles that, in addition to numerous satisfactions, also include a permanent stress experience. The question arises as to whether and in what manner resilience is associated with the perception of the important life roles quality and overall subjective well-being. The research was conducted on a geographic cluster sample of 2023 inhabitants of Serbia. The instrument used was PORPOS battery, the custom-built instrument consisting of 389 items and questions grouped in a series of short scales designed to evaluate a large number of constructs, among others, the resilience assessment, the quality of important life roles and assessment of subjective well-being. The results show that resilience is in a positive correlation with the perception of the quality of all examined life roles: the partner's role, the role of parents, the role of the employee, the role of the host and the role of the one who takes care of the elderly parents. Positive correlation between resilience and subjective well-being was obtained. Regarding the differences between men and women in terms of studied variables, men are more resilient compared to women, while women report a higher level of subjective well-being, but these differences are not statistically significant. When it comes to the quality of performing roles, men are more satisfied with the attitude of satisfaction and effort when it comes to partner's role and role of the host.

Key words: resilience, quality of important life roles, subjective well-being

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Introduction

Human existence a priori involves numerous challenges and difficulties. This often involves dealing with stresses and challenges that, by their strength and scope go beyond the common human functioning, searching for new strategies for overcoming it and putting additional effort. On one hand, this is the process that lies in growing up and maturing of every human being. The question arises as to why some people, despite difficult circumstances and great stress, manage to overcome life's challenges, while some other people respond inadequately even to small ones which are often ineffective and consequently people feel helpless. The concept of resilience, i.e. resistance to stress is a term that can provide answers to these questions.

Systemic resilience studies have been conducted since the 1960s in the area of prevention and treatment of children's mental health issues (Werner & Smith, 1982; Rutter, 1985). In social sciences, the term "resilience" is introduced by Werner (1982) and the concept becomes more and more popular throughout the years of research. This coincided with the tendencies in psychology which in those years was increasingly turning to health and positive aspects of human functioning. We can talk about resilience on several levels, among other things; we can talk about the resilience of the nation, the resilience of some group of people who share some common characteristics and the resilience of the individual. The concept of resilience more and more preoccupies researchers' attention, especially due to the numerous events in the world that affect a large number of people. Ganong (Ganong, 2002) states that in the aftermath of the terrorist attack in 2001, even 100 articles of the New York Times were dedicated to resilience, therefore this author says that we are entering a "resilience era." Global events, wars, crises, climate change are just some of the many risk factors whose impact is massive. It is extremely important to determine how people contribute to stress resistance.

Individual capacity for resilience (Erickson, 1963) represents a good psychological functioning or a positive outcome, despite suffering or a risky experience. Regarding the definition of this term, there is still no single position on its definition. Resilience or resistance is sometimes perceived as the ability to maintain, or recover, mental health despite the experience of an unusual stressor or trauma (Ryff et al., 2004). In this case, resilience is seen as the capacity of a person to overcome the stressors that are unusual in their extent and intensity. According to some authors, the resilience is not merely the overcoming of stressful situations, but also the ability of a person to identify the potential challenge, growth and development in each stressful situation (Park et al., 1996). Although most authors consider the resilience is a personality trait, the characteristic that reduces the negative effect of stress and allows adaptation (Wagnild & Young, 1993, according to Andjelkovic), contemporary concepts perceive resilience as a process. Modern conceptions take resilience as a dynamic process involving many factors, among others, the biological factor, the personality factor, the social environment, the micro and macro factors

of the environment and it depends on the specific cultural and historical context (Herrman et al., 2011).

Resilience does not mean absence of difficulties and problems, resilience is behaviour, thought, action that can be learned and developed. Resilience is the human capacity for change (Grotberg, 2006), the ability to adapt to a new situation, the ability to change and adopt adequate strategies for dealing with stress, an active relationship with the stressor, and the adoption of adequate forms that may be useful in some new situations.

Although the concept of resilience is mainly associated with large events and great stress, it is interesting to study this concept in the terms of so-called " micro-stress"which represents the stress of everyday functioning, and which has a cumulative character. Daily micro-stressors are events of very low intensity of threat, but of high frequency, which gives them a stressed potential (Zotović, 2002). Stress of everyday life has a number of implications for mental health and well-being. The modern lifestyle, in addition to the greater bustle, also implies the roles that, in recent years, have becomein many ways more complex and demanding. One of the challenges of the modern man is the successful establishment of a balance between the obligations and the responsibilities of the life roles that adults have. Life roles, such as parental, the role of an employee, the role of the caregiver of the elderly parents and the role of the host / hostess provide both satisfaction and the source of stress because they involve the investing of a person's ongoing effort. These aspects of life greatly influence the perception of the subjective well-being of a person. Subjective well-being is most often defined as a cognitive and affective evaluation of one's own life (Diener, et.al. 2009). This construct consists of three components: satisfaction with life, positive affect and low level of negativeaffect. Satisfaction with life is a cognitive aspect of subjective well-being and refers to a person's global assessment of their own life. Positive affect involves frequent experiences of pleasant emotions, and the low level of negative affect implies rarely experiences of unpleasant emotional states and the relative absence of feelings of depression and anxiety.

The aim of the research

The aim of this research is to examine the relationship of resilience with the quality of performing life roles (the partner's role, the role of parents, the role of the employee, the role of the host and the role of the one who takes care of the elderly parents) and subjective well-being in men and women.

Method

Instruments

Respondents were testedwith PORPOS batteries –the instrument created for this purpose, consisting of 389 items and questions grouped into a series of short

scales designed to evaluate a larger number of constructs which, among other things, contain short scales for assessing resilience, subjective well-being and quality of life roles. The scales and questionnaires in the battery are either constructed for the purpose of this research, or obtained by adjusting and shortening existing scales and questionnaires.

The measurements from the battery used in this paper are:

1. The Adversity Response Profile (ARP, Stoltz, 2000) is designed to measure the resistance of respondents to stress. On this sample, the Kronbach alpha coefficient is 0.406. Example of an item: *When I am in a stressful situation, I can control my emotions and behaviours; It is hard for me to put an end to issues that burden me.*

2. Quality roles scale - adjusted according to the Role Quality Scale (Tsai, 2008) consists of two sets of five questions requiring the respondent first to assess the extent to which he or she is satisfied with his or her roles:the role of the one who takes care of the elderly parents., the role of husband / wife, the role of emotional partner and the role of employee; and then to assess to what extent each of these roles are stressful for him. Each item is responded by selecting a response on the 5-degree Likert's type scale of self-assessment. Example of an item: *I am satisfied with my parents' role; I'm tired of the role of an employee.*

   The quality of life score was obtained by deducting the score of effort from the satisfaction score for each of the examined life roles by items, thus the quality of the role is the relationship between the experience of satisfaction and the experience of the effort the role itself carries.

3. Short scale of subjective well-being (Jovanović & Novović, 2008). The content of the scale refers to the experiences of pleasant emotions and positive evaluation. Answers are given on the 5-degree Likert's type scale. Example of an item: *I feel lively; It's wonderful to live.*

Sample

This study was conducted on the geographic cluster sample of Serbian residents in the working age. The sample consisted of 2282 respondents. 43% of the respondents surveyed in the main study were male and 57% female, with an average of 39 years.

Results

Table 1 shows the basic descriptive statistics for the measures used in this paper: resilience, subjective well-being, the quality of the host / housekeeper role, the quality of the partner's role, the quality of the role of the one who cares for his parents, the quality of the employee's role and the quality of the parental role.

Table 1: Arithmetic mean and standard deviations of the measures
used in the research

	M	SD
Resilience	3,49	0,711
Subjective well-being	3,82	0,899
the quality of the role of the host / hostess	2,24	1,696
the quality of the partner's role	2,11	1,745
the quality of the role of the one who cares for his parents	2,60	1,639
the quality of the employee's role	2,35	1,558
the quality of the parental role	2,92	1,350

Arithmetic mean on resilience variables and subjective well-being are closer to the theoretical maximum. The relationship between the satisfaction with life roles and effort, named as the perception of the quality of the role of life, is the greatest when it comes to the parental role. It seems that in this role of life, satisfaction mostly exceeds the necessary effort of investing in the role. The partner's role mostlyendures it in relation betweenthe satisfaction and effort,still, deviations from the general rule are the greatest.

Table 2 shows correlations of resilience with subjective well-being and the quality of all important life roles examined: the quality of the host / housekeeper role, the quality of the partner role, the quality of the role of the one who cares for his parents, the quality of the employee's role and the quality of the parental role.

Table 2: Correlation of resilience with subjective well-being and quality of all important life roles

	subjective well-being	the quality of the role of the host / hostess	the quality of the partner's role	the quality of the role of the one who cares for his parents	the quality of the employee's role	the quality of the parental role
Resilience	0,289**	0,277**	0,269**	0,227**	0,271**	0,286**

Statistically significant and positive correlations were obtained between resilience and subjective well-being and resilience and the quality of all examined life roles.

Table 3: Differences between men and women in terms of the variablesstudied

	Gender	Mean	t	p
Resilience	Men	3,5353	2,118	0,034
	Female	3,4675		
Subjective well-being	Men	3,7802	-1,909	0,056
	Female	3,8584		
the quality of the host / housekeeper role	Men	2,4316	3,520	0,000
	Female	2,1192		

the quality of the employee's role	Men	2,2300	1,812	0,070
	Female	2,0593		
the quality of the partner's role	Men	2,7606	2,793	0,005
	Female	2,5086		
the quality of the role of the one who cares for his parents	Men	2,3769	0,315	0,753
	Female	2,3489		
the quality of the parental role	Men	2,8879	-0,966	0,334
	Female	2,9657		

Men are more resilient compared to women, while women report a higher level of subjective well-being, but differences are not statistically significant. When it comes to the quality of performing roles, men are more satisfied with the attitude of satisfaction and effort when it comes to partner role and role of the host. For other examined life roles, there were no statistically significant differences between men and women.

Discussion

The result show that the resilience is in positive relation with the quality of life roles. The quality of life roles in this research is obtained as a relation of measures of satisfaction and strenuousness of life roles. Effective realization of important life roles implies a lot of knowledge, skills and abilities. Most contemporary people have many roles that have become more complex due to modern lifestyle. A special factor that can be singled out is self-efficacy, an individual's belief in their ability to mobilize motivation, cognitive resources and directed action in taking control of a given situation (Bandura 1982,1999). The roles that we have examined bring satisfaction, but also a number of unexpected and challenging situations. It is important that a person has an experience so he can deal with all the difficulties of everyday roles. Only confidence of a person that he can overcome the stress and get out of the situation even stronger, which is by definition resilience, contributes to more effective suppression and rejection of negative thoughts about himself and his abilities (Ozer & Bandura, 1990). The ability of a person to see the challenge in a stressful situation and learn from the given circumstances is the precondition for a successful performance of life roles (Grotberg, 2006).

Positive relationship was obtained between subjective well-being and resilience. Previous research shows that resilience has a protective role in the context of stress by reducing or abating its negative effects on the well-being of an individual. Subjective well-being is one of the most important indicators of mental health (Jovanović & Novović, 2008). Nowadays, it is accepted that we cannot judge on the mental health of an individual only on the basis of the absence of psychopathological symptoms, but it is also necessary to evaluate positive aspects of functioning, such as satisfaction with life and the presence of pleasant emotions. The perception of subjective well-being is a variable that directly affects the perception of distress.

In fact, according to some researches, subjective well-being is a mediator between a stressful situation and a stressful experience (Stevens, et al., 2007). One study examined the relationship between the psychological well-being of a particularly positive affect with resilience and the links obtainedwereclear. The feeling of a person who can deal with difficulties and has good reasons and goals to do so contributes to greater resilience (Stevens, et al., 2007).

Regarding gender differences, although statistically significant differences between men and women in terms of resilience and subjective well-being have not been obtained, it is interesting to examine the finding that men, on average, report a higher level of resilience, while women report a higher level of subjective well-being. Some studies speak of resilience as an inherited trait, and the findings of such research generally indicate that resilience is more expressed in men. However, more and more research is emphasizing the importance of social factors rather than hereditary. Men are more likely to express resistance and more likely to be rewarded for showing traditional signs of resistance. In other words, gender socialization can interact with genetic factors or reduce resistance to women, or help men achieve some genetic potential that provides resilience.

One of the explanations may be that women socialize to be oriented with a relationship, while men socialize to be independent. Women are educated to be more sensitive to the problems of their families and friends and this is a certain price they pay ("cost of caring" hypothesis (Kessler & McLeod, 1984; Maciejewski et al., 2001). Women can be less stress-resistant in a situation which includes friends and family because of their social roles, as caregivers. For example, Kendler et al., (2001) show that women, in relation to men, are no longer subject to stressful life events as a whole. However, they show clear differences in sensitivity to specific life events, including divorce, housing problems and conflicts in the relationship. Another possibility is that women,compared to men, use different strategies for dealing. A number of studies document differences in male and female prevalence styles, and many highlight more active styles among men than women (Pearlin and Schooler, 1978; Nolen-Hoeksema, 1987). Namely, an active style of overcoming stress has been found to act safely against stress (Pearlin and Schooler, 1978). Authors point out that women are more often thinking about problems while men often act instrumentally (Nolen-Hoeksema, 1987).

Women report on a slightly greater subjective well-being, but differences are not statistically significant, which has been shown in previous research.. Demographic variables such as age and gender are not strongly related to subjective well-being. According to the Worldview Survey (N = 57000 from 41 countries), women are more likely to report a negative affect than men, while both groups experience the same level of positive affects and life satisfaction (Joronen, 2005: Todorović & Simić, 2013).

When it comes to the quality of performing roles, statistical differences between men and women were found only in the partner's role and role of the host. In both cases, men are more satisfied with the relationship of satisfaction and effort of the role. This result may be explained by the traditional distribution of household duties.

Women invest more energy and effort in their household and home jobs, regardless of whether they are employed or not, while a man as a "family foster" rarely helps in the household.

Conclusion

The results of this research indicate the relationship of resilience with subjective well-being and the quality of performing roles. The person's ability to deal with stress and manage to overcome life's challenges is an important correlate of quality fulfilment of life roles that, despite numerous satisfactions, involve the investment of permanent effort that can be a stressful for the person. On the other hand, resistance to stress is an important component of subjective well-being, because subjective well-being does not mean the absence of stress, but, among other things, a firm belief that someone can overcome each situation and there is a good reason for that. Gender differences of the examined variables go in the direction of traditional gender differences and speak about the firm coupling of the roles that a person has and the environment in which the person realizes them.

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Original scientific paper

SATISFACTION AND DISSATISFACTION WITH FAMILY ROLES IN WOMEN FROM RURAL AND URBAN AREAS2

Abstract

The aim of this paper was to examine differences in satisfaction and dissatisfaction with family roles between women who live in rural and urban areas in Republic of Serbia and whether the dimensions of quality of life (Physical health, Psychological health, Social relationships, Environment) represent significant predictors of women's satisfaction and dissatisfaction with family roles.

The sample consisted of 833 women (267 from rural, 558 from urban areas), aged 30-70. For the purposes of this study, we used Scale Of Role Quality, Adapted WHO Quality of Life–brief, Socio-demographic Data Questionnaire and Questionnaire of experienced violence.

In the sample of urban women 27% of variance of satisfaction with family role was explained by dimensions of quality of life (R^2=.27, p=.00) and significant predictor were social relationships (β=.26, p=.00), environment (β=15, p=.02) and psychological health (β=.19, p=.01). In the sample of rural women 29% of variance of variable satisfaction with family role was explained by dimensions of quality of life (R^2=.29, p=.00) and significant predictors were social relationships (β=.21, p=.03) and enviroment (β=.19, p=.04). Dimensions of quality of life, when contribution of domestic violence is controlled, explain 9% variance of variable stressfulness of family role in the sample of urban women (ΔR^2=.09, p=.00) and 20% in the sample of rural women (ΔR^2=.20, p=.00). Significant predictor in the the sample of urban women was psychological health (β=-.21, p=.00) and in the sample of rural women social relationships (β=-.21, p=.04).

The results are discussed in the context of family roles theories and previous research.

***Keywords*:** family roles, quality of life, domestic violence

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Theoretical background of the problem

The period we live in is characterized by constant changes and rapid development in different domains. Changes in some segments of social structure and the functioning of an individual and family are more intense and noticeable, whereas in others they are slower or less intense. Throughout a life, a person usually acquires more than a single social role. People are different in relation to the social role they acquire and also in relation to how many social roles they perform (Vidanović,Anđelković, Stojilković & Todorović, 2016). That is why, it is necessary to perceive the nature of possible changes that refer to different social and family roles and factors contributing to them. Roles in the family changed depending on social and historical context, and nowdays they differ in the traditional, patriarchal and modern family structure. In traditional family structure role division is done according to gender and age, in patriarchal family structure the father has the most important role in the form of material support to the family, whereas modern family is mostly conceived as a community, which should affirm individuality, solidarity, and division of roles is based on the agreement, abilities and affinities (Todorović, Vidanović & Stefanović-Stanojević, 2013). Although formal- legal equality between women and men is present in all spheres of life, in modern-day society there are various forms of suppression and self-supression of women (Vilić, 2012), rooted in the fact that the idea of 'patriarchy', as some kind of synonym for male dominance, still permeates social relations. Even today, patriarchy seems to be particularly dominant pattern in rural households, which have always rested on two main pillars: authority and solidarity. According to Bobić (1999), the authority with which is acknowledged the power of one member to decide on family life on the whole and the fate of each individual member, singles out one member, an elder (a man) and gives primacy to the older over the younger, as well as to male members. The other side of the 'rural way of life' pattern is the firm kinship solidarity that provides necessary security and protection for each member. Relations with neighbors and acquaintances in rural regions are by far more frequent and emotionally richer than in urban regions. According to Korać (1991), children are the most important sense of life for a rural family, especially for the woman. Parenthood is extremely gender-oriented, whereby all activities related to satisfying the needs of children – from existential, over school, to educational, are accomplished by mothers on their own, or by relying on kinship network (extended family) and neighbourhood, whereas there is no institutional support. Women in rural regions perform and other important roles – the role of a housewife, agricultural producer, spouse, as well as someone who takes care of their parents. Thereby, results of the research done by Korać (1991) point out to the complete identification of women with their biological and psychological role of wife and mother. There is no awareness of gender inequality in various domains of domestic routine, and satisfaction and low level of conflict in marriage are noted. Korać (1991) considers that self-realization of rural women is to such an extent related to the household that neither education, employment,

nor age or status can change it. Studies done by Petrović (1994) offer interesting data. Namely, despite the household workload (approximately 8,2 hours daily, in contrast to women in the city that spend about 2,8 hours), rural women value more and have greater appreciation for tasks (work) done by men, than women in urban regions, when men do not perform their primary family role of the 'breadwinner'. Authors assume that such attitude is in line with maintaining the hierarchical social structure and traditionalism of rural community. Nevertheless, it should be noted that the above-mentioned information date back twenty years and we cannot assert with certainty that they are sufficiently relevant today.

In the case of urban environment, new value behaviour models were created under the influence of increased work activities of women/mothers. They refer to nuclearization of the family nucleus, decline in the desired number of children, as well as changing the relation in marriage and to marriage (Vilić, 2012). In addition to the role of a mother, wife and daughter, work role takes an important place in life of modern woman living in an urban area. The conflict which arises from the attempt to reconcile different roles has been recognized in psychology literature, so that a great number of research papers, examining the quality of family roles and their compliance with work role may be found (Lee & Powers, 2002; McMunn et al., 2008). Many researches (e.g. Anđelković, Vidanović & Hedrih, 2012; Frone, Russell & Cooper, 1997; Kinnunen & Mauno, 1998) focus on the conflict between family and job experienced by employed parents, mothers particularly (Oláh, 2014). Institutional support, in the form of nurseries, kindergartens, day care for children, is significantly more present form of help with upbringing childeren for the families living in the urban areas in relation to rural families, whereas relying on kinship or neighbour support is less present. In this context, we found it useful to compare perceptions of satisfaction and stressfulness of family roles of women living in the urban and rural areas. We were also interested in examining the predictor role of dimensions of quality of life to satisfaction and stressfullness of family roles, respectively.

When it comes to the quality of life, there were many attempts to define and operationalize this concept in the last few decades (Ilić, Milić & Aranđelović, 2010; Schalock, 2004). Within these efforts one of the important dilemmas for the authors was whether external indicators, such as assessment of socio-economic status, may independently show the quality of life. Thus, for example, Eurostat (2015) percieves the quality of life primarily through material living conditions, work activity, health, accessibility to education, quality of leisure time, economic and physical security, resource management and human rights, quality of natural and living environment and evaluation of life satisfaction and welfare. However, other authors consider that objective measures are insufficient for explaining the quality of life. Cummins (2000) states that real improvement in living conditions, when they were poor, leads to improvement of subjective evaluation of quality of life, but at a certain level that correlation is lost. In other words, if basic needs of an individual are satisfied, increase of material wealth will not influence significantly their subjective measure of quality of life. In this paper we rely on a group of definitions which indicate that external

factors may have a significant role in explaining general satisfaction and quality of life, but that the correlation of these factors and experience of quality of life is not linear. Quality of life is seen as personal perception of one's own living conditions and way of life in the context of culture, value system, aspirations, prospects for the future, standards and interests (World Health Organization, 1998), as subjective experience of one's own life determined by the objective circumstances in which person lives, personality characteristics which influence how reality will be experienced and the specific life experience (Krizmanić & Kolesarić, 1989). Low socioeconomic status within these definitions is perceived as an indicator of poor quality of life, but the importance of subjective experience of objective circumstances is more emphasized. It is of importance for our research problem the fact that families living in the rural areas are faced with the situation of unemployment more often, cumulatively followed by other risks, such as more prominent difficulties in meeting the needs of family members, paying off the costs of education of children and significantly greater exposure of the family to external stressors (poverty, illness) (Miljenović, Blažeka Kokorić & Berc 2016). However, precisely in circumstances of strong exposure to external stressors, there may come about strengthening of family cohesion and resistance (Berc, 2012; Dučkić & Blažeka Kokorić, 2014; Walsh, 2006). Family system may activate its inner resources, the function of self-preservation function and overcoming crises (Janković, 2008) and act protectively. Similar findings can be found in previous research – family relations, as well as social relations with members of wider family, cousins and friends, as important indicators of the quality of life, are better preserved resources in rural areas (Miljenović et al., 2016).

On the other hand, social norms reflected in gender inequality, expectation that the man is dominant, even agressive, as well as low social and economic status of women (which is more prevalent in rural areas), may represent the basis for rationalization, and therefore the prevalence of violence against women (Heise & Garcia-Moreno, 2010; WHO/LSHTM, 2010). Hence we considered it important to include in the researh the assesment of experience with physical violence in a partnership relationship. Findings of previous researches show that partner violence may have long-term consequences on one's health (increases the risk of depression, suicide attempts, chronic pain syndroms, psychosomatic disturbances) and quality of life, visible even when abuse is no longer present (Alsaker, Moen & Kristoffersen, 2008; Campbell, 2002). In addition to that, lower level of psychological functioning reflects on parenthood, estimated as worse by women victims of violence, and the frequency and hronicity of violence and unsatisfactory functioning in the role of mother are associated with both marital and family dissatisfaction (Levendosky&Graham-Bermann, 2001).

Method

Reserach problem and aim

The aim of this research was to examine the differences in satisfaction and dissatisfcation with family role, respectively between women living in rural regions and women living in urban regions in the territory of the Republic of Serbia. Moreover, one of the aims was to examine the predictive role of dimensions of quality of life (physical health, psychological health, social relations, enviroment) in satisfaction and dissatisfcation with family role, respectively when variable violence against women is statistically controlled.

Sample

The research was conducted on the subsample of female participants (N=833), taken from a wider research conducted on the sample which consisted of a total of 2,283 residents of Serbia. Out of the total number of female participant who form this sample, 32.1% live in the rural, whereas 67% live in urban areas. At the time research was conducted the youngest participant was 28, and the oldest was 68 years old. Average age of the sample of women is 43 years (SD=10.41). Out of the total number of female participants who live in rural areas, 10.4% finished elementary school or a lower level of education, 61% finished high school, 13.5% finished school of higher education, and 15% hold university degree, M.A. degree, Ph.D or they are still students. Out of the total number of female participants who live in urban areas, 4% finished elementary school or a lower level of education, 52.2% finished high school, 13.3% finished school of higher education, and 29.4% hold university degree, M.A. degree, Ph.D or they are still students.

Instruments

Participants were given the PORPOS battery – an instrument designed for this research which includ 389 items (Hedrih, Simić & Ristić, 2013). Scales and questionnaires included in this battery were constructed for the purposes of this research or were obtained by adapting or abbreviation the existent scales and questionnaires.

Family roles quality scale(Hedrih et al., 2013) represents the adapted version of the questionnaire *Role Quality Scale* (Tsai, 2008) which conhsists of two sets of four questions asking the participants to assess to what extent they are satisfied with their family roles, respectively to what extent they are stressful/dissatisfied with family role (the role of parent, person taking care of their parents, husband/wife, i.e. partner). Participant gives their answer on a five-point Likert scale or by marking that they do not have the said role. Cronbach's alpha coefficient for subscale satisfaction with family role was 0.7 and for subscale dissatisfaction with family role 0.83.

Presence of domestic violence is operationalized by the following question within the PORPOS battery: 'Have you been abused by your partner physically?'

which the participants could answer by estimating the presence and frequency of episodes.

Questionnare on the quality of life – abbreviated and adapted version of the WHOQOL-BREF (*World Health Organization Quality of Life-Brief*) by World Health Organization (Hedrih et al., 2013). The questionnaire consist 13 questions, on which the participant may answer through five-point Likert scale. Based on participants' answers is obtained data on quality of life operationalized via four domains: physical health (activities, need for medication and treatment, energy capacity, agility, the presence of pain, sleep quality, health-related work capacity), psychological health (satisfaction with physical appearance – oneself, negative and positive emotions, confidence), social relationships (interpersonal relations, social support and sexual activity) and environment (financial resources, opportunities for recreation and pastime). Hedrih et al. (2013) reported Cronbach's coefficient of 0.76 for physical health, 0.73 for psychological health, 0.78 for social relationships and 0.78 for environment.

Sociodemographic questionnaire – represents a set of questions within the PORPOS battery which asks the participants to state their gender, age, residence, level of education and type of family (Hedrih et al., 2013).

Procedure

The data given in this research represents a part of a wider research whose aim was to examine the relationship at work and in family in Serbia. The sample formed was based on geographical clusters (geographical cluster sample) (Hedrih et al., 2013). More precisely, the forming of sample was done with regard to administrative districts in Serbia and that the ratio between the number of rural and urban locations be roughly proportionate with the share of urban and rural population (Anđelković et al., 2012). Research was conducted at 33 locations (urban and rural areas in Serbia).

Results

Based on results given in Table, it can be seen that satisfaction with family role is in positive, whereas variable dissatisfaction with family role is in negative corellation with dimensions of the quality of life in the subsample of women living in the rural and urban areas. Variable violence is in negative correlation with the quality of social relationships and psychological health and in positive correlation with dissatisfction with family role in the subsample of rural women, whereas in the subsample of urban women it is in negative correlation with the dimensions of the quality of life and satisfaction with family role, and it is positive correlated with dissatisfaction with family role.

Table 1. Correlation between varibles examined

	VII	VI	V	IV	III	II	I	AS	SD
(I) Physical health	-.01	-.26**	.36**	.37**	.41**	.5**	/	54.21	10.23
(II) Social rlationships	-.24**	-.41**	.45**	.61**	.48**	/	.37**	58.41	23.02
(III) Enviroment	-.12	-.29**	.44**	.51**	/	.39**	.37**	47.09	19.5
(IV) Psychological health	-.18**	-.37**	.4**	/	.5**	.63**	.37**	3.4	.7
(V) Satisfaction with role	-.04	-.47**	/	.46**	.38**	.46**	.23**	20.89	3.5
(VI) Dissatisfaction with role	.18*	/	-.56**	-.32**	-.23**	-.27**	-.13*	88.39	3.14
(VII) Partner violence	/	.2**	-.25**	-.3**	-.19**	-.31**	-.10*	1.17	.56
M	1.12	87.75	21.38	3.43	45.99	60.25	55.46	/	/
SD	.43	3.11	3.28	.71	21.05	21.63	11.18	/	/

Note: the upper part of the table refers to women from rural areas, the lower refers to women from urban areas
*correlation is statistically siginificanat at the level .05; ** correlation is statisticaly significant at the level .01

Using the t test it was determined that urban women (M=88.39) are more dissatisfacted with family role than rural women (M=87.75) (t(488)=-2.12, p=.03, M difference =-.64). No significant differences were found in the satisfaction with family role (t(405)=1.35, p=.17), dimensions of the quality of life (psychological health - (t(823)=.69, p=.49), enviroment - (t(799)=-.72, p=.47), social relations - (t(786)=1.07, p=.28), physical health - (t(795)=1.56, p=.11)) and the presence of domestic violence (t(796)=-1.32, p=.18).

In order to investige which dimensions are better predictors of dissatisfcation and satisfaction with family role, respectively we performed several standard multiple regressions where psychological and physical health, social relationships and enviroment are included as predictors, seperetly in subsamples of urban and rural women.

It has been shown in the subsample of rural women that the model was statistically significant (F (4, 146) = 10.78, p=.00), explaining 22% variances of variable dissatisfcation with family role (R^2=.22). The variable of **social relationships** (B=-.03, SE=.01, beta=-.24, p=.02) was the only statistically significant predictor in this model. The model, in which satisfaction with family role was criterium variable, was statistically significant (F (4, 122)=12.65, p=.00) and explained a total of 29% variances (R^2=.29). **Social relationships**(B=.03, SE=.01, beta=.21, p=.03) and **enviroment** (B=.02, SE=.01, beta=.19, p=.04) were statistically significant predictors.

It has been shown in the subsample of urban women that the model, in which the criterion was variable dissatisfacation with family role was statiscally significant (F (4, 304)=10.08, p=.00) explaining 11.7% of variances (R^2=.11). The variable **psychological health** (B=-1.01, SE=.34, beta=-.22, p=.00) was statistically significant predictors. It has been shown that the model in which criterium variable

was satisfaction with family role was statistically significant (F (4, 247)=22.95, p=.00) explaining 27% of variances (R^2=.27). **Social relationships** (B=.04, SE=.01, beta=.26, p=.00), **enviroment**(B=.02, SE=.01, beta=.15, p=.02) and **psychological health** (B=.95, SE=.37, beta=.19, p=.01) proved to be statistically significant predictors.

In order to examine the contribution of dimensions of the quality of life in explaining the variance of variable dissatisfaction with family role, when contribution of violence is controlled, we performed hierarchical multiple regression separetly in the subsamples of rural and urban women. In step 1 variable violence was included and in step 2 we included dimensions of the quality of life (physical and psychological health, social relationships and enviroment).

In the subample of women living in the rural areas results have shown that the first model was statistically significant (F (1, 145)=5.92, p=.01), and that variable violence explained 3.9% variances of variable dissatisfaction with family role (R=.19, R^2=.03, p=.00; B=1.43, SE=.58, Beta=.1, p=.01). When contribution of the variable violence was controlled, it proved that dimensions of the quality of life explained additional 20% variances (R^2 Change=.2, p=.00). In the second model **variable of social relationships** (B=-.03, SE=.01, Beta=-.21, p=.04) was the only significant predictor.

Table.2 Hierarchical multiple regression (Entry method) – criterion variable dissatisfcation with family role (subsample of women living in the rural area)

Model	Predictors	B	p	R^2	p	R^2 Change	P
					Dissatisfaction with family role		
I	**Violence**	**.19**	**.01**	.03	.00		
II	Violence	.1	.16	.24	.00	.2	.00
	Social relationships	**-.21**	**.04**				
	Physical helath	-.1	.23				
	Enviroment	-.16	.07				
	Pshychological health	-.1	.32				

Results have shown that in the subsample of women living in the urban areas the first model was statistically significant (F (1, 304)=11.309, p=.00), and that variable violence explained 3.6% variances of variable dissatisfcation with family role (R=.18, R^2=.03, p=.00; B=1.17, SE=.35, Beta=.18, p=.00). After contribution of variable violence was controled, results showed that dimensions of quality of life explained additional 9.2% of variance (R^2 Change=.09, p=.00). In the second model **variable psychological health** (B=-.99, SE=.34, Beta=-.21, p=.00) was a significant predictor.

Table 3. Hierarchical multiple regression (Enter method)- criterion variable dissatisfcation with family role (subsample of women living in the urban area)

Model	Predictors	B	p	R^2	p	R^2 Change	P
I	**Violence**	**.18**	**.00**	.03	.00		
	Violence	.08	.14				
	Social relationships	-.08	.23				
II	Physical helath	-.00	.95	.12	.00	.09	.00
	Enviroment	-.06	.33				
	Pshychological health	**-.21**	**.00**				

The results obtained through hierarchical multiple regression showed that after the dimesions of quality of life were included in the modela variable violence was not any more the predictor of dissatisfcation with family role, leaving the varible of social relationships as the only significant predictor of the level of dissatisfcation with family role in the subsample of women living in rural areas, and psychological health in the subsample of women living in urban areas, indicating to the possible existence of mediation.

Since variable violence is a significant predictor for the quality of social relationships in the subsample of rural women (B=-.00, SE=.00, beta=-.24, p=.000; R^2=.05, p=.00), and psychological health of urban women (B=-.24, SE=.03, beta=-.3, p=.00; R^2=.09, p=.00), respectively, it has been found that there is justification for examining the existance of the mediation effect.

Table 4. Mediation effect

Subsample	Predictor	Mediator	a	b	c	c'	ab
Rural		Social relationships	-10.23**	-.05**	1.5**	.04	.55*
	Violence						
Urban		Psychological health	-.39**	-1.39**	1.18**	.64*	.55*

a –the effect of the predictor to the mediator, a – the effect of mediators to the criterum, c – total effect of the predictor to the criterum, c' – direct effect of the predictor to the criterium when mediator is under control, ab – indirect effect, i.e. the effect of the mediator in the relation between predictor and criterum
***p<.01*p<.05*

Based on Table 4 we can see that the asotitation between violence and dissatisfcation with family role is achieved only through the quality of social relationships as the mediator in the subsample of women living in the rural areas. The direct effect of violence on dissatisfcation with family role, when the mediator was controlled, was not statistically significant so we can conclude that mediation was complete in this case. The results show that violence is in negative correlation with social relationships, contributing to a lower level of dissatisfcation with family role.

When it comes to the subsample of women living in the urban areas relation between violence and dissatisfaction with family role is partially achieved directly, and partially mediated by the quality of psychological health as the mediator. The finding suggests that one of the ways in which violence is associated with dissatisfcation with family role is precisely through the quality of psychological health. Results show that physical violence is in negative correlation with the quality of psychological health thus contributing to a lower level of dissatisfcation with family role as a whole.

Discussion

The research presented in this paper was created with the intention of examining the factors which contribute to the perception of satisfaction and dissatisfcation with family role of women living in the urban and rural areas, as well examining the factors which contribute to it. According to the results, women living in urban areas evaluate their family role (role of a parent, person who takes care of their parents, wife/love partner, housewife) as more stressful than women living in rural areas. Although, we didn't examine family roles separately and their relations with work roles, in the line with some previous research (Berc, 2009; Higgins, Duxbury & Lyons, 2007; Hoffman, 1989), this result might be understood in the context of greater work engagement of women living in urban areas and intensified demands for reconciliation of work and family roles. For example, Hoffman (1989) underline that woman's employment is related to her satisfaction with life, what is also confirmed in the study done by Berc (2009), who found that women are more exposed to parent stress and are less satisfied with family life. Higgins et al. (2007) point out that if working mothers and fathers are compared, the results show that working mothers pay more attention to harmonization of their family and business roles. Women living in the rural areas also have more than one important role – the role of housewife, agricultural producer, mother, wife and someone who takes care of their parents. However, these roles mostly refer to the family and 'around the house', in the context of farm household (Blagojević, 2010). Namely, traditional division of labor is retained in rural areas (the wife prepares food and maintains the household, whereas the husband 'brings home the bacon'). Rural women do not perceive such a traditional model as a negative one and they manage well in it, which authors (Blagojević, 2010) explain though the low level of sensitivity to the

problem of gender inequality in private sphere in the rural areas. Raising children, as one of the most important tasks, is facilitated in this context, especially when we take into account the possibility of relying on kinship and neighbour support, which is more available in rural areas (Korać, 1999). Quality of social relations is precisely the predictor of stresfulness of family role for women living in the rural areas, but also the mediator in the relation of partner violence and dissatisfcation with family role. Obtained results confirm that social relations represent one of the important aspects in lives of rural women, which conforms to previous findings. Bobić (1999), for example emphasizes that relations with neighbours and acquaintances are emotionally richer and more frequent in women who live in the rural areas than in those living in urban. Blagojević (2010) pointed out that it is important for women living in the rural areas to maintain relations with different social participants, as well as that in modern-day conditions, friends have more important role even in relation to cousins, which represents a shift towards 'disentangling' from traditional networks and relationships. She also states that when we observe the stability of social network of rural women (in the period which refers to last five years), it remained the same or expanded in almost half of the cases, pointing out to the great willingness of rural women to preserve and increase the social capital they have. It seems that some aspects of the activity of social support are significant in overcoming negative consequences which partner violence might have on the experience of family roles of rural women, which is a finding known from earlier. For example, Janoff-Bulman (1992), states that after a trauma (such as partner violence) social support helps the woman regain trust in her environment. This may be important when treatment strategies are planned, primarily bearing in mind that women victims of partner violence are often isolated by their violent partner (Nećak, Pudar Draško & Milutinović Bojanić, 2016). However, operation modes of this support are not sufficiently explored, so they have to be examined further.

On the other hand, besides evaluating their family role as more stressful in comparison with women living in the rural parts, it proved that some other predictors – partner violence and assessment of the quality of psychological health, contribute to the experience of stressfulness in women living in urban parts. For more complete understanding of the finding that partner violence contributes to the stressfulness of family roles in the subsample of women living in the city, these results should be inspected in the light of change of the position of women in both society and family, which has affected urban parts of the country in greater measure. Namely, authors (Blagojević, 2010; Korać, 1991) generally agree that an extreme hierarchy between the genders is still present in rural areas, with no awareness of gender inequality in various domains of everyday life, and that women themselves cultivate patriarchal ideology believing that it is the husband who should have 'the final say', finding excuses for his eventual use of violence to assure his position as the 'head of the family' (Garcia-Moreno, Heise, Jansen, Ellsberg & Watts, 2005). It may be assumed that the pursuit of gender equality in urban women increases the sensitivity to gender inequality, which, among other things is manifested through the demonstration of physical health. The result obtained should be observed in line with the fact that

in subsample of urban women lack the mediator effect of social interactions in the context of partner violence, which is an important factor for alleviating the effects of violence in rural women. Although, maintaining social relations is an important segment in the lives of urban women as much as in the lives of rural women, it could be assumed that there are different net of associations between these variables in urban and rural women that should be examined in future research. Our research has shown that social relations represent an important predictor for satisfaction with family roles in women living in the urban areas, too, thus confirming the significance of social relations for an individual's general welfare, as documented in a number of previous researches (Lakey & Orehek, 2011; Finch, Okun, Pool & Ruehlman, 1999). However, it seems that some aspects of social network functioning in rural environment not only contribute to the psychological welfare in regular conditions but also alleviate some of the consequences in increasingly stressful situations such is the experience of partner violence. Even previous researches have shown that consequences of violence are reflected in the evaluation of the victim's quality of life in the environment (Spasić, 2015), that they lead to a lower level of psychological functioning which reflects negatively on parenthood as well (Levendosky&Graham-Bermann, 2001), a more detailed analysis of these results is set as an important research task in the future.

In line with expectations is the finding that the quality of psychological health is in negative correlates with stressfulness and in positive with satisfaction with family roles in urban women. The relation between family, work and social roles and different aspects of the quality of life is complex, forming one interdependent structure of correlation. Modern woman is faced with numerous roles and compelled to cope with the complexity of each (Fokkema, 2002). Having in mind the complexity of the phenomenon, it is not surprising that some studies (Gordon & Whelan-Berry, 2005) show the beneficial effect that the existence of multiple roles can have on women's physical and mental health since this kind of involvement, according to the authors, can increase the level of self-respect, personal and professional competence in various domains of functioning.

In addition, evaluation of enviroment is an important predictor of satisfaction with family roles for women from both subsamples. Subjective perception of wealth/poverty, sense on whether one has enough money to meet the needs (one of the living conditions components), are important factors of satisfaction with one's family role, irrespective of where someone live (rural or urban areas). However, we have not controlled participants' objective socio-economic status and we believe that comparing objective measureas and subjective assessments of participants' living conditions from both rural and urban areas would be quite interesting for future research.

Conclusion

Results of the research conducted show that women who live urban areas, in relation to rural women, experience more stress when performing family roles, which should be taken into account when planning possible national strategies for preservance of mental health, particularly of employed women. In this paper were problematized various risks and ways of protection, and it was stressed the potential protective effect of social relationships that has mediator role in the relationship between partner violence and dissatisfcation with family role on subsample of rural women. However, it is left to future researchers to examine further the operation modes of these factors.

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PARENTAL EDUCATIONAL STYLES AND FORMS OF ANXIOUS BEHAVIOUR OF A CHILD

Abstract

The aim of this study is to examine whether there is a connection between parental educational styles and forms of anxious behavior of the primary school aged child and what the connection is like.

All the variables of this paper were operationalized by scores on the Family Interactions Quality Scale (Vulić-Prtorić, 2004) and Children's Anxiety Scale AFS (Vulić- Prtorić & Sorić, 2006). The indicators of parental educational style are defined through the dimensions: satisfaction with the family, parental acceptance and rejection. Anxious behaviour of a child is presented through the following measures: test anxiety, manifest anxiety, social desirability and dissatisfaction with the school. The sample of the study consisted of 200 children, aged from 10 to 15. In the analysis of data, descriptive statistical methods and correlation analysis were used.

Results of the study show that acceptance by the mother is significantly related to the level of social desirability, while the rejection is in a positive correlation with test and manifest anxiety, as well as dissatisfaction with school, and there is a negative correlation with social desirability. The acceptance by the father is significantly related to the dimension of social desirability, while the rejection by the father correlated with manifest anxiety and dissatisfaction with school and there is a negative correlation with the dimension of social desirability.

The findings obtained speak in favour of the fact that rejection by the parents is a significant factor in the appearance of different forms of anxiety with children, i.e. the children who estimate that parents are rough to them or neglect them in a way have a several symptoms of anxiety. We have the task to investigate the contribution of other contextual variables, as well as personality traits, to the development of anxious forms of behavior with children in the following studies.

Keywords: educational behavior, anxiety, correlation

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Parental educational styles and forms of anxious behaviour of a child

Introduction

It has long been familiar with the idea that parents with their behavior and attitude towards children determine their behavior and functioning (Janković & Laklija, 2011). The question is how the first social experience that the child acquires in the family influence the development of certain characteristics of the child or his/her behavior. For example, the results of studies suggest that the positive cooperation of parents in the education of children contributes to the adaptive potential of the child (McHale & Ramussen, 1998), while children who are exposed to the negative aspects of education by parents are significantly more anxious, depressed and have significantly lower self-esteem than children who experienced acceptance (Vulić-Prtorić, 2004). Children who experience hostility in relations with parents more likely use emotional reactivity, which can result in a deterioration of relations and lead to higher levels of stress and anxiety in these relations (Steinberg & Silk, 2002).

The theory of parental acceptance or rejection

One of the earliest and most influential theories that has made a significant contribution to the understanding of the dimensions of parenting and differences between parents and children is Rohner theory of parental acceptance and rejection (*Parental Acceptance and Rejection Theory – PART*; Rohner, 1986, 2004; Rohner & Rohner, 1980). Rohnerbelieves that parental acceptance or rejection is very important for the personality development of children, as well as their functioning in adulthood. The theory interprets the effects of parental interaction and attempts to explain the causes and consequences of parental behavior on bipolar ends of parental relationships, respectively emotional dimensions of parental warmth (Rohner et al., 1980). The theory, therefore, assumes that parental warmth is a dimension that has two poles. At one end of this dimension, the positive pole, there is acceptance, and on the other, negative, there is a rejection of the child.

Parental acceptance marks one end of the continuum and relates to positive emotional aspects of the relationship between parent and child and to the warmth, attention, affection, care, comfort, support, care and love that children can feel from their parents.Aspects of such relations are characterized by mutual closeness, providing support, trust, understanding and a certain symmetry in relations (Vujović & Mijanović, 2013).

The other side is marked by the continuum of the parental rejection which refers to the absence or substantial absence of feelings and behavior that is associated with the acceptance of the presence of a variety of mental and physical behaviors and harmful effects (Rohner et al., 2005). In other words, the rejection refers to children experiencing different parent procedures ranging from a lack of understanding of the difficulty, and

until to neglect and punishment. Neglect can be defined as the experience of the child that parents are not interested in him and that he does not devote enough time and attention, while penalties are expressed as gratuitous accusations, inappropriate or error caused by resentment of parents (Vulić-Prtorić, 2004).

Although parental acceptance and rejection cannot explain the developmental outcomes fully and are responsible only for 26% of variability and adaptability of children (Janković & Laklija, 2011), states that the warm, supportive parents consistently use educational strategies, foster and encourage the child's communication in a social environment and autonomy, the development of mechanisms of self-control behavior and support the positive child's inner self-evaluation and experience of parents as a secure base in situations of stress (Ciccheti & Toth, 1998; Lengua et al., 2007).

On the other hand, cold, unsupported, inaccessible and neglecting parents send rejection and writing off messages to the child that it is not worthwhile and competent. Children who are exposed to such behavior are more anxious, manifest aggressive and hostile behavior and are more likely to exhibit the risky and antisocial behavior patterns (Weiss & Schwarz, 1996). In the framework of the aforementioned perspectives also is pointed out that the child may feel that he/she is not loved by their parents (as in undifferentiated rejection), although using external indicators cannot be detected by explicit indicators of parental rejection. Therefore, it is important to emphasize that parental rejection, therefore, does not imply a specific set of procedures, but the experience that the child has within the overall educational process(Kagan, 1978).

Anxiety on childhood

Awfulness or anxiety is uncomfortable affective state of stress, fear and anxiety, accompanied by physiological activation, which is characterized by the anticipation of possible dangers and threats. Although fears and various forms of anxiety are very common and are an integral part of the development of every child, like most psychological phenomena in childhood and adolescence, they are very intertwined with each other and are difficult to distinguish(Vulić-Prtorić, 2002). In general, it can be said that fear is primarily related to real danger at present, while anxiety is mainly a threat that is predicted (anticipated) in the future (Mikas et al., 2015). It is pointed out that both fear and anxiety may occur along a continuum from normal, conventional fear and anxiety to those which in their duration, the degree of adaptation, and the intensity give rise to various forms of anxiety disorders (Vulić-Prtorić, 2002). If they're intensive and long-term, can be resulting in significant discomfort and anxiety, both to a child and his family (Vulić-Prtorić, 2002), a child becomes overly worried, and exposure to stimuli that cause fear or anticipation of these irritating, leads to physiological anxiety and avoidance (Ollendick & Ollendick, 1997). In such cases, the question is whether it is a transient fear, which are in accordance with the age of the child and the situation or we can talk about anxiety disorders and phobias.

The literature distinguishes several types of anxiety that are related to school age, and they are as follows: social anxiety, test anxiety, and generalized anxiety.

Social anxiety occurs frequently in adolescence and is characterized by anxiety, emotional distress, as well as the avoidance of the reaction and in the withdrawal of the actual or perceived social interactions. In a school environment, this type of anxiety is recognized not only in relationships with peers but also in situations test (Berce, Puklek Lepuvšček, 2011).

Test anxiety is the most common in the context of the school environment. Some authors define test anxiety as a complex and multidimensional construct that includes cognitive, affective, physiological and behavioral responses to evaluative situations, and is characterized by stress and tension in a test situation, with the particular perception of helplessness (Hong, 1998; Dykeman, 1994; according to Mohorić, 2008). Students, to whom is manifested the test anxiety often cannot achieve the results that are proportional to their level of knowledge because of test anxiety.Studies have shown that high test anxiety students usually have high trait anxiety, so that the exams are perceived as more threatening and dangerous than low anxious students (Spielberger & Vagg, 1995; according to Mohorić, 2008).

Generalized or general anxiety is not related to specific stimuli or situations (House & Stark, 2002). This type of anxiety includes general concern for itself and familiar ones, for example, fear of an accident, illness, death, or generally fear that something bad was going to happen.

Since it was found that the content of fear and anxiety change over time as a result of the development experiences of the child and increased cognitive abilities, with a focus that with age moves from concrete, external fears toward more internalized, abstract anxiety, in this study we wanted to examine which forms of anxiety is the most present in the primary school age, whether you are registered gender and age differences in the occurrence of various forms of anxiety, as well as to establish the existence of a connection between the various forms of anxiety and parenting behavior.

Meтhod

Sample. The research was conducted on a sample of 200 children, 100 boys and 100 girls, ages 10 to 15 years (12.79 years = M; SD = 1.263). All respondents were students of higher grades of elementary school "Vuk Karadzic" in Tutin and 50 in the fifth, sixth, seventh and eighth grades. In each class was tested an equal number of boys and girls under 25.

A collection of data was conducted during the month of June 2015 with the approval of the school administration. Questionnaires were given by groups for the duration of schooling. The survey was anonymous and did not last longer than 30 minutes.

Instruments.The general questionnaire assessing socio-demographic characteristics of the sample was constructed for the purpose of research and is

aimed at gathering general information about respondents and socio-demographic data of their families.

Family Interactions Quality Scale (Vulić-Prtorić, 2004) is intended for measuring the interaction between the child and the parents on the dimensions of acceptance and rejection, as well as satisfaction with family. It consists of 55 claims which are divided into five subscales: satisfaction of his own family, acceptance of the mother by the father acceptance, rejection by the mother and the rejection by the father. The respondents on a five-point scale of Likert's type is estimated how much of each of said claims refers to their relationship with a mother or family as a whole. Total score is determined for each subscale separately and obtained by adding the points where a higher score on the subscale of acceptance indicates a greater closeness, trust and understanding between the child and the mother and father, a higher score on the subscale rejection means that the child is experiencing more of the prohibitions, of brutality and neglect by the mother or father. Satisfaction subscale family examines how the respondent feels in his family and his satisfaction with family life(Vulić-Prtorić, 2004).

*Children's Anxiety Scale AFS (Vulić- Prtorić & Sorić, 2006)*is designed to assess anxiety in children in four main aspects of anxiety: Anxiety in a test situation, general, manifest anxiety, discontent, aversion to school and socially desirable behaviors. Originally is intended for pupils from nine to sixteen. Scale of anxiety in the test situation describes the feelings of helplessness and discomfort that occur in the test situation as a fear of failure in solving problems, which is often accompanied by the reactions of the vegetative nervous system. Manifest Anxiety Scale consists of affirmations which relate to the general anxiety symptoms such as palpitations, anxiety, sleep disorders, and the concentration, as well as fright and reduced self-esteem. This scale examines the trends that are in various life situations manifest anxiety reactions and considering it is a general tendency towards anxiety response, which is usually the basis of which it will be easier to develop and specific test anxiety. Results on the scale of discontent school depend on the frequency of negative experiences that accumulate during training, and partly the result of fear of tests and failures. The scale of social desirability tendencies examines students to behave in a tailored and socially desirable manner. In this case, it can be interpreted as a fear to deviate from socially desirable forms of behavior. The result of the scale is expressed by subscales. Higher scores on all subscales indicate the presence of higher levels of a particular form anxiety.

Results

Descriptive data for dimensions, the satisfaction of own family, educational behavior of parents (acceptance and rejection) and forms of anxiety.

Table 1. *Descriptive data for dimensions of family satisfaction, parental acceptance and rejection*

	Dimensions	n	minimum	maximum	M	SD
	Family satisfaction	200	22	52	33.69	3.269
	Acceptance by mother	200	23	50	43.48	5.90
KOBI	Rejection by mother	200	12	53	21.33	8.27
	Acceptance by father	196	19	50	41.63	5.886
	Rejection by father	196	12	48	21.30	8.254

Average values in Table 1 show that the respondents were covered by the sample moderately satisfied with their family and family life (M= 33.69).

On the other hand, the more values on the subscales acceptance by both parents compared with rejection suggest that most children their relationship both with the mother and the father are characterized as a close, trusting and understanding.

Table 2. *Descriptive data for dimensions of child anxiety*

	Dimensions	n	minimum	maximum	M	SD
	Test anxiety	200	0	30	18.09	6.540
	Manifest anxiety	200	0	26	14.78	5.970
AFS	Social desirability	200	1	18	12.68	3.253
	Dissatisfaction with school	200	1	14	7.22	2.780

Based on the obtained results relating to the four aspects of anxiety has been found that the respondents mostly are anxiety in the test situation (M = 18.09), a little less manifest is shown by symptoms of anxiety (M = 14.78). The average value of the scale social desirability (M = 12.68) indicate that the students included in a sample exhibit a moderately adjusted and socially desirable way, while the values on the scale of dissatisfaction with education (M = 7.22) indicated a low level of adverse experiences accumulated over schooling (Table 2).

Examination of difference in assessing of family satisfaction, parenting behavior and forms of anxiety with regard to the gender and age of respondents

Table 3._The significance of differences in assessing family satisfaction and educational behavior of parents with regard to gender of respondent_

Variable	Gender	M	SD	Difference M	t statistics	F	p
Family satisfaction	male	34.11	3.31	.84	1.828	198	.069
	female	33.27	3.19				
Acceptance by mother	male	42.82	5.48	-1.31	-1.576	198	.117
	female	44.13	6.25				
Rejection by mother	male	21.97	8.49	1.28	1.095	198	.275
	female	20.69	8.04				
Acceptance by father	male	42.25	6.60	1.25	1.494	194	.137
	female	41.00	5.01				
Rejection by father	male	22.66	8.64	2.74	2.350	194	**.020**
	female	19.92	7.64				

The obtained results show that between the male and female are statistically significant differences only in the evaluation of the rejection of the father ($p<0.05$), wherein the result experienced by boys prohibition, roughness, and neglect than girls, when the parental treatments concerned (Table 3). On the other dimensions of parenting behavior, as well as in assessing the satisfaction of family showed no statistically significant gender differences.

Table 4._The significance of differences in the assessment of anxiety with the regard to the gender of respondents_

Variable	Gender	M	SD	Difference M	t statistics	F	p
Test anxiety	male	17.93	6.14	-.32	-.345	198	.730
	female	18.25	6.64				
Manifest anxiety	male	13.87	6.12	-1.83	-2.188	198	**.030**
	female	15.70	5.70				
Social desirability	male	12.36	3.53	-.64	-1.395	198	.165
	female	13.00	2.93				
Dissatisfaction with school	male	7.42	2.92	0.40	1.012	198	.313
	female	7.02	2.66				

When the estimation in form of anxiety is in question, Table 4 shows also the obvious data, which show that between male and females are statistically significant differences in the evaluation of manifest anxiety ($p<0.05$), whereby little girls are seen more general symptoms of anxiety, such as palpitations, anxiety, sleep disorders and the concentration, as well as fright, and reduced self-esteem than boys.

Table 5. *The significance of difference in the assessment of satisfaction of family and educational behavior of parents with regard to the age of respondents*

	Grade	n	M	SD	F	p
Family satisfaction	V	50	33.94	2.73	.978	.404
	VI	50	34.20	3.67		
	VII	50	33.40	3.39		
	VIII	50	33.22	3.21		
Acceptance by mother	V	50	45.28	4.51	4.625	**.004**
	VI	50	44.38	5.18		
	VII	50	42.96	6.25		
	VIII	50	41.28	6.77		
Rejection by mother	V	50	17.98	5.62	7.106	**.000**
	VI	50	20.18	6.59		
	VII	50	22.16	10.18		
	VIII	50	25.00	8.48		
Acceptance by father	V	50	43.86	4.62	6.704	**.000**
	VI	49	41.59	5.58		
	VII	50	42.12	5.76		
	VIII	47	38.79	6.51		
Rejection by father	V	50	18.38	5.31	5.935	**.001**
	VI	49	19.98	7.14		
	VII	50	22.24	10.01		
	VIII	47	24.79	8.62		

In Table 5, are visible the data, showing that there are no statistically significant differences between the pupils of different grades in the perception of educational attitudes of parents. Subsequent tests conducted were obtained findings that in the variable acceptance of the mother higher levels show a fifth-and-sixth-grade compared to the eighth-grade, while the variables rejection by the mother fifth-grade showed lower levels of expression in comparison with the seventh-and-eighth-grade, and a sixth-grade perceive a lesser degree of behavior of rejection by mother in relation to the eighth-grade students. When we talk about variables rejection by father, significantly lower levels of expression show fifth and sixth-grade students compared with students of the eighth-grade. On the variables of family, satisfaction was not received differences with regard to the grade that students attend.

Table 6._Significance in difference in the assessment of anxiety with regard to age of respondents_

	Grade	n	M	SD	F	p
Test anxiety	V	50	16.16	6.68	3.228	**.024**
	VI	50	19.60	6.92		
	VII	50	19.28	5.76		
	VIII	50	17.32	6.30		
Manifest anxiety	V	50	12.20	6.22	4.394	**.005**
	VI	50	15.60	6.37		
	VII	50	15.56	5.42		
	VIII	50	15.78	5.19		
Social desirability	V	50	13.18	2.66	2.153	.095
	VI	50	13.32	3.63		
	VII	50	11.98	3.36		
	VIII	50	12.24	3.17		
Dissatisfaction with school	V	50	5.98	2.61	7.162	**.000**
	VI	50	8.16	2.92		
	VII	50	7.92	2.36		
	VIII	50	6.82	2.76		

Regarding the expression of anxiety in obtained results in Table 6 is shown that the students included in the sample are significantly different in the field of test and Manifest Anxiety and dissatisfaction with education in relation to the class that attends. Further analysis revealed that the fifth-grade significantly lower anxiety test (M = 16.16; p <0.01) compared with the students of the sixth-grade (M = 19.60). Also, was obtained that the students of the fifth -grade (M = 12.20) exhibit fewer symptoms of manifest anxiety compared with a sixth (M = 15.60; p <0.01), then the seventh (M = 15.56, p < 0.01), as well as the eighth-grade (M = 15.78; p <0.01). Although the expression of the socially desirable responses did not show significant differences between the groups, though subsequent testing has been found to be socially desirable responding at least characteristic of the seventh (M = 11.98) and in relation to the students of the sixth-grade (M = 13.32; p <0.05). As for the dissatisfaction with education, the greatest expression of these variables has been determined in the sixth-grade students (M = 8.16) and compared with fifth (M = 5.98; p <0.001), and the eighth group (M = 6.82; p <0.05), as well as of the seventh-grade (M = 7.92) also in relation to the students of the fifth (p <0.001), and the eighth group (p <0.05).

**Correlation, dimension of educational behavior of parents and forms of the child's anxiety**

Table 7. *Correlation of family satisfaction, dimension of educational behavior of parents and the forms of the child's anxiety*

	Family satisfaction		Acceptance by mother		Rejection by mother		Acceptance by father		Rejection by father	
	r	p	r	p	r	p	r	p	r	p
Test anxiety	.101	.154	-.007	.918	.154	**.030**	-.088	.221	.139	.052
Manifest anxiety	.056	.431	-.051	.474	.281	**.000**	-.113	.116	.216	**.002**
Social desirability	.041	.567	.355	**.000**	-.323	**.000**	.141	**.049**	-.309	**.000**
Dissatisfaction with school	.065	.359	-.132	.063	.257	**.000**	-.133	.062	.235	**.001**

Findings presented in Table 7 indicate the fact that there is statistically significant correlation between the dimensions of parenting behavior dimensions and certain anxiety. Acceptance by the mother is statistically significant, positive and moderately associated with the level of social desirability. The rejection by the mother is significantly correlated with all dimensions of anxiety and low and positive with test anxiety, manifest anxiety and dissatisfaction with the school, and a moderate negative correlation with social desirability. The rejection by the mother is significantly correlated with all dimensions of anxiety and low and positive with test anxiety, manifest anxiety and dissatisfaction with the school, and a moderate negative correlation with social desirability.

Discussion and conclusion

By conducting this study we wanted to examine which educational style is the most characterized for parents of primary school age, form of anxiety is the most present in children in higher grades of primary school, whether is registered gender and age differences in the occurrence of various forms of anxiety, as well as to determine the existence of integration of various forms of anxiety and parenting behavior.

The obtained results indicate that the respondents included in the sample are moderately satisfied with their families and family life. In addition, the higher results on the acceptance subscale by parents compared with rejection indicate greater closeness, trust, and understanding between the child and the mother and father.Accordingly, it can be assumed that the students covered by the pattern of their parents perceived mainly as a warm, supportive, believe that they consistently implement corrective actions, foster and encourage the child's communication in a social environment and autonomy, which makes a good foundation for the development of a positive evaluation of the child's personality(Janković & Laklija, 2011).

When it comes to anxiety, the analysis of the results showed that the respondents are mostly anxiety in a test situation, with moderately present feelings of helplessness and inconvenience, which is manifested in the form of fear of failure

in solving problems, which is often accompanied by reactions vegetative nervous system. This finding is consistent with previous studies, who speak about it, that the appearance of the first test anxiety related to the period between the seventh and the fifteenth year of the child, as well as the intensity of test anxiety, grows as a function of age following the curve of the negative acceleration (first rises sharply after which its growth is slowing and eventually stabilizing around the eighteenth year of the level achieved)(Lacković-Grgin, 2000). According to Lacković-Grgin (2000), such a change, namely increase test anxiety as a function of age is often explained by the fact that older students show more fear of bodily harm, discomfort in society, as well as the failure of some activities (Grgin, 1997), and which might be relevant to the phenomenon of test anxiety. However, the results of research in this field are not fully consistent.

In terms of quality of family interactions at the level of the parent-child relationship, the results indicate that the variable rejection by the father is pronounced in boys than in girls. In other words, boys experience more of the prohibitions, rudeness, and neglect by the father than girls. The role of the father is especially important in the process of identifying a male child with a person of the same sex, and identification of a boy with his father in connection with the creation of a sense of belonging to their own sex, adopting masculine roles and behaviors in relation to this role (Kostić, 2014). On this basis, it can be assumed that it was the experience of father's rejection of the male children of a similar significant experience in girls.

In this study was determined a statistically significant difference between the sexes in the manifest anxiety. Girls showed significantly more symptoms manifest anxiety than boys. These results are as expected and in accordance with the findings of previous studies (Hayward & Sanborn, 2002). These differences may mean that girls are more willing to acknowledge the anxiety, and not they really are more anxious than boys. Also, these differences may be due to physiological and psychological maturation, as the majority of children in the sample is in puberty and early adolescence. These physical and psychological changes are affected differently by girls and boys. The girls become less secure, lower self-esteem, show them the negative image of their own body, while the boy's physical changes that accompany puberty contribute to feeling more important and stronger. In addition, the expression of anxiety in boys and girls can have impacted the gender of roles. Girls are taught from early childhood that are weaker, gentler sex, a significant figure in them encourage the expression of emotions. On the other hand, boys learn to be strong and powerful. Thus, girls are actually taught to show anxiety. That is why it is possible that girls are not more anxious than boys, but they are only willing to show and acknowledge.

When it comes to age differences in the assessment of educational attitudes of parents, it is proved that the acceptance by the mother expressed at least eighth-grade students compared with students in the fifth and sixth grades. Also, the acceptance by the father is less pronounced in eighth compared to the students of the fifth and seventh grade. As for the dimensions of rejection by the mother, it was found that the eighth grade have significantly lower levels of expression of these variables

compared with fifth and sixth grade, whereas in the case of rejection of the father is reversed, so that the eighth grade have higher levels of expression in relation to the students of the fifth and sixth grades. Unfortunately, there is still little data in the literature that speak of the perception of parental behavior depending on the age of the child(Kostić, 2014). The findings of the study conducted by Macuka (2008) indicate that among adolescents aged 10 to 16 years the perception of a positive emotional aspect of the relationship with his father, which includes support, acceptance and showing emotions, declines with age, but increases the father's control in children's behavior. In addition, it was found that younger adolescents are estimated more acceptance and less control of their behavior by mothers than older adolescents.

As for the difference between students of different grade levels of anxiety, it was found that students in higher grades have more symptoms of anxiety, which is in line with expectations. Most authors who have examined the relationship of students' age and level of test anxiety conclude that the fear of testing occurs in the early school period, with a tendency to increase in intensity towards the final grades of primary school when its level stabilized (Franić, 1994). Due to the complexity of the learning content and the development of cognitive abilities that enable better insight into the seriousness of the social consequences of the failure during the education, there is a higher intensity of anxiety in students higher of grades (Pahić, 2008). Considering that the predominant sources of anxiety in children of primary school age relate to the context of school, understandable is the finding that points to the fact that students in higher grades show more symptoms of manifest anxiety.

When we talk about the connectivity between the dimensions of parenting behavior and forms of anxiety behavior of the child, based on the findings, we can conclude that the acceptance by the father and mother is positively correlated with social desirability, and reject the negative. If we take into account the area in which was conducted testing of children, where is the dominant patriarchal-authoritarian family, it can be assumed that in them by parents specific corrective actions nourish and encourage the socially desirable behavior. Namely, the child who is brought up in such an environment will be more inclined to accept the assessment and desirable standards of authority and important persons (Golubović, 1981; accordint to: Pejić, 2010). On the other hand, the rejection by the mother is in positive correlation with the test and manifest anxiety and dissatisfaction with the school, while the rejection by the father also is positively correlated with the last two variables. Studies have shown that the rejection is a significant predictor of symptoms of anxiety and that children who estimate that their parents treat them rough or that they somehow neglect have more symptoms of anxiety (Vulić-Prtorić, 2002).In addition, parents of anxious children greatly encouraged caution and avoidance of risk in children, provide them with information about the possible negative outcomes, which is why children are becoming more and more worried. Also, they tend to express doubts about the child's competence, reward them for avoidance and withdrawal, apply more restrictive practices and dominant educational methods, which in turn limits the autonomy and the development of positive self-efficacy in children(Dadds et al., 1996; according to Vulić-Prtorić, 2002). Negative messages received from the

parent a child forms his cognitive style that is characterized by an increased feeling of helplessness and low self-esteem. In this way, early communication within the family through the process of dealing contributes to the vulnerability of the child to develop anxiety symptoms.

Based on the above, we can conclude that the relationship between parent and child is an extremely important factor in the adaptable behavior of the child. Specifically, it was found that the negative aspects of educational behavior are associated with the development of all forms of anxiety, which is in line with a number of studies dealing with educational styles and adaptable forms of child behavior. It shows that the relationship between parent and child is of crucial importance for the successful socialization of the child and the development of a healthy personality. Although parenting is caused by various factors, it is undisputed that the security and love that parents give the child form the basis of his mental health and satisfaction.

We believe that in this paper we have opened of questions parents' educational attitudes and adaptive behavior of the child to focus on possible paths for further research. In light of this, recommendations for future research certainly dictate that it would be desirable to use different methods for assessing the studied relationships between parent-child, as well as the inclusion of other contextual variables in research, in order to obtain objective data and perform more valid conclusions.

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Original scientific paper

ORGANIZATIONAL COMMITMENT IN CONTEXT OF MARITAL AND PARENTAL STATUS OF EMPLOYEES[2]

Abstract

The success of every company in certain conditions is increasingly more dependent on the extent and way in which human resources contribute to the organization of human life. Research into organizational commitment plays an important role in the study of organizational behavior, where the results indicate that the marital and parental status of employees influence organizational commitment. The subject matter of this research is to investigate whether there are differences in the intensity of organizational commitment and its aspects (affective commitment, normative commitment and staying in company commitment) based on the marital and parental status of employees. The research sample consisted of 453 respondents, all employed, and aged 35-50. To measure the intensity of their organizational commitment, Allen-Meyer's organizational commitment questionnaire was used (Allen& Mayer, 1990; Allen & Meyer, 1996; Meyer & Allen, 1991). The findings of ANOVA indicated that employees who are married have a more pronounced organizational commitment in comparison to employees who are not married or are only in a relationship. There is also a clear connection between parental status (whether the employee has children or not) and the extent of organizational commitment: employees with children show a higher level of organizational commitment. Cannonical discriminant analysis confirmed the existence of a connection between organizational commitment and marital and parental status but indicate that the connection is not independent of the type of work organization, public or private. The results show that in private, but not in public sector employees without children can be discriminated from those with children based on lower intensity of all aspects of organizational commitment, and especially continuance commitment. At the other hand, results about employess with different marital status indicate that employes with differente relationship status in private sector can not be discriminated based on their organizational committment, but it is relevant for public property work organizations where all of subjects who are not maried (single, divorced or in relationship) have lower committment to the organization. Recommendation of the study is to take into account variables which are related to the family functioning

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of employees if the goal is to achieve better understanding or an increase in the level of organizational commitment of employees.

Introduction

The success of every company in modern-day conditions is depending increasingly more on the extent to which human resources contribute to the life of an organization, since they, unlike the financial and technological-technical resources, have the greatest possibility of change and adaptation to the demands of modern business practices.

Research into organizational commitment plays an important role in the study of organizational behavior (Jafari et al., 2013). These claims are based on an extensive number of studieswhichanalyzed the relations between organizational commitment and the attitudes and behavior of employees in the work context (Angle & Perry, 1981; Koch & Steers, 1978; Porter et al., 1974, 1976). The question why employees are prepared to invest their energy into social systems, which processes that include or what the nature of the commitment is, is answered in the relevant literature by means of the following responses and definitions. Thus Becker (Becker, 1960; according to Mowday et al., 1982), Hrebiniak and Alutto (1972) consider organizational commitment to be based on the exchange of interests or investment and gain between individuals and the organization. Weiner and Gechman (1977) describe organizational commitment as socially acceptable behavior related to formal and/or normative expectations, while probably most influential authors in this field Porter, Steers, Mowday and Boulian (1974) equate organizational commitment with emotional ties.

The studies carried out over the last few decades were primarily based on the multi-dimensional model of organizational commitment established by Allen and Meyer in 1990. These authors support a new concept of organizational commitment and thus make a distinction between three mutually independent components of organizational commitment: affective commitment, normative commitment and continuance commitment. Affective commitmentis established when an employee wishes to remain in the organization due to existing emotional ties and identification with the organizational goals and values. Normative commitment stems from a feeling of obligation on the part of the employee to remain in the organization due to offered enticements or favors (for example, paid tuition fees), that is, exists when a person believes that they are duty bound to remain in the organization without re-evaluating their decision. Continuance commitment refers to the awareness of the employee of the price of leaving the organization, that is, an understanding that accumulated investments exist which might be lost if he were to leave the organization (friends

at the workplace, benefits specific for a particular type of organization). The level of development of this component of commitment also influences the availability of alternative possibilities of employment.

Meyer and Allen (1991) consider affective, normative and continuance commitment to be components of, and not types or kinds of, commitment. Thus, a certain person can at the same time feel both a strong emotional commitment to the organization, but also an obligation to remain its member. Organizational commitment can be determined by a certain extent of desire, the need and duty which an individual feels towards the organization he works for. That is why the commitment he feels for his organization can be better understood if we take into consideration all three components of commitment, that is, if organizational commitment is treated as a multi-dimensional construct.

There are studies that have found a relationship between organizational commitment and many of demographic characteristics (Elizur & Koslowsky, 2001; Igbal, 2010; Marsden et al., 1993; Nijhof et al., 1998). In his study on demographic and psychological factors predicting organizational commitment Salami (2008) found that marital status of employees significantly predicted organizational commitment. Many researches have shown that employees who are married show much more commitment to their organisations compared to single employees (Dood-McCue & Wright, 1996). Similarly, research carried out in India (Tikare, 2015) has indicated that individuals who are married have a more pronounced organizational commitment, as well as all individual aspects of commitment, when compared to employees who are not married. It is interesting that the differences were most pronounced in the aspects of normative commitment to an organization, while the differences in terms of affective and continuance commitment were less pronounced, but still indicated more pronounced commitment than those who were married. In research conducted by Mathıuge and Zagac (1990) authors find found that married employees showed more commitment to the organization, and also a study conducted by Cengiz (2001) suggested that gender does not have an effect on organizational commitment, but in other way widows and divorced employees demonstrated more commitment to their organizations.

Empirical results from some of explorations suggest that employees who had children have a need for more flexibility in work-related context, also those employees more often then those who do not have children, may occasionally leave work early to attend a child's academic or social activity, work from home when a child is ill, or bring their children to work (O'Neil et al., 2009). On the other hand, some results has suggested that holding multiple roles (i.e., parent and manager) may contribute to both well-being and leadership skills for women (Ruderman et al., 2002).

In the last forty years, families have slowly been distancing themselves from gender roles which emphasize the differences between the genders and have moved in the direction of more egalitarian definitions of business and family roles of men and women. These changes are connected to an increase in the participation of women in non-family related activities, but without much or without any compensatory increase in the participation of men in their family roles (Tošić & Todorović, 2011).

The trend towards a greater sharing of the economic role and of family obligations, when partners accept egalitarian attitudes and relations, can lead to an increase in the quality of marriage, and through the improvement of equality in marriage even an increase in the satisfaction of partners regarding the numerous benefits which they obtain from this type of relationship, and which can be realized in a traditional marriage with divided roles between husband and wife (Haas, 1980).

Theoreticians and researchers-practitioners alike working in the field of organizational psychology and psychology of work agree that the increase in the existing knowledge on organizational commitment must be continued (according to Schultz, 2000), and thus the research presented in this paper deals with the study of possible relations between organizational commitment, on the one hand, and marital and parental status on the other.

Methodology

2. 1. The problem and hypothesis of the research

The aim of this research is to investigate whether there are differences in the intensity of organizational commitment and its aspects (affective commitment, normative commitment and staying in company commitment) between employees who have or do not have marital partner and child/children.

In accordance with the subject matter of the research, the following hypotheses were proposed /tested:

H1. Employees who are not married have lower intensity of organizational commitment and its aspects (affective commitment, normative commitment and staying in company commitment) than employees who are in marriage.

H2. Employees who have child/children have higher intensity of organizational commitment and its aspects (affective commitment, normative commitment and staying in company commitment) than employees who do not have a child. H3. To examine whether employess with different marital status can be discriminated based on the intensity of organizational comittment.

H4. To examine whether employess with different parental status can be discriminated based on the intensity of organizational commitment.

H5. To examine whether there are differences in the relationship between characteristics of the family (marital status and having children) depending on employment in the private or public sector (private or public property of companies – work organizations)

2.2. Measuring instruments

To measure the intensity of organizational commitment Alen-Meyer's organizational commitment questionnaire was used (Organizational Commitment scale Allen & Mayer, 1990; Allen & Meyer, 1996; Meyer & Allen, 1991), which has the following subscales, that is, it measures three aspects of organizational

commitment: affective commitment (4 items), staying-in-the-organization commitment (4 items) and normative commitment (6 items). Scale used in this research was based on 14 items (4 items which shows the weakest saturation with the extracted factors in the conducted factor analysis was excluded). According to Allen and Meyer (1990, 1991, 1996) *affective commitment* exists when an employee wants to remain in the organization because of the emotional attachment; *normative commitment* stems from feelings of obligation of the employee to remain in the organization because of the incentives given or favours done (salaries and training); *commitment through staying in the organization* refers to the notion that there are accumulated benefits that could be lost if one leaves the organization (friends in the workplace, benefits specific to a particular organization). General score on scale of organizational commitment is composite score of all items from three subscales. Alpha coefficient of reliability for the questionnaire in this research sample was .865.

A questionnaire for the socio-demographic data was designed for the needs of the study through which, among other things, we gathered data about relationship or marital status, parental status and the type of organization of employees.

2.3. The sample of respondents

The research sample consisted of 453 respondents. All of the subjects are employed (163 (36,1%) from private sector and 289 (63,9%) from public secbro) and aged 35-50 years. The age range was selected so as to ensure that all the participants would be of the age when they were expected to already have started their own families, and if they have not, it is not ascribed to their age, but to their convictions, attitudes or maybe even the inability to start and maintain relations with others. The sample consisted of 231 male and 222 female participants. Most of the participants were married 313 (68.8%), while 56 participants (12,3%) were single, and 36 (7,9%) were in a relationship. Slightly less than 5% were divorced and 0,5% were widowed. 314 of the participants were parents and had at least one child, while 114 of the participants did not have children.

Results

The findings indicate that there are differences in the intensity of organizational commitment and in all its aspects between employees who are not married and employees who are in marriage.

Table 1 *Organizational commitment of employees with different marital status (ANOVA)*

Organizational commitment	Df	F	p
Affective commitment	1	9.23	.003
Continuance commitment	1	10.03	.002
Normative commitment	1	8.98	.003
Organizational commitment – general score	1	11.21	.001

More detailed analysis (Table 2) shows that married subjects have the highest scores on the scale of organizational commitment and on all its aspects: affective commitment, normative commitment and staying in company commitment. In fact, results show that there are no statistically significant differences in organizational commitment between people who are single and people who are in relationship, as well as between subjects who are in relationship and divorced one. Married subject have statistically significantly higher scores on all aspects of organizational commitment than people who are in relationship and than people who are single. It should be remarked that married people have higher level of affective aspect of organizational commitment, but also the normative aspect compared to the divorced employees, while there are no difference in continuance commitment. The last one group, the divorced subjects, also have statistically significant higher score on continuance commitment than single employees.

Table 2 *Organizational commitment of employees with different marital status (t-test)*

Marital status	Affective commitment			Continuance commitment			Normative commitment		
	M	t	p	M	t	p	M	t	p
In marriage	15.36	- 4.28	.000	12.65	-3.38	.001	20,18	-4.42	.000
Single	12.16			10.30			15.50		
In marriage	15.36	-3.06	.004	12.65	-3.04	.004	20,18	-2.57	.014
In relationship	12.56			10.36			16.78		
In marriage	15.36	3.45	.001	12.65	-	-	20,18	2.49	,013
Divorced	12.64			12.45			17.14		
Single	12.16	-	-	10.30	-1.84	.032	15.50	-	-
Divorced	12.64			12.45			17.14		

As it can be seen in Table 3, the second hypothesis which assumed that employees who have child/children will have higher intensity of all aspects of organizational commitment is also confirmed.

Table 3 Organizational commitment of employees with different parental status (t-test)

Marital status	Affective commitment			Continuance commitment			Normative commitment		
	M	t	p	M	t	p	M	t	P
Without child	13.51	3.04	.000	11.36	3.17	.002	17.66	2.99	.003
With child/children	14.90			12.54			19.69		

With a view to checking whether employess with different marital status can be discriminated based on the intensity of organizational comittment, the method of canonical discriminant analysis was applied. In order to respond to all the rest hypotheses the mensioned method was applied separately on subsamples of employees in private and in public sector.

The results suggest that it is possible to differentiate people of differente marital and parental status by their committment to the organization, but this relation and possibility to discriminate is different in these two sectors or types of organizations. Precisely, canonical analysis showed that it can not be discriminated people with or without children depending on the level of expression of commitment to the organization in the public sector. On the other side, on the subsample of employees in private firms, canonical discriminant analysis showed that employees without children can be discriminated from those with children based on lower intensity of all aspects of organizational commitment, and especially continuance commitment (Table 4,5,6).

Table 4 *Chi square of canonical discriminant functions (private sector)*

Function	Eigenvalue	Canonical R	Wilks lambda	Chi square	df	p-level
1	.082	.276	.924	11.83	3	,008

Table 5 *Structure matrix of canonical discriminant functions*

I function		
Affective commitment	.282	$p^t < .05$
Continuance commitment	.908	$p^t < .05$
Normative commitment	.583	$p^t < .05$

Table 6 Functions at group centroids of canonical discriminant functions

Type of employment (job)	Function I
Having child/children	.144
Without children	-.566

The results show that on the basis of organizational commitment it is possible to discriminate married people compared to employees who are not married with a canonical correlation of ,380, but only in public sector. In a table 8 it is presented the structure of canonical discriminant functions and in table 9 group centroids of canonical discriminant functions.

Table 7 Chi square of canonical discriminant functions (public sector)

Function	Eigenvalue	Canonical R	Wilks lambda	Chi square	df	p-level
1	.168	.380	.841	45.54	9	.000
2	.016	.124	.983	4.55	4	-
3	.002	.043	.998	.48	1	-

Table 8 *Structure matrix of canonical discriminant functions*

I function		
Affective commitment	.945	$p^\dagger < .05$
Continuance commitment	.782	$p^\dagger < .05$
Normative commitment	.737	$p^\dagger < .05$

Table 9 Functions at group centroids of canonical discriminant functions

Type of employment (job)	Function I
In marriage	.262
In relationship	-.738
Single	-.628
Divorced	-.061

Results about employess with different marital status indicate that employes with differente relationship status in private sector can not be discriminated based on their organizational commitment, but it is relevant for public propertywork organizations where all of subjects who are not maried (single, divorced or in relationship) have lower committment to the organization.

Discussion and conclusions

The recommendations for the management of the organizations emphasize adhering to the principles of the "open system" philosophy –accepting the significance of external factors in relation to the work organization (Dipboye et al., 1994). An evaluation of the relations which exist between the unambiguously significant socio-demographic variables such as marital and parental status of the employees, on the one hand, and organizational commitment on the other, can have significant implications for the improvement of the relationship between an employed individual and the work organization he belongs to.

The findings of this study indicated that employees who are married have a more pronounced organizational commitment compared to employees who are not married or are only in a common law marriage, which is in agreement with the findings of numerous studies which dealt precisely with these topics (Dood-McCue & Wright, 1996; Salami, 2008; Tikare, 2015). The relationship between parental status (whether the employee has or does not have children) and the extent of organizational commitment is clear, so that the employees who do have children indicate a higher extent of organizational commitment, especially in the case of aspects which refer

to continuance commitment. If we bear in mind that organizational commitment through continuance refers to the awareness of the employee of the price of leaving an organization, that is, the understanding that there are accumulated investments which might be lost if the employee were to abandon the organization, it was expected that other studies would also confirm the aforementioned findings (for example, O'Neil et al., 2009). The assumption is that employees who are married or who have children, perceive that it is necessary to provide socio-economic safety not only for themselves but also for their family members.

Intense and deep changes which take place both at the global and regional business market, and which refer to the changes from the traditionally safe work context towards a rapidly changing and unstable context, are expected to cause effects that not only affect the general psychological well-being of the individual, but also his behavior and attitudes towards work in the long runas well as the benefitfor the organization which employs the individual (Todorović, 2015). Thus it was expected that the outcome would be the employees working in the private sector who have children can clearly be distinguished from employees without children, based on the pronounced nature of their organizational commitment, especially the aspect which refers to continuance commitment. Naturally, it is precisely continuance commitment, but also affective and normative commitment, that is more pronounced among employees who have children. On the other hand, a canonical discriminant analysis has indicated that it is not possible to make this distinction based on parental status on a sub-sample of employees working in the state (public) sector. A possible explanation of the obtained findings is that in our country work in the public sector is considered a privilege and a source of greater pleasure than working in the private sector (Marković et al., 2011), and thus there are no differences in organizational commitment based on the parental status of the individual. On the other hand, among individuals working in the private sector, children increase organizational commitment probably because the parental role carries with it financial responsibility, and thus individuals will not easily change jobs or leave a private company they are dissatisfied with. This is reflected in the higher scores for normative commitment and continuancecommitment component for this sub-sample. When it comes to the marital status of the employees, the canonical discriminant correlation has indicated that for the sub-sample of employees in the public sector we can distinguish between those who are married and those who are not (single, divorced, in a common law relationship), and that it is precisely those who are not married that indicate a significantly lower extent of organizational commitment and all its aspects. The data which indicate differences in the manifestation of organizational commitment depending on whether the employees work in the private or public sector is not surprising, if we bear in mind the extensive range of empirical findings related to this field. Many studies the world over indicate that employees in the private sector appreciate economic-material rewards to a greater extent than do employees in the public sector (Cacioppe& Mock, 1084; Crewson, 2007; Karl & Sutton, 1998). A weaker manifestation of organizational commitment was found even among managers employed in the public sector, compared to the executive managers from

the private sector (Buchanan, 1974a; Buchanan, 1974b). Choudry (1989) finds that there are differences in the attitudes toward work among those employed in the private and public sector.

A special contribution of this work in which we have confirmed the existence of a connection between organizational commitment and marital and parental status still refers to the findings which indicate that the connection between the studied variables is not independent of the type of work organization (public or private). This warns about the danger of drawing any generalized conclusions and that the connection between family and business constructs is mediated by a large number of different kinds of variables. These findings are important if we bear in mind that the acceptance of variables related to the family functioning of employees is presented as an imperative if we wish to meet the interests and requirements of the organization, but to also protect, improve and preserve the quality of the family functioning of employees.

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Original scientific paper

DYNAMIC CONTENT OF TRUST ИN JOINT ACTIVITY: THEORY, PRACTICE AND RESEARCH

Abstract

The dynamics of trust in joint activities is considered. Types of trust are distinguished: basic, experience of trust, concrete, actual. The content of the dynamic model of trust is disclosed. The dynamic model of trust is complete model of trust that reflects all the basic structural and dynamic aspects of trust. As an example, the content of trust in the structure of psychological practice is expanded in terms of "dimensions": vertical, horizontal and dynamic.

Keywords: trust, joint activity, psychological practice.

The problem of social trust has a high level of relevance in various spheres of society. Trust is the most important factor in the effectiveness of joint activities and the functioning of society. Being included in social practice as its key element, trust has been a leading social practice for a long time: where trust is ignored or undermined, social relations are violated, and society is degraded. Where trust is a daily social practice, there is a growing prosperity in all spheres: personal, interpersonal, industrial, commercial, social, therapeutic, pedagogical, scientific, etc. Trust has its own systemic structure, including dynamic one.

Modern studies of psychology of trust cover a wide range of issues. In particular, problems of trust are studied by such researchers as R. Bachmann, A. Zaheer, R.C. Bernadette, M. Böss, D. Gefen, J. Häkli, C. Minca, C.A. Larsen, D.S. Reina, M. Reina, K.J. Rotenberg, B. Rothstein, P. Spikins (Bachmann & Zaheer, 2006; Bernadette, 2011; Böss, 2016; Gefen, 2013; Häkli & Minca, 2009; Larsen, 2013; Reina & Reina, 2015; Rotenberg, 2017; Rothstein, 2005; Spikins, 2015). As indicated by E. Erikson, D. Gambetta, A. Giddens, R.M. Kramer, A.B. Kupreychenko, D. Levis and A.J. Weigert, J.K. Rempel and J.G. Holmes, C. Rogers, J.B. Rotter, T.P. Skripkina, V.P. Zinchenko, and other researchers (Erikson, 1950; Gambetta, 1988; Giddens, 1991; Kramer, 1999; Kupreychenko, 2008; Levis & Weigert, 1985; Rempel & Holmes, 1986; Rogers, 1961; Rotter,

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1971; Skripkina, 2000; Zinchenko, 2001), the genesis of trust goes back to early childhood. But trust evolves in normal ontogenesis as a selective mental formation, which manifests itself in relation to each significant object as a certain level or a degree of trust (distrust). Thus, in addition to general **basic trust** a person shows selective and specific trust to a particular object. Before the individual is able to express this specific trust in relation to an object, he / she should get some experience with it. Based on this experience as well as with consideration of all his / her own previous experience, the individual will form a certain amount of trust (distrust) in this object. A particular individual does not have trust in general (it would be trust in nothing, objectless trust), but has certain expression of trust to specific objects. General trust is a theoretical construction, a generalization of these specific manifestations of trust. Thus, trust as a real phenomenon in its form of particular trust, is built each time afresh in relation to each new object, with consideration of the **experience** of the individual and his / her basic trust. In other words, *theexperience of trust,* **which is integrated in the individual, is one of the factors of shaping** *particular trust***, trust in a given case.**

When **particular trust** has reached a significant level, i.e. when it appears to be a stable enough attitude of the subject to the object of trust, it starts playing an important and often defining role in organization of the interaction between the subject and the object (which in turn acts as the subject of interaction). At the least, it appears to be an independent factor of this interaction. Herewith, particular trust (i.e. trust in a particular object, a particular individual) reaches a certain level, which fluctuates around this level in the process of distinct acts of communication and is dependent on the attendant circumstances, mainly on the situational factors of trust. Because of these fluctuations, every time the individual shows **actual trust**, which is different from the general level of particular trust.

Thus, we see a line of interdependence between the four facts: basic trust, the experience of trust, particular trust and actual trust. According to E. Erickson (Erickson, 1950), **basic trust** is formed during the first year of life. It is the foundation of any trust. By the time basic trust is formed, a functional organ of trust has been formed as well. Trust starts to exist as an independent phenomenon, with no possibility of any new changes happening to it. All the subsequent **experience of trust** is only a differentiation, a specification of basic trust. The experience of trust does not change anything fundamentally; if a certain level of basic trust has been formed, this level becomes a permanent characteristic of the individual and he / she cannot change it: this level accompanies him / her in all circumstances and determines his / her patterns of interaction with the world, his / her existence in the world (basic trust can only be changed in conditions of specially organized psychotherapy). All the particular and actual trust is tied to this level and depends on it.

However, it should not be understood that some individuals constantly trust all the life circumstances and others do not. Even basic trust, which is determined by the circumstances of the first year of a child's life, is a complex, differentiated and selective attitude, i.e. the experience of each individual normally contains different degrees of trust in various social objects. The middle line of this experience in the

first year of life is expressed in an integrated form of basic trust, which, on the one hand, is a complex systemic attitude, on the other - a certain level of overall trust.

Thus, we find particular trust, the experience of trust and basic trust, as if they have been put together in the manner of nesting dolls, into actual trust or immediately after it. **It is the mechanism of internal determination of actual trust** by its more general forms (Pic. 1). Actual trust is not only the result of the situational factors of trust, but of all types of trust: it manifests itself from and through them. As its base and support, particular trust, the experience of trust and basic trust are present in actual trust. Herewith, if there are no criteria for the formation of actual trust, there appears particular trust; if there are no criteria for the formation of particular trust, there appears the level of trust, which corresponds to the individual's experience of trust; behind which there is basic trust.
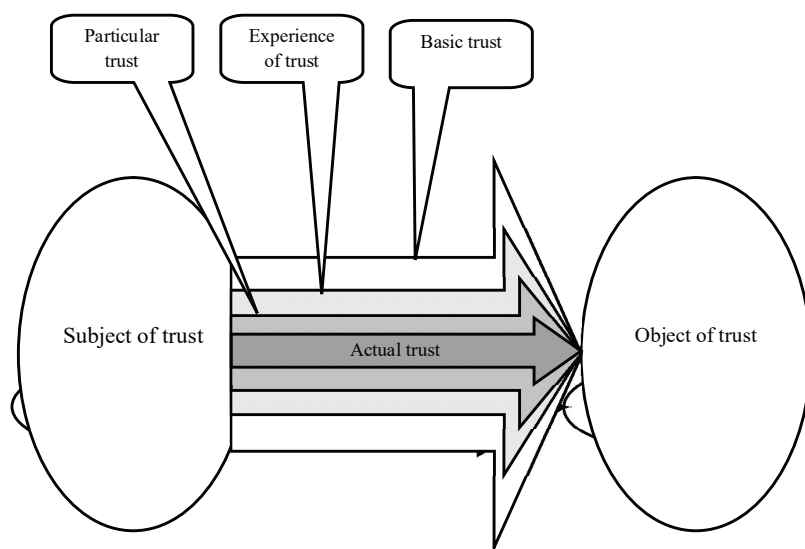
Pic. 1. The mechanism of internal determination of trust

If there exists a certain level of trust (or distrust), this certainty of trust builds interaction in accordance with the level of existing trust. A child trusts a mother and does not require verification of her intentions in respect to himself / herself and takes her care and her instructions as proper and positive. A pupil trusts a teacher and does not ask about the correctness of the teacher's knowledge. The client trusts the counselor, the therapist-coach: this is the basis for the success of psychological practice. If a manager trusts his subordinates, he at the same time actually delegates his authority and responsibility to them, which hastens the solution of any problem, because it does not require coordination of each simple task by the manager: the subordinate solves them himself. If a high degree of trust is formed between business partners, it simplifies their work and increases the profits of both, because every concern (distrust) adds the insurance costs against these concerns in one form or

another: from collection of information about the other party to engagement of third persons for participating in a transaction. If politicians do not trust each other, then it slows down the process of negotiations, the search for consensus, the decision-making process, it causes the permanent suspicion, etc. When people do not trust the government, then every government proposal is perceived as directed against their interests, although there are no indications that it is true, and this situation is difficult to cure.

Thus, the degree of trust directly determines the quality of the interaction and the result. Moreover, the result of this interaction, in its turn, affects the participants of this interaction. If the interaction between the subject and the object continues, a system of relationships is formed and developed on its base, starting with the current level of trust, but gradually "acquiring" other multiple relations, that may be positive, neutral, or negative, depending on the degree of trust / distrust.

Our empirical studies (Antonenko, 2004, 2006) demonstrate that if relationships of the parties are developing according to the positive scenario, and positive trust (in the narrow sense of the word) is built between them, it causes a whole range of secondary positive relationships: friendship, mutual support, positive recommendations to third parties, exchange of confidential information, etc. A negative script is fraught with its own consequences. In the best-case scenario, the reinforced and intensifying mutual distrust of the parties leads to the cessation of contacts, and relationships become "virtual": they exist as a mutual subjective representation of a negative opinion about the other party and not as a real interaction between the parties. In the worst-case scenario, distrust grows into mutual hostility and actions against each other, developing and escalating conflict.

The sequence of relations illustrated above reflects the complex dynamics of the formation and the development of trust. The basis of all displayed particular trust is basic trust and individual experience of trust. It is also determined by subjective, objective, environmental, and situational factors of trust. The emerging attitude will be namely trust (e.g., not gullibility) only in case if it is equivalent and proportionate to the object relation that is predictable and allows the activity be successful. Then the achieved level of trust essentially affects the specifics of the interaction and its result, and forms the relationships of the parties, which in their turn, according to the feedback law, also contribute to the development of trust.

Thus, when trust (some extent of it) is formed in a particular object, it becomes an active agent of the subsequent interaction with this object. Therefore, it determines the interaction between the subject and the object, its characteristics and its result. Relationships between subject and object are formed in a sequence of these interactions. Apparently, trust is a developmental factor of these relationships. At the same time, the level of trust constantly receives reinforcements from all levels of interaction between the subject and the object. This dynamic is reflected in ***the dynamic model of trust*** (Pic. 2).

It contains the following mechanisms. Joint activity of the subject and the object is considered in the framework of their interaction, with their interaction leading to a particular activity.

Joint activity, on the one hand, creates a certain objective relation; on the other hand, it has a certain result, which reflects its successfulness. This result has an impact on the activity itself (corrects it), on the interaction of the parties (the subject and the object), on the objective relations, on trust, and contributes to the development of relationships. Objective relation is the primary determinant of trust. Trust and relationships affect all the other aspects of the situation within which the interaction and joint activity develop (three short arrows). The dynamic model of trust is a complete trust model, which reflects all the main structural and dynamic aspects of trust.

As an example, let us consider the most important type of joint activity for modern society - psychological practice. Trust is its most important component (Karitsky, 2002; 2006). The main types of constructive psychological practices include psychological self-regulation, prevention, counseling, therapy, personal growth. Each of these practices begins with the formation of trust: to yourself, to your abilities (Maslow, 1971; Rogers, 1961), to a counselor, therapist, coach, mentor. The effectiveness of psychological practice is largely due to belief in one's own strength and trust in the accompanying specialist. Trust in psychological practice is so significant that it is its independent and initial element: before the psychological practice begins in accordance with the stated goal, the practice of building trust is carried out. Thus, in the vertical structure of psychological practice (Karitsky, 2002; 2006), trust is represented at all levels. On the motivational level the trust phenomenon is the moment of motivation, on the conceptual one - an element of knowledge, on the methodological one - way to build trust, on the praxic one - skills and the ability to build trust, etc. Similarly, in the horizontal structure of practice, trust is a constant, explicit or latent, task. Being singled out in the structure of practice as the relatively independent moment of it, trust can be traced in its dynamics: as a positively growing, moderately growing, contradictory, etc.

Conclusion. The problem of trust has a high level of relevance in modern society. Trust is studied by a lot of researchers in the field of psychology, sociology, management, international relations and other professionals. Personal trust is formed in ontogeny as basic trust, actual trust is shown on the basis of experience of trust and concrete trust. The level of trust in joint activities and interpersonal relationships determines the effectiveness of the activity. The authors reveal all aspects of the functioning of trust in the dynamic model of trust. The place and role of trust in psychological practice is shown in detail: trust determines the effectiveness of psychological practice.

Environmental factors

The situation of trust

Situational factors

SFT

OFT

Sactiv

Interaction

Joint activity

Subject of activity and trust

Objective relation

FOT

Result

Object of activity and trust

Actual trust

Relationships

Strust

SFT

OFT

SFT - Subjective factors of trust
OFT– Objective factors of trust
Sactiv– Subject of activity
Strust– Subject of trust
FOT – Functional organ of trust
Рез-т – Result of activity

Pic. 2 The dynamic model of trust

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Original scientific paper

STRESSFULNESS OF FAMILY AND WORK ROLES AND BURNOUT SYNDROME IN PERSONS SUFFERING FROM A CHRONIC SOMATIC DISEASE[2]

Abstract

The aim of this study was to examine whether there are significant differences in relation to the satisfaction and stressfulness of work and family roles and burnout syndrome in persons who suffered from certain chronic somatic diseases (N=828) and those who did not have any chronic somatic disease (N=828), based on self-reporting, as well as to examine the correlation between these variables individually in each sub-sample (aged M = 40.26, SD = 14.34, 56.1% of women). PORPOS battery was used, a specially designed instrument of 389 items and questions, which, inter alia, contained short scales for assessing satisfaction with and stressfulness of different roles and burnout syndrome. The results show that participants suffering from some of chronic diseases significantly differ regarding the experience of the stressfulness of roles (t = -2.353, df = 1515, p<.01) and burnout syndrome (t = -3.127, df = 1526, p <.001) compared to participants who did not report having any of these diseases. No significant differences were found between the compared groups of participants in terms of roles satisfaction (t = 1.586, df = 1539, p = .113). The correlation between all the examined variables was established for both subsamples, wherby there was a significant difference in the intensity of the relation between the roles satisfaction and the stressfulness of roles in the subgroup of healthy and sick participants (r1 = - 388, p<.001, z1 = - 412; r2 = -.475, p<.001, z2 = -. 517 zops = 2.1). The results of the study suggest that the level of stress associated with family and work roles and burnout syndrome can be associated with chronic somatic illnesses.

Key words: roles satisfaction, stressfulness of roles, burnout syndrome, chronic somatic diseases

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Introduction

Numerous studies have identified the association between stress, depression, inflammation and disorders such as, both non-infectious or somatic, the so-called noncommunicable diseases (NCDs) (Nešić and Cekić, 2012; Nešić and Ćirić, 2012; Nešić, Nešić and Čičević, 2012; Nešić, Nešić and Hadži Pešić, 2013), and infectious diseases. A large epidemiological research conducted over a period of 25 years (1990 to 2015) has shown that the central risk factors that may be modified, such as global exposure to unsafe sanitation, household air pollution, childhood underweight, childhood stunting, and smoking, have been reduced by 25%. In contrast, global exposure to multiple occupational risks, high body-mass index (BMI), and drug use have been increased by more than 25%. Thus, the prevalence of infectious diseases, although lower than before, is higher in developing countries, unlike somatic diseases, such as e.g. cardiovascular diseases and cancers, the prevalence of which is higher in developed countries (GBD 2015 Risk Factors Collaborators, 2016). The most significant four types of NCDs are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes. NCDs tend to be of long duration and generally slow progression. The term NCD herby refers to non-infectivity of these diseases and not to the fact that actually one of the important factors for the occurrence of these diseases may be disturbed communication or the lack of support (according to a stress/social support hypothesis proposed by Burman and Margolin, 1992; Hudek-Knežević, Karapić and Kardum, 2006), and stressful environment whether at work or in the family. These diseases are the result of a combination of genetic, physiological, environmental and behavioral factors. Certain individuals are more prone to stress than others, whereas long-term exposure to stress at work on or in the family may lead to burnout syndrome and the onset of various diseases.

Considering the way we learn to live with others in society, how we experience ourselves and the way we behave depends to a large extent on the context in which we live and groups and networks we belong to. Bauman and May (2001) argue that in social life we are acquiring a vast amount of "tacit knowledge which directs our behaviour, while at the same time we are not necessarily able to express how and why it functions in certain ways" (Bauman and May, 2001, p.17). Contemporary research (according to Todorović, Vidanović and Stefanović-Stanojević 2013) indicates changes in the representation of gender relations, but they are far from egalitarian relationships. A change in the social position of women has the most significant role in overcoming traditional family relationships in terms of sharing power in a family. The number of families in which parents equally contribute financially is increasing, and the role of fathers in raising children is becoming more and more important. The transformation that led to the employment of women at the same time significantly influenced the traditional organization of the family (in which fathers dealt with work, and women took care of the children). A woman who used to dedicate her time to running a household is now leaving the family, thus raising the possibility

of the occurrence of conflicts between family and work roles, since the demands for the coordination of work and family activities are undoubtedly greater (Hedrih, 2006). Hedrich (2006) also points out that the existence of a conflict between family and work (and vice versa) may have different negative consequences both on work performance and health (stress, burnout) and various psychological variables (satisfaction with different aspects of life). In addition, previous studies (e.g. Lee and Powers, 2002; McMunn, Bartley and Kuh, 2006) suggest that the conflicts work-family and family-work are psychologically two different issues with different consequences, but also different antecedents. Certainly, consideration should also be given to studies examining the relationship between the number of roles that a person has and the quality of these roles (satisfaction / stressfulness) with various psychological factors, including quality of life and related concepts (Frone, Russell and Cooper 1997; McLean, Glynn and Ansara 2004; Plaisier, De Bruijn, Smit et al., 2008). For instance, in our environment, in relation to the association between satisfaction with/ stressfulness of different parental roles and perception of what is most important for the development of a child, a study conducted by Anđelković, Vidanović and Hedrih (2012) has shown that satisfaction with the parental role is very significant. Satisfaction or dissatisfaction with other examined roles (providing care to parents, husband / wife, or partner and employee) were found to be less important than satisfaction with parental role.

When it comes to stressesfulness of individual life roles, it is clear that their cultural specificity should also be taken into account. Thus, Mihić and Petrović (2009) argue that, the concept of traditional gender and family roles, collectivism dominates in Serbian society, contrary to individual interests and the development of an individual, which distinguishes it from European, individualistically oriented societies. However, we believe it does not imply that people are completely bound by rigid gender and family roles, or that individuality is powerless against social influences. This only means that dominant codes, such as - masculinity and femininity, family roles are established in everyday practice in most societies.

Many dimensions of socioeconomic status (SES), either on individual, familiar or community levels, such as disparities in income, education and occupation may cause stress and increase disease risk through stress-related pathways (Nešić et al, 2012). For instance, life of children in "risky families" burdened with conflicting relationships and aggressive parenting can lead to cumulative stress that will cause proneness to a disease in later life (Repetti, Taylor and Seeman, 2002).

Social roles, either work or family roles, such as marital and parental roles more closely define the identity of adults and take up most of their time. Pioneering research in the United States has shown that family roles can be of supportive and protective importance (Barnett, Marshall and Pleck, 1992), but may also be a factor of stress. The role of a parent (father) is a stronger predictor of physical distress symptoms than the role at work or the role of a husband (Barnett and Marshall, 1993). Certain individuals are more prone to stress than others, whereas long exposure to stress both at work and in relation to the many roles that a person may perform can also lead to burnout syndrome and the occurence of various diseases (Barnett, Steptoe and Gareis, 2005).

Burnout syndrome is a prolonged response to chronic emotional and interpersonal stressors associated with the workplace. It is caused by a long-term exposure to strong stress, most often in case of high expectations imposed on us, by work, by other people or by ourselves. The likelihood of the burnout syndrome is proportional to the degree of incongruity between the individual and the six domains of work environment, namely, workload, control, reward, community, fairness and values. Incongruity may occur in one or more areas, affecting the severity of the syndrome (Leiter and Maslach, 1988; Maslach and Leiter, 1997).

Burnout is a highly important socio-medical problem. This is, inter alia, evidenced by the fact that the phenomenon is present in 48 to 69% of population in Japan and Taiwan, in about 20% in the United States and in about 28% of people in Europe (Maslach et al., 2001; according to Dedić, 2005). In a large Finnish study, the authors estimate that the prevalence of the manefested burnout is present at 3-7% in the representative sample of worker population. Burnout predicators are characteristics of work such as high workload, conflicting roles, low predictability, the lack of participation and support, or the experience of injustice (Ahola et al., 2005; 2010).

Schaufeli, Leiter and Maslach (2009) define the burnout syndrome as a state of exhaustion that causes cynicism and doubts in individuals about their own performance capacities as well as their own occupational values. According to Maslach, Schaufel and Leiter (2001), the three dimensions underlying this syndrome are excessive exhaustion, cynicism and detachment from work, as well as professional inefficiency accompanied by the lack of accomplishment. Exhaustion is the main component of burnout syndrome and is the result of over-expectations of the individual in meeting the difficult demands of the work performed. It leads to cognitive and emotional distractions from work consciously practiced by the individual, as an attempt to »cope up with" exhaustion. Cynicism or depersonalisation is an interpersonal component of burnout syndrome. It is characterized by an altered attitude towards people the individual is in contact with at workplace (colleagues and clients). Professional inefficiency relates, however, to the reduction of personal engagement in the workplace.

Burnout syndrome is manifested through physical symptoms (frequent headaches, gastrointestinal disorders, weight loss, insomnia, weakness accompanied by undefined pain, fatigue and exhaustion), emotional symptoms (varying mood, irritability, depression, detachment, cynicism, a low frustration tolerance, feeling of helplessness, anxiety, apathy) and behavioral symptoms (poor work performance and absence from work, behavioral changes that lead to family and social interaction problems).

Burnout is included in the diagnosis F43.2 - *Adjustment disorders*, characterized by disorders in social, work or academic functioning (WHO, 1992) according to the Classification of Mental Disorders and Behavioral Disorders (ICD-10). Thus, the burnout is recognized as a legitimate medical disorder (World Health Organization, 2010), that has its own ICD-10 code (Z73.0 - Burn-out state of vital exhaustion). Considering the causes of the development of burnout syndrome at work, two groups

of factors are most often distinguished: *situational factors (work environment)* and *specific characteristics of the individual* (Dedić, 2005). Certain empirical studies have shown that situational factors have a stronger impact on mental exhaustion than individual characteristics (Lavrova and Levin, 2006), while others emphasize the role of individual characteristics as dominant in the development of burnout syndrome (Mazzi and Ferlin, 2004). Burnout syndrome studies have primarily attempted to determine the proportion of situational and individual characteristics in its occurrence and development.

Many of the symptoms of burnout overlap with the hallmarks of depression, including extreme fatigue, loss of passion, and intensifying cynicism and negativity. It is also evident that certain physical manifestations of burnout syndrome overlap with psychosomatic manifestations, which may have the somatic focus within different organs or systems: cardiovascular (cardiac neurosis), gastrointestinal (gastric neurosis, hiccups, dyspepsia, pylorospasm, irritable colon of psychogenic origin, diarrhea), respiratory (psychogenic forms of cough and hyperventilation), urogenital (psychogenic frequent urination).

There is a relative lack of literature on the association between burnout and NCDs. Honkonen et al. (2006) have shown that physical illness is much more common in people with symptoms of burnout (64% vs. 54%), and that the prevalence of the disease increases with the intensity of burnout. Cardiovascular diseases were more frequent in men, while musculoskeletal disorders were more common in women. The prevalence of these diseases is related to the severity of all three dimensions of burnout syndrome: exhaustion, cynicism and lack of professional efficacy.

Melamed et al. (2006) consider that burnout and the related concept of vital exhaustion are associated with an increased risk of cardiovascular diseases and cardiovascular-related events. On the other hand, studies on gender differences within Colombian populations have shown that the perceived quality of roles is not a predictor of cardiovascular risk in men. The role of mother has a very low probability of cardiovascular risk prediction in women, indicating that the effort of this role, as well as its threat to a woman, is relatively continuous (Gómez, 2006).

Literature data indicate the importance of marital relationships, as a central relationship for most adults with beneficial effects for health. The stress / social support hypothesis proposed by Burman and Margolin (1992) may explain the relationship between marital distress and health problems. Mutual social support of spouses as a source of marital satisfaction leads to better health, whereas disrupted relationships among spouses may be a significant source of stress leading to health disorders (Robles and Kiecolt-Glaser, 2003). It may also be expected that the negative effects of low levels of marital quality accumulate over time and negatively affect health. Umberson et al. (2006) have found that negative marital interaction at the age of 70 or older affects physical health. Harmful effects of negative experiences in the elderly population may be the result of either a cumulative effect on health or a greater stress-vulnerability of the elderly. On the contrary, positive dimensions of marital quality are significantly associated with good physical health since satisfying marital relationships are predictive of low allostatic load, which is instrumental in

maintaining good health. A longitudinal 20 years long study has shown that initial values of marital happiness and marital problems are significantly associated with the initial value of physical health in early life and midlife cohorts (Miller et al., 2013) and it may have long-term implications for health outcomes (Robles and Kiecolt-Glaser, 2003).

The aim of the study

Taking into account the results of previous research indicating that the roles performed by the individual provide satisfaction, but may also be a source of stress and related to the presence of chronic somatic diseases and burnout syndrome, as well as the association between burnout syndrome and physical symptoms, we tried to determine whether there are significant differences in relation to the satisfaction and stressfulness of work and family roles and burnout syndrome in persons who suffered from and those who did not have any chronic somatic diseases at the time of the research. Furthermore, we wished to examine the correlation between the mentioned variables individually on each sub-sample.

Method

Sample

The study involved 1656 participants divided into two equal groups: 828 subjects (M = 44.46, SD = 14.51, 36.1% of men and 63.9% of women), in whom, based on self-reports, the presence of certain of the examined chronic somatic diseases has been established (skin diseases, heart diseases, bronchial asthma, rheumatic diseases, gynecological and urological diseases, migraine, gastric ulcer or duodenal ulcer, ulcerative colitis, hyperthyroidism, diabetes and malignancies) and 828 subjects (M = 36.10, SD = 12.90, 48.5% of women) who, according to self-reports, did not suffer from any of these diseases. Most of the above mentioned diseases are classified, according to ICD 10 classification of mental and behavioral disorders and diseases, as diseases caused by both psychological and somatic processes. The sample is part of a wider geographic cluster sample compiled within the study of the Diversity of work and family relations in Serbia in 2011.

Table 1. Structure of the sample with regard to age

Age	Sick		Healthy	
	Frequency	Percentage	Frequency	Percentage
Up to 30 years	173	21.4	344	42.2
31-40 years	154	19.0	198	24.3
41-50 years	182	22.5	139	17.0
More than 50 years	300	37.1	135	16.5

The most participants who reported suffering from a certain chronic somatic disease have more than 50 years which is the least frequent age category in the group of participants who did not report having any of the diseases. The most frequent age category in the group of participants who did not report having any of the diseases is up to 30 years, and the least frequent category in those who reported suffering from a certain chronic somatic disease is between 31-40 years. There is a significant difference in the proportion of the participants who reported suffering from some and those who did not have any of the examined diseases regarding age, $\chi^2 = 130.378$, p = .000, $\varphi = .283$.

Table 2. Structure of the sample with regard to education

Education	Sick		Healthy	
	Frequency	Percentage	Frequency	Percentage
Not completed elementary school	8	1.0	2	0.2
Elementary school	53	6.5	36	4.4
Secondary school	460	56.7	440	54.2
College of applied studies	109	13.4	113	13.9
Bachelor or Master	175	21.6	212	26.1
Doctorate	6	0.7	9	1.1

The highest percentage of the participants in both groups has graduated from secondary school, followed by the participants with Bachelor or Master (including students). The lowest percentage of the participants in both sub-samples included the participants who have not completed elementary education and those with a PhD degree. There is a significant difference in the proportion of the participants who reported suffering from some and those who did not have any of the examined diseases regarding education, $\chi^2 = 11.501$, p = .042, $\varphi = .084$.

Table 3. Structure of the sample with regard toemployment status

Employment status	Sick		Healthy	
	Frequency	Percentage	Frequency	Percentage
Unemployed	282	34.1	233	28.1
Employed	546	65.9	595	71.9

In the group of the participants who reported suffering from a certain chronic somatic disease there were 65.9% of the employed, whereas in the sub-sample of the participants who did not report having any of the diseases 71.9%. The established difference is statistically important, $\chi^2=6.776$, p<.001, $\varphi=.-064$.

Table 4. Structure of the sample with regard toemployment sector of the participants

Employment sector of the participants	Sick		Healthy	
	Frequency	Percentage	Frequency	Percentage
Entrepreneur	63	7.6	80	9.7
Public service employees	183	22.1	184	22.2
Private sector employees	194	23.4	223	26.9
Undeclared employees	56	6.8	47	5.7
Temporary/part-time jobs	50	6.0	61	7.4
Other	282	34.1	233	28.1

The highest percentage of the participants in both groups does not belong to any of the examined employment sectors - other, but earn in some other way (rent, pension, social welfare, dependents), followed by the private sector employees, and public service employees. The lowest percentage of the participants is engaged in occasional / part-time jobs, i.e. are not registered as employees. The proportions of the participants reporting the presence of some of the chronic somatic diseases and those who do not have any of the examined somatic diseases, do not differ significantly with regard to their employment status, $\chi^2=10.579$, p=.060.

Table 5. Structure of the sample with regard topartnership status

Partnership status	Sick		Healthy	
	Frequency	Percentage	Frequency	Percentage
Single	86	10.8	160	20.1
Divorced	57	7.1	36	4.5
Widowed	48	6.0	23	2.9
Married	501	62.6	422	52.9
In a relationship	100	12.5	150	18.8
Married and in a relationship	8	1.0	6	.8

Regarding partner status, the highest percentage of the subjects in both groups is married, followed by the participants in a relationship. The lowest percentage of the participants from both groups is simultaneously in marriage and in a relationship and widowed. There is a significant difference in the proportion of the participants in the compared sub-samples regarding partnership status, $\chi^2=52.847$, p<.000, $\varphi=.182$.

Instruments

PORPOS battery - a specially designed instrument of 389 items and questions for the purpose of the study. The battery, inter alia, contained short scales for assessing satisfaction and stressfulness of different roles (parent, care for one's own parents, partner, householder, employee) and burnout syndrome, as well as a check list for the assessment of the presence / absence of 12 chronic somatic diseases:

skin diseases, heart diseases, bronchial asthma, rheumatic diseases, gynaecological and urological diseases, migraine, gastric ulcer or duodenal ulcer, ulcerative colitis, hyperthyroidism, diabetes and malignancies.

The scale for the assessment of satisfaction with/ stressfulness of family and work roles consists of 10 items (5 items relate to satisfaction with family and work roles, and 5 items in relation to stressfulness of family and work roles). Most of the items (4) refer to the satisfaction / stressfulness of family roles, and only refers to work. The scale is an adapted version of Role quality scale (Tsai, 2008). Answers are rated on a 5-point Likert scale (1= completely agree, 5= completely disagree). Scale reliability of satisfaction with family and work roles assesed as Cronbah's α was .804, and of stressfulness with family and work roles was α=.875.

Burnout syndrome was established according to the dimension of emotional exhaustion from the model Christina Maslach, i.e with the help of 4 items from the Maslach Burnout Inventory (MBI; Maslach et al, 1996). Examples of the item are: "While at work, I feel exhausted and lacking physical or mental energy"; "At the end of the working day, I feel emotionally discharged." All items were evaluated using the five-step scale of the Likert response type (from 1 = totally incorrect to 5 = completely true. Scale reliability of burnout syndrome assesed as Cronbah's α was .835.

The check list for the assessment of the presence of chronic somatic diseases consists of a table with listed diseases or groups of diseases, whereby the participants are asked to check the disease(s) they suffer from.

Results

Table 5 provides an overview of the differences in the degree of satisfaction with and stressfulness of the examined family and work roles (parent, care for one's own parents, partner, householder, employee) and burnout syndrome between a group of participants reporting to suffer from certain chronic somatic diseases and healthy subjects who do not report the presence of any of the examined diseases.

Table 5. Differences in the degree of satisfaction and stressfulness of family and work roles and burnout syndrome in subjects who have and do not have chronic somatic diseases.

Variables	Presence of a certain somatic disease	AS	SD	t	df	p
Roles satisfaction	Yes	4.12	.79	1.586	1539	.113
	No	4.18	.77			
Stressfulness of roles	Yes	1.84	.83	-2.353	1515	.019
	No	1.74	.83			
Burnout syndrome	Yes	2.91	1.61	-3.127	1526	.002
	No	2.65	1.59			

The results shown in Table 5 indicate that the compared groups of participants significantly differ with regard to the experience of stressfulness of roles and burnout syndrome. No statistically significant differences related to roles satisfaction were found.

Shown below is the correlation between the examined variables in individual samples.

Table 6. Correlation (expressed by Pirson's correlation coefficient) between roles satisfaction, stressfulness of roles and burnout syndrome in the sub-sample of the participants who do not suffer from any chronic somatic diseases

Variables	Stressfulness of roles	Burnout syndrome
Roles satisfaction	-.388**	-.123**
Stressfulness of roles		.204**

**p<.01

There is a statistically significant negative correlation between correlation between roles satisfaction and stressfulness of the examined roles. Burnout syndrome is negatively correlated with roles satisfaction and positively correlated with stressfulness of the examined roles.

Table 7. Correlation (expressed by Pirson's correlation coefficient) between roles satisfaction, stressfulness of roles and burnout syndrome in the sub-sample of the participants suffering from certain chronic somatic diseases

Variables	Stressfulness of roles	Burnout syndrome
Roles satisfaction	-.475**	-.133**
Stressfulness of roles		.224**

**p<.01

The results in the Table 7 indicate the negative correlation between roles satisfaction and stressfulness of roles also in the group of participants who reported suffering from a certain chronic somatic disease. Burnout syndrome is also negatively correlated with roles satisfaction and positively correlated with stressfulness of roles.

Since correlations between the examined variables were established in both sub-samples, it was verified whether there was a statistically significant difference in the intensity of the established correlations between the sub-samples. The results indicate a significant difference in the intensity of the relation between roles satisfaction and stressfulness of roles in the subgroups of healthy and sick ($r1 = -.388$, $p<.001$, $z1 = -.412$; $r2 = -.475$, $p<.001$, $z2 = -.517$ zops = 2.1).

Discussion

According to the data of the third Serbian National Heath Survey conducted in the last quarter of 2013 (Stojadinović et al., 2014), the majority of citizens of Serbia (57.8%) assessed their health as very good and good. 40% of the population of Serbia reported on existence of a long-term disease or a health problem. According to the statements of the interviewees, the most frequent disease in 2012. was high blood pressure (31.3%), and it was found that among the population of Serbia aged 20 and over 47.5% had hypertension and potential hypertension. Cardiovascular diseases and malignant tumours were causes of over three quarters of deaths in Serbia in 2007. In the mortality structure, cardiovascular diseases accounted for more than half of the total fatal outcomes (56.0%), and almost every fifth deceased person (19.9%) died of a malignant tumour.

Based on the share in total mortality of the population, four out of ten leading causes of death, in the period 1950-2009 had an increased mortality rate: cardiovascular diseases, tumors, violent deaths and diseases of glands with internal secretion, nutrition and metabolism. On the other hand, the reduction in relative share in the total mortality was recorded in diseases characterized as certain conditions occurring in the perinatal period, infectious diseases, undefined conditions, urogenital diseases, respiratory diseases and digestive system diseases (Marinković, 2012).

The results of a meta-analysis which examined the relationship between stressors, involvement and support in the domains of work and family, work-family conflict, and satisfaction outside of those domains (Ford, Heinen and Langkamer, 2007) suggest that significant variability in family satisfaction can be explained by variables of work, whereas a considerable variability in work satisfaction may be explained by family variables. Work and family related stress have the strongest effects on the work-family conflict and cross-domain satisfaction.

In the current research, a comparison was made between the experience of satisfaction with /stressfulness of family and work roles and burnout syndrome in participants who reported to suffer from some of the mentioned diseases and an equal number of healthy subjects. The results of the research have shown that there are no significant differences in the level of satisfaction with the family and work roles of the participants who suffer from and those who do not have any chronic somatic illness, but there is a significant difference in the degree of stressfulness of family and work roles. On the basis of these results, it can be speculated that satisfaction has a weaker effect on the health of population than stress, or, perhaps, roles satisfaction mitigate the consequences of the disease. Therefore, the healthy and the sick do not differ in this parameter.

The characteristics of burnout listed in the current research, such as loss of interest in work, emotional discharge at the end of the day, anxiety at the thought of work at the beginning of the day and the feeling of exhaustion as well as the lack of physical or mental energy during the work, shown summarily, are more pronounced in the group of sick than in the sub-sample of healthy subjects. In

support of this finding, the results of earlier studies have found that the symptoms of burnout syndrome are most closely related to heart diseases, rheumatic and skin diseases (Nešić et al., 2012a), which are the most frequent diseases reported by the participants in this study.

Satisfaction with family and work roles, the stressfulness of family and work roles and burnout syndrome are intercorrelated both in the sub-sample of the sick and sub-sample of healthy subjects. In addition to the negative correlations between satisfaction with family and work roles, on the one hand, and the stressfulness of family and work roles, on the other, a negative correlation has been found between satisfaction with family and work roles, on one hand, and burnout syndrome, on the other. Negative correlation of satisfaction and stressfulness of roles has been found in both subgroups, which is quite expected, since whether being healthy or ill, we are certainly less satisfied with what we experience as stressful. However, the intensity of the relationship of pleasure and stressfulness of roles is higher in the group of the sick, thus indicating that the individuals in this sub-sample most likely perceive their roles as less satisfactory and more stressful, which may be related to the development of the disease.

The results of the conducted research have shown that the total level of stress reported by the participants regarding the parental role, the role of caring for one's own parents, the role of partner, the role of a householder and the employee role have a low but significant correlation with burnout syndrome, which was, generally, not an unexpected finding, given the very complex interaction of the examined variables. In the previous studies of Hadži Pešić et al. (2012) and Pavlović, Nešić and Nešić (2012), the levels of stress of these roles have been found to correlate with somatic diseases the participants reported to suffer from, whereas burnout correlates with the diseases. It should be noted that a number of relevant factors were not included in this research (inter alia, the duration of somatic diseaes, the nature of social and direct work relations, including possible mobbing, gender differences, material status ...), which should certainly be taken into account in future research of the relationships of these variables.

In a study conducted by Nešić et al. (2012a), the stressfulness of all roles was higher in the group of the sick compared to the healthy subjects, except for the parental role, which is contrary to the findings of Barnett and Marshall (1993). According to these data it seems that being a parent is less stressful than caring for and looking after one's own parents. Numerous studies have shown that providing care for the patients and the elderly by professional caregivers is extremely stressful and leads to burnout (Ilić et al., 2017). It may be assumed that this role is even more stressful for family members who constantly, throughout the day (and night) provide care to their parents suffering from the consequences of age or illnesses.

Many characteristics of the participants, such as age, gender, education, employment status, employment sector and partnership status may participate in the evolution of chronic somatic diseases. For examle, almost 40% of non-selected patients in general practitioner practice may be considered as suffering from conditions described as medically unexplained symptoms (MUSs), and the

percentage is even higher among divorced or unemployed (similarly, it was shown in our research that there is higher percentage of sick participants among unemployed). It would be interesting to explore gender differences of work and family roles and health. The results of a study by Ristić, Ranđelović and Belić (2013) in a sample from Serbia that examined the stressfulness of certain roles and burnout have shown that women perceive their roles as more difficult compared to men.

MUSs need to be considered in a comprehensive, interdisciplinary way, by assessing the psychological factors that affect the vulnerability of a person, as well as the course and outcome of a disease, paying particular attention to the lifestyle and psychosocial needs. The number of persons with MUSs grows with an increase of the symptoms of stress and the severity of life stressors, especially if they are present in an early childhood, adolescence, family or work environment (Tschudi-Madsena et al, 2014). However, life stressors are not necessarily associated only with MUSs, but with the development of a disease as well, as a result of chronic and continuous exposure to stressful events that lead to long-term alterations in epigenetic lines (McEwen and Getz, 2013). In addition, this is also associated with an increasing number of reports on symptoms and the interpretation of the symptoms.

Conclusion

The results of our study have found differences in experiencing the stressfulness of family and work roles between the participants who reported to suffer from certain chronic somatic diseases and the healthy ones. Furthermore, a difference in burnout syndrome has been established between these two sub-samples of population, with statistically significantly higher values of burnout symptoms, as well as the stressfulness of roles in the group of sick. The satisfaction with both work and family roles is not significantly different in sick and healthy population. Negative intercorelations of roles satisfaction on the one hand and stressfulness of roles on the other, were found, in both sub-samples, with a higher intensity of these correlations in the group of sick. Roles satisfaction is in negative, and the stressfulness of roles is in a positive correlation with burnout syndrome, which may further be associated with the occurrence of chronic somatic diseas. Age, education, employment and partnership status may be important factors, too. It would be necessary, in further research, to examine these factors and obtain closer data on the duration of the diseases, with a more precise definition of each group of diseases.

Since parental role, relationships in marriage and family, as well as in work organization change over time and are different in various environments, more transcultural and intercultural research of these relationships is required. Furthermore, the environment may provide different kinds of support both to the family and the employees at work. Therefore, it is important to establish laws that will influence the integration and balance of these roles, which will affect better health and disease prevention.

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AN ATTEMPT TO MEASURE WORK ETHIC IN TEACHERS

Abstract

The aim of the study was to examine the teachers' work ethic, its desirable and undesirable aspects, as well as to develop an instrument to assess it. The research was conducted on a 145 upper secondary school teachers in Novi Sad (79,1% of women and 20,9% of men) with different employment length. Teacher's work ethic was operationalized through items which reflect a presence or the lack of diligence, effectiveness, responsibility, order, commitment, care, accuracy, loyalty, frugality and modesty, honesty and human relationships and communication. Exploratory factor analysis yielded three-factor solution which represents a multidimensional structure of teachers' work ethic. One factor, named Anti-work ethic reflect undesirable work ethic, while factors Cooperation Work ethic and Task work ethic represent a desirable aspect of work ethic. Particular employment length groups showed significant differences $(F(2,127)=3,152, p=,046)$. Employees with the shortest employment length had significant lower Anti-work ethic than employees with the longest employment length. Gender differences were not significant.

Key words: desirable work ethic, undesirable work ethic, teachers

Definition and measures of work ethics

The **work ethic** incorporates more than just a single concept of high effort and it is considered relevant for work behaviour. Baruchle and Azam (2003) suggest that work ethics are about the desirable attitudes, values, and habits expected from employees. "Positive attitudes and behaviours of individuals living in a society toward working and their jobs" are also defined as work ethics (Ozdemir, 2009, p. 305, as cited in Erdemli, 2015). Individuals' perspectives of working and work ethics may reflect on their attitudes and behaviours (Erdemli, 2015), but also a relationship between supervisors and employees work ethics could be significant factor (Baruchle & Azam, 2003; Petty & Hill, 2005). Additionally, the presence or absence of these attitudes, values and behaviours tends to correlate directly with the ability of an individual to enter the workforce. (Boatwright & Slate, 2002).

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Work ethic is considered to be a culturally developed, affective behaviour which is a combination of family, religious, and ethnic beliefs and values (Petty and Hill, 2005). Religious background could be found in more than century old, theoretical concept of "Protestant work ethic" elaborated by Weber in 1904/05 (trans. 1958), which is still under scrutiny of the researchers. Weber's concept of the Protestant work ethic views work as a "calling" which is predicated on a set of beliefs and conduct, embodying asceticism, self-discipline, frugality, hard work, conservation of resources, and deferment of immediate gratification. Most researchers and almost all practitioners have replaced the original "Protestant work ethic" nomenclature in favour of the more secular term, "work ethic" (Mann, Taber & Haywood, 2013), and different attempts to conceptualise and measure this variable are currently present in different cultures.

So far, more than 20 scales were developed for their own unique purposes – some of them measure religious and cultural implication of work ethics, while others take more secular approach to work ethic; some of them were developed primarily to measure the work ethic of adolescent, students enrolled in technical school; or individuals transitioning from school settings to full-time employment (see in Mann, Taber & Haywood, 2013). The most comprehensive measure of work ethic based on the theoretical dimensions first proposed by Weber (1904/05), was developed by Miller, Woehr & Hudspeth (2002). The Multidimensional Work Ethic Profile (MWEP) is a 65-item inventory which indexes seven dimensions of work ethic: self-reliance, morality/ethics, non-leisure, hard work, centrality of work, wasted time, and delay of gratification. The instrument was developed, tested, revised, and validated in a series of studies. Factor analysis showed that the MWEP nicely fit its seven-factor theoretical structure (ibid).

Recently, Mann, Taber and Haywood (2013) tried to redefine the Weberian concept of work ethics which was operationalized through MWEP, and to identify additional dimensions of the work ethic construct. The authors performed a mix-method inductive study of defining elements of work ethic. They used information from semi-structured interviews with high-level executives and managers to gather a broad sample of contemporary ideas about facets and dimensions of work ethic. Based on the interviews, a pool of Likert-type items was developed and administered to a sample of student respondents. Analysis of the pilot data assessed the factorial structure of the new scales and found encouraging evidence for six of the eight proposed dimensions of work ethic: self-development, concern for quality and initiative, teamwork, social accountability, balance (of work and other use of time), perseverance and loyalty. The analysis also showed, however, that additional advancement is needed to develop additional items that more clearly define the individual dimensions and distinguish them from one another.

Teachers' work ethic

Very few research was done to identify teachers' work ethic, although the concept of work ethics is an important determinant of teachers' behaviours with respect to their work (Miller, Woehr & Hudspeth, 2001, as cited by Erdemli, 2015). It could be argued that structure of work ethic construct among teachers is not different than the one proposed by MWEP, but on the other hand, there are few important differences in teachers' profession than in the profession of profitable companies' managers, on which MWEP was constructed. Firstly, the teachers work in non-profit sector in which values other than profit to the company are considered important. Secondly, teachers' opinion on work ethics could be shaped by their intensive and everyday interaction with students, which are the main and direct "users" of their work. Thirdly, teachers' work is shaped by classes and schedules that are quite different than in profitable companies; fourthly, the teachers are obliged to continuously develop their professional (teaching) skills in order to keep their licence. Those are just a few arguments that lead us to the idea to try to conceptualise teachers' work ethic as a somewhat specific variable that could be measured differently than general work ethic.

Also, the school management, culture and agreed "ethos" (one of seven quality areas in Serbian schools) should be accountable for work ethic of individual teacher. The relationships based on trust which are established by **teachers** with a school's internal stakeholders can provide greater engagement in **work. Teachers** who are engaged in their jobs can be decisive in turning their schools into successful and effective schools (Petty & Hill, 2005). In order for teachers to care more for their profession and fulfil their duties with care, school administrators must ensure that teachers feel trusted and valued, and must pay attention to allow them to take more initiative in school activities. (Erdemli, 2015). Therefore, relations with their managers should also be taken into the consideration when measuring work ethic in teachers.

Another set of factors that could influence teachers' work ethic are coming from the social circumstances. Schools and teachers, as well as the entire educational system, are functioning in the framework of broader social conditions that may beperceived as favourable and unfavourable for particular aspects of their job and profession, among which is their work ethic (Beara & Jerković, 2015). Results of recent research in Serbia (ibid) indicate that teachers generally perceive social conditions as unfavourable to their professional development and that professional satisfaction was significantly correlated with the perception of social circumstances.

Recent research also showed that a decrease in teachers' ethical values such as dedication to work and commitment to duty leads to an increase in psychological and physical withdrawal behaviours, such as absenteeism, chatting non-professional matters during working hours, prolonging intermissions between the class sessions and not participating in in-service trainings. Therefore, the author concluded that in order to decrease the teachers' physical and psychological withdrawal behaviours, it

must be ensured that they adopt puritan ethical values, including dedication to work and commitment to duty (Erdemli, 2015).

In this paper we will conceptualise and operationalize work ethic of teachers as values, attitudes, behaviours and habits at a work place, that could manifest as a presence or the lack of diligence, effectiveness, responsibility, order, commitment, care, accuracy, loyalty, frugality and modesty, honesty and human relationships and communication. We want to explore multidimensionality of the work ethic in Serbian teachers: are there factors that could be perceived as positive (desirable) and separate factors that could be perceived as negative (undesirable) for their quality of work – which could coexist in the same time, given the fact that there are multiple factors (internal or external to the educational system), that could influence attitudes and behaviours of teachers.

Method

An explorative study of the work ethics of secondary school teachers was carried out within the framework of the project Culture of the Development of Work Ethics, implemented in the first semester of the school year 2014/2015 in 8 gymnasiums and vocational secondary schools in Novi Sad.

The purpose of the study was to examine the teachers' work ethic and its multidimensionality, as well as the construction of a questionnaire to assess it.

Based on previous researches, that stressed the importance of redefining Weber's concepts within the current age and cultural framework (Mann, Taber & Haywood, 2013), work ethics was operationalized through the following indicators: diligence, effectiveness, responsibility, order, commitment, care, accuracy, loyalty, frugality & modesty, honesty, human relationships and communication (or communication culture) in a working context of teachers in Serbia. Each of these categories has its own "positive" or "negative" valence - in other words, we proposed items that are reflecting what is theoretically desirable or theoretically undesirable work behaviour. Basis of item construction was authors' previous long-time experience in research and practice in professional development of teachers. For some items, the inspiration came from the common sayings in Serbian culture that could be applied to work ethic. For example, initial pool of items contained items such as: "As high my salary is – as much I will work at my job" which is based on the saying "as much money – as much music" and has negative valence, because it refers to an undesirable work ethic in which a job is experienced exclusively as an instrument of reaching the extrinsic goal - salary.

Sample

The sample consisted of 145 upper secondary school teachers in Novi Sad (79,1% of women and 20,9% of men)[2] with different employment length categorised into three groups: 21 years or more (32.3%), one to twenty years (39.2%), less than ten years (28.5%).

Results

The main aim of the study was to operationalize the concept of work ethic and to construct appropriate measurement instrument in the Serbian language for teachers. To obtain that aim, the very first step was to identify the latent structure of the constructed scale.

Row data exploration didn't show any patterns of the missing values, so EM method was used for the missing values estimation. The initial pool of 37 items after reliability analysis was reduced on 20 items. After that, exploratory factor analysis was conducted. The principal component method with Oblimin rotation was used for factors extraction. According to Gutman-Kaiser criteria, 7 factors had eigenvalues greater than 1, while scree plot and parallel analysis suggested three-factor solution, so in further analysis three-factor solution which explaining 42,44% of the variance was accepted (Table 1.)

Table 1. Explained variance

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	4,136	20,679	20,679
2	2,790	13,952	34,631
3	1,562	7,812	42,443

The first factor explained 20,68% of variance. The factor structure is presented in Table 2. The greatest factor loadings have items which describe low and external motivation for work, so we named it "Anti-work ethic".

Table 2. Structure of anti-work ethic

Item	
As high, my salary is – as much I will work at my job.	,713
I believe that it's best to be average at work.	,645
First of all, the organization should create working conditions for me to behave honestly and responsibly at work.	,644

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[2] In upper secondary education in Serbia, in May 2017 there were 29739 teachers in total: 65% female and 35% male according to the Bulletin UPPER SECONDARY EDUCATION IN THE REPUBLIC OF SERBIA, Statistical office of the Republic of Serbia. http://www.stat.gov.rs/WebSite/repository/documents/00/02/48/35/SB-621-UpperSecondaryEducation2016-17.pdf

Item	
The work is a necessary evil.	,641
The main reason for my lack of motivation at work is salary.	,610
The employer must provide me a salary in accordance with my needs then I'll work.	,599
At work, I do as much as the task requires, not more than that.	,591
The biggest motivator for work is money.	,578
If I become lottery winner, the next day I'll quit my job.	,454
I could be satisfied even if I didn't do my best at work.	,379
About some things that the director usually decides, I can decide for myself.	,376

The second factor explained 13,95% of variance and was named "Cooperation working ethic". Items mainly describe a quality of personal relationships at work. The factor structure is presented in Table 3.

Table 3. Cooperation work ethic structure

Item	
I'm trying to show confidence to the people I work with.	,747
I openly communicate with colleagues and superiors at work.	,718
I'm trying to be honest with everyone I work with.	,661
In my organization people are open and have reliance to each other.	,618

The third factor was named "Task work ethic" and explained additional 7,81% of variance. Items involved in this factor are predominately related to attitudes and behaviours that lead to tasks accomplishment. The factor structure is presented in Table 4.

Table 4. Task work ethic structure

Item	
No order – no work.	,726
Until the aim of the job is achieved there is no giving up.	,717
Everyone should know his role, responsibilities, and tasks at the job.	,622
First of all, the organization should be in good condition to be good for the individuals working in it.	,597
I often show initiative at my work.	,352

Correlation between factors ranged from - 0.083 to 0.215. Factor Anti work ethic has a very low negative correlation with other two factor (- 0.083 with Cooperational work ethic and - 0.093 with Task work ethic), while factors Task work ethic and Cooperation work ethic have still low but positive correlation (0.215).

The reliability analysis for rotated factors has shown that only the first factor "Anti-work ethic" has a satisfactory alpha coefficient value (0,798), while the other two factors "Cooperation work ethic" and "Task work ethic" have alpha coefficients 0,576 and 0,607, respectively. After excluding one item ("In my organization, people are open and have reliance to each other.") from Cooperation work ethic factor the value of the alpha coefficient increases to 0,744.

The dimensions scores distributions are shown in Table 5. Scores of the dimension Anti-work ethic are closer to the left end, while scores of Cooperation work ethic and Task work ethic are moved to the right end of the scale. That kind of distributions could point that majority of the sample in this research showed low Anti-work ethic and high Cooperation work ethic and Task work ethic.

Table 5. Scores distributions

	Anti work ethic	Cooperation work ethic	Task work ethic
Mean	2,6000	4,3909	4,3424
Std. Deviation	,72808	,48302	,49387
Skewness	,218	-,690	-,618
Std. Error of Skewness	,201	,201	,201
Kurtosis	-,370	,002	-,265
Std. Error of Kurtosis	,400	,400	,400
Range	3,36	2,01	2,00
Minimum	1,18	3,00	3,00
Maximum	4,55	5,01	5,00

In further analysis we explored gender and employment length differences across work ethic scale dimensions. Results showed no gender differences on Work ethic scale dimensions ($t(127) = 0.574$, $p>0.05$).

There was a difference between the groups of different employment length on Anti-work ethic ($F(2,127)=3,152$, $p=,046$): employees with the shortest employment length had significant lower Anti-work ethic ($M = 2,38$; $SD = 0,71$) than employees with the longest employment length ($M = 2,78$; $SD = 0,66$).

Discussion

The main objective of this paper was development of the instrument to assess work ethic in Serbian teachers. The motivation of the authors is to promote research of work ethic in Serbia and to offer a relatively short, 20-item scale which would be economical for use in different theoretical research and practical situations in schools. With adjustment, we believe this scale should be used in different work settings and not only in schools.

Three-factor structure of the scale showed that the work ethic could be measured through Anti-work ethic and two components of desirable work ethic – Cooperation and Task work ethic. In these three factors, there are items that were aimed to reflect presence (or the lack of) diligence, effectiveness, responsibility, order, commitment, care, accuracy, loyalty, frugality & modesty, honesty and human relationships and communication. Clear presence of Anti-work ethic factor suggests that there is more than simple lack of constructive work attitudes, behaviours and habits, but rather presence of attitudes, behaviours and habits that are active, conscious and accepted by teachers as their response to the unsatisfactory conditions of work - but would be perceived as undesirable by other actors of educational system.

High scores on Anti – work ethic describes low and external motivation for work - salary is one of the most important aspects, work is something that someone has to do, not a source of satisfaction in itself, and indicates the attitude that it is the organization (school) that is accountable for create working conditions for honest and responsible work.

High scores on Cooperative work ethic and Task work ethic express a positive attitude toward work and the job as they are; the work has value in itself. Cooperative work ethic includes confidence in colleagues and superiors, recognition of the importance of open and clear communication in the organization. Task work ethic subscale considers goal-oriented behaviours, order, responsibility and initiative.

Nevertheless, we can say that in order to measure work ethic values, attitudes and behaviours with more precision, there should be a better representation of each of the value and behaviour with more items and in more dimensions than only three. Other instruments for measurement of work ethic have got between 5 and 68 items, and between one (general work ethic) and eight dimensions (see in Mann, Taber & Haywood, 2013), but they were constructed in different cultures. Our aim was to make an attempt to construct psychological instrument that is based on Serbian cultural specificities.

We found no gender differences but did found age differences in measures of work ethic in our sample. Employees with the shortest employment length had significant lower Anti-work ethic, than employees with the longest employment length. That could be explained by early enthusiasm of the "youngest" teachers in the profession, while in those with longer employment length we could expect worn-out enthusiasm, especially given the social circumstances in which the teachers in Serbia work. In recent research conducted in Serbian schools (Beara & Jerković, 2015), the results indicated that teachers generally perceive social circumstances as unfavorable for their professional development, that they are more satisfied with the past than present and future professional aspects of life, and that work satisfaction is significantly related to the perception of social circumstances. We should expect that work satisfaction and work ethics are correlated and both relevant for the success in teaching profession, but that we want to confirm in future studies.

These results could be useful for future use of measurement of work ethic in teachers, but also as a basis for wider investigation of work ethic in other profession. Shortcomings of this research, which couldn't have been overcome within the project that served as a ground for the research, were small sample consisted of only one profession (teachers) and limited time both for the research and filling the questionnaires by the teachers, which directed us to construct relatively short instrument. Nevertheless, we think this attempt could be a basis for the next inductive and mix-method research of work ethic, both in non-profit and profit sectors, and within wider Serbian culture.

Conclusion

Work Ethic Scale (WES) for assessing work ethic in teachers showed a three-factor latent structure. One factor reflected undesirable work ethic and was named Anti - work ethic, while two factors reflected desirable work ethic and were named Cooperation work ethic and Task work ethic.

No significant gender differences were found in any Work ethic scale dimension, while employment length had a significant effect on Anti-work ethic dimension - employees with the shortest employment length had the lower Anti-work ethic.

Further improvement of the scale should include inductive and mix-method research on a representative sample.

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PERSONAL FACTORS OF JOB BURNOUT SYNDROME AMONG SERBIAN EMPLOYEES[2]

Abstract

The main goal of this study is to examine the predictive power of personal factors of employee burnout at work. The personality traits were postulated using the Five-factor personality model by Costa and McCrae, while the burnout syndrome was identified based on Christina Maslach's model and includes the indicators of emotional exhaustion. Social and demographic characteristics include: gender, age, number of children in the family, degree of formal education and marital status. The survey was done on a geographic cluster sample of 2023 inhabitants of Serbia, and for the purpose of this paper, a portion of the sample includes the employed people (N = 1282). The age range is between 18 and 63 years (AS = 37.99; SD = 10.96), while the gender sample is unevenly distributed (57.1% of the sample are female). The PORPOS test battery was created, which is a purposefully designed instrument consisting of 389 items grouped in several scales and used to asses a larger number of constructs for the purpose of the project 179002, aimed at assessing the modalities of balancing family and job roles. Hierarchical Regression Analysis was conducted in order to examine the basic hypothesis of the study. The results have shown that education, Neuroticism, Extraversion, Conscientiousness and Openness to Experience are important correlates of burnout, but not the marital status of the respondents. Accordingly, the level of formal education of the respondents was introduced in the first step of the regression analysis, while the above-mentioned personality traits were introduced in the second step of the analysis. Education has proven to be a statistically significant predictor of burnout ($ß = -.11$; $p < .01$), but its predictive power was lost in the second step of the analysis ($ß = -.036$; $p = .175$). With regards to personality traits, Neuroticism is the best predictor of burnout ($ß=.257$; $p<.001$), followed by Extraversion ($ß=-.198$; $p<.001$) and Conscientiousness ($ß=-.140$; $p<.05$). The findings of this study are in accordance with the previous empirical evidence on the correlation between personality traits and burnout. The contribution of the socio-demographic characteristics to the development of the burnout syndrome requires additional research.

Key words: personality traits, the Five-factor personality model, socio-demographic characteristics, Burnout Syndrome, Employed residents of Serbia, PORPOS test battery.

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Employee Burnout Syndrome

Burnout Syndrome is a negative emotional reaction to one's job that results from prolonged exposure to a stressful work environment (Maslach & Jackson, 1984; Maslach, Schaufeli, &Leiter, 2001) and it can be described as the exhaustion of physical and mental potentials. The more precise determinants of this psychological phenomenon are explained with its three essential characteristics: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach, 1993; Maslach, Jackson, &Leiter, 1996). Emotional exhaustion is a feeling that an individual is emotionally "combusted" and exhausted by work, as well as by an unfavourable work environment. In other words, emotional exhaustion means that a person experiences emotional emptiness (bluntness) and becomes vulnerable to stressors. An emotionally exhausted person feels as if he/she does not have enough coping resources to handle the emotionally demanding situations at work adequately, which, according Maslach et al. (2001) leads to depersonalisation. Depersonalization is characterized by a "detached" attitude and alienation, negative response and cynicism. More precisely, depersonalisation is the tendency of an individual to treat others as objects, not as people, resulting in keeping people at a distance and in disturbed interpersonal relationships, which further triggers the feelings of incompetence, as well as the feelings of the loss of ability to accomplish professional goals.Decline in personal engagement and loss of interest in work leads to a decline in work efficiency. A tendency towards self-deprecation is also present, which results in a loss of belief in one's feelings of competence and of successful achievement at work (Maslach et al., 2001). Some researchers (such as Lanctot& Hess, 2007; Leiter, 1989; Maslach et al., 2001) say that emotional exhaustion is a core feature of this phenomenon, believing that it contributes to the development of the remaining two components of the burnout syndrome.

In addition to this frequently cited definition of the burnout syndrome, a four-dimensional model of this phenomenon was proposed recently (Santinello, Altoè, &Verzelletti, 2006), which includes the following: 1) psycho-physical exhaustion; 2) detriment of relationships; 3) professional inefficacy, and 4) disillusion. Psycho-physical exhaustion implies that a person is feeling tense, without energy and under pressure. Detriment of relationships is described as the specific quality of relationship between employees and their clients, and this relationship is characterized by insensibility and distance. Professional inefficacy includes the lack of gratification by one's own work. These dimensions correspond to emotional exhaustion, depersonalisation, and reduced personal accomplishment, as defined by Maslach (Maslach, 1993; Maslach et al., 1996). However, the last dimension has been included recently, and it refers to the fact that burnout is a result of a long disillusion process in which the expectations towards the work have been totally disregarded (Magnano, Paolillo, &Barrano, 2015). In other words, burnout occurs when employees have lost their enthusiasm for the job.

It is clear from the above that this phenomenon is a multidimensional construct, because it includes different types of indicators, such as: affective, cognitive,

behavioural, and physical (Ranđelović&Stojiljković, 2013). From the aspect of affective manifestations, the burnout syndrome can be recognized by emotional exhaustion, hypersensitivity, irritability, tenseness, feeling of helplessness and hopelessness. Cognitive symptoms include: depersonalization, lack of concentration, stereotypical view of people and situations, etc. Absenteeism, resignation, the inclination towards health and other forms of risky behaviour, frequent problems and conflicts with family and at work, as well as the difficulties in interpersonal relationships at work are the behavioural aspect of the burnout syndrome. As for the physical symptoms, the most common are: impaired immunity, frequent headaches, chronic fatigue, sleep problems, gastrointestinal disturbances, etc.

All of the above shows that burnout is associated with a low level of well-being of employees, as well as with certain negative attitudes towards oneself and others, weakened health and negative forms ofbehaviour (Cordes& Dougherty, 1993).

Therefore, it can be said that burnout is a process of deterioration of the professional and personal abilities of a person, and represents both an individual and a social problem, because it destructively reflects on the quality of work, both of an individual and the business system. It is important to study this phenomenon due to its frequency. Thus, for example, 48 to 69% of people in Japan and Taiwan suffer from burnout syndrome, while this percentage is somewhat lower in the United States (around 20%) and Europe (around 28%) (Maslach et al., 2001). That is why the burnout syndrome is recognized as a serious social and medical problem and urges the researchers and practitioners all around the world to study it and design the strategies to prevent it and reduce its negative effects (Schaufeli, Leiter, &Maslach, 2009).

The previous studies of burnout syndrome can be divided into two categories. The first category includes the studies of the situational factors of the burnout syndrome, such as the job characteristics, professional characteristics and properties of the organization (Cordes& Dougherty 1993; Halbesleben& Buckley, 2004; Pines, 1993; Ranđelović &Stojiljković, 2015;Ranđelović, Stojiljković,&Milojević, 2012). The second category includes the studies which deal with individual (personal) factors, such as personality traits, social and demographic characteristics of employees, and their attitude towards work (for example, Alarcon, Eschleman, & Bowling, 2009; Gustafsson, Persson, Eriksson, Norberg, &Strandberg, 2009; Piedmont, 1993; Ranđelović, Stojiljković&Milojević, 2013).

Personality traitsand job burnout syndrome

Job burnout syndrome is usually described as a psychological process that involves a certain way of perception, emotional experience, specific motivation and expectations, as well as negative experiences. Since the personality traits represent relatively permanent personality dispositions that shape a certain way of perception, opinion, experience and behaviour, they represent important predisposing factors for the development and sustainment of burnout syndrome. In other words, individual

differences in personality traits are responsible for the variability in experiencing certain situations as stressful at work, as well as for responding to them (Bolger & Zuckerman, 1995; Chung & Harding, 2009; Maslach et al. 2001; Vollrath, 2001).

Based on the Five-factor Personality Model (Costa & McCrae, 1995), the results of previous studies show that neuroticism is a positive correlate of emotional exhaustion and depersonalization (Hudek-Knežević, Krapić, &Kardum, 2006; Piedmont, 1993; Schaufeli&Enzmann, 1998, according toSchaufeli et al., 2009; Stojiljković &Ranđelović, 2012; Zellars, Perrewe, &Hochwarter, 2000), as well as of the reduced personal accomplishment (Goddard & Patton, 2004; Zellars et al., 2000). Namely, the people who have a tendency toward neurotic reaction, perceive a wide range of situations, even those at work, as a danger, and react to them with negative emotions. Besides, these individuals do not have sufficient capacity to overcome any difficulties, which leads to greater "physical and mental exhaustion". Hemenover, (2003) states that neurotic individuals often use insufficiently adaptive strategies for problem-solving and stress reduction, which then makes them a vulnerable group for the development of the burnout syndrome.

Contrary to neuroticism, extraversion can be a protective factor for the development of burnout syndrome, and numerous research data indicate a negative correlation between extraversion and burnout indicators (Cano-Garcia, Padilla-Munoz, & Carrasco-Ortiz, 2005; Storm &Rothmann, 2003). The tendency towards positive emotions, the perception of potential stressors as challenges, as well as the use of coping strategies aimed at problem solving (Tatalović-Vorkapić&Lončarić, 2013), makes extraversion an "inhibitory" factor in the development of job burnout. However, there are findings (for example: Eastburg, Williamson, Gorsuch, & Ridley, 1994) that support the understanding that extraversion positively contributes to professional accomplishment, which then protects the individual from developing a negative reaction to the work environment. However, the empirical data on the relationships between extraversion and burnout syndrome are not unambiguous. One part of the study noticed a negative relationship between the above-mentioned constructs (Eastburg et al., 1994; Mills & Huebner, 1998; Zellars et al., 2000), while others show positive relationship with emotional exhaustion and depersonalization (for example, Bühler& Land, 2003; Piedmont, 1993). What some authors (such as Piedmont, 1993) mention as a possible explanation is that people who have a pronounced desire for excitement (facet of extraversion) search for "risky" and challenging business ventures and activities, and hence they have more chance to become emotionally exhausted. The same as emotional exhaustion precedes depersonalisation (Maslach et al., 2001), a positive correlation between extraversion and depersonalisation could also be explained in this way.

Given that Agreeableness is a dimension of interpersonal relationships, which describes individual differences in trust, altruism, compassion and leniency, it can be expected for Agreeableness tonegatively correlate with burnout at work.Alarkon, Eschleman, & Bowling (2009) claim that there is a negative correlation between agreeablenessand emotional exhaustion, and the same result was obtained in several previous research (Bakker, Van der Zee, Lewig, & Dollard, 2006; Piedmont, 1993;

Zellars et al., 2000), as well as the negative correlation with depersonalization, and a positive one with personal accomplishment.

Conscientious people are more aware of their own efficiency, abilities and confidence in themselves, and they are also well-organised and responsibly fulfil all the obligations (Stojiljković&Hedrih, 2013). These individuals are also ready to work hard and, if necessary, work hard long-term to achieve a specific goal. That is why conscientiousness is considered an important dimension of personality to describe and predict the behaviour of individuals in the work environment. In other words, conscientiousness is linked with the achievement of goals and control of the stressors, which leads to less emotional exhaustion and greater sense of success at work. However, this relationship is not unambiguous. On one hand, the findings of the studies are in favour of the link between high conscientiousness and low emotional exhaustion and depersonalisation, that is, high personal accomplishment (Schaufeli et al., 2009; Storm &Rothmann, 2003). On the other hand, there are the opposite findings which indicate that high conscientiousness correlates with high levels of emotional exhaustion (Mills & Huebner, 1998). It seems that conscientiousness contributes to the reduction of negative reactions to stressors at work only to a certain extent, after which "too much conscientiousness" (perfectionism, workacholism) diminishes the emotional capacity of a person, leading to reduced efficiency.

People who are highly open to experience are described as inquisitive, imaginative, creative, flexible and open. There are several reasons why this personality dimension would be associated with reduced stress. McCrae & Costa (1987) say that openness to experience has been related to the use of humour as a way of dealing with stress. In addition to this, Smith and Williams (1992) believe that the individuals with higher scores in the above dimension are "more protected" from stress because they perceive the situations as less threatening.Compared to the aforementioned personality traits, the openness to experience shows a generally weaker correlation with the burnout syndrome, which is indicated by Bakker and associates (Bakker, Van der Zee, Lewig, & Dollard, 2006). For example, some studies did not notice any significant link between openness to experience and burnout syndrome (such as Piedmont, 1993), while other researchers report moderate positive correlation between the openness and personal accomplishment, as well as the negative correlation between openness and depersonalization (such as Morgan & de Bruin, 2010; Storm & Rothman, 2003; Zellars et al., 2000), while Schaufeli et al. (2009) find that openness correlates with lower emotional exhaustion.

Similar to the above results, several isolated empirical studies conducted in Serbia identified the correlation between burnout and some personality traits. One of the recent studies on a large sample of adults in Serbia, a positive correlation of moderate intensity between burnout and neuroticism was found, and a low negative correlation between burnout and agreeablenessand conscientiousness (Stojiljković&Ranđelović, 2012).

Socio-demographic Characteristics and Job Burnout Syndrome

Socio-demographic characteristics, such as gender, age, years of service, formal education degree, marital status, number of children in the family can play an important role in determining how to react to stressful situations at work. Compared to men, women have been found to score higher in neuroticism (Costa, Terracciano, & McCrae, 2001), which indirectly suggests that women tend to perceive the work environment as more stressful. The findings of a large number of studies (for example: Arnten, Jansson, & Archer, 2008; Doyle & Hind, 1998) suggest that women experience a higher degree of anxiety, stress at work and workload. And while one set of research data (by Anderson &Iwanicki, 1984;according to Lau, Yuen, & Chan, 2005; Bakker, Demerouti&Schaufeli, 2002; Rupert & Morgan, 2005) shows that women are "more vulnerable" and more prone to developing burnout syndrome, there are also data on the lack of differences in the degree of burnout considering gender (Bekker, Croon, &Bressers, 2005; Boštjančič, ZagerKocjan, & Stare, 2015; Van Horn, Schaufeli, Greenglass& Burke, 1997; Zhao & Bi, 2003;according to Lau, Yuen, & Chan, 2005).

Numerous studies have shown that younger employees are more susceptible to burnout than their older colleagues (byBlau, Tatum, & Ward Goldberg, 2013; Boštjančič et al., 2015; Johnson, Holdsworth, Hoel, & Zapf, 2013; Maslach et al., 1996; Anderson &Iwanicki, 1984; according to Lau, Yuen & Chan, 2005). Older employees have more work experience and are more confident at work which makes them more resistant to stress. Moreover, emotional stability, maturity and the balance between work and life are more the characteristics of elderly people (Boštjančič et al., 2015). However, these findings cannot be generalized because some studies show that elderly individuals are more susceptible to job burnout (Mukundan&Ahour, 2011).

The researchers' attention was also focused on examining the relationships between educational level and burnout.Some studies have shown that the level of formal education positively correlates with burnout (Blau et al., 2013; Cole, Salahadin, Shannon, Scott &Eyles, 2002), that is, people with high levels of education are more susceptible to burnout. The fact that people with high levels of education do the jobs that bear greater responsibility, and that these jobs are inherently complex and tied with continuous improvement and proving oneself in the labour market, could be one of the explanations for these findings.

The individuals who are married, especially men, are less prone to burnout than those who are single, meaning that they are less emotionally exhausted and show less signs of depersonalisation (Boštjančič et al., 2015; De Heus&Diekstra, 1999; according to Lau, Yuen & Chan, 2005; Maslach et al., 2001). This is explained by the emotional support of the spouse, the division of domestic duties and sharing responsibilities over finances, etc., making life less stressful. Of course, this interpretation is limited to that part of the population living in harmonious and functional marriages, as well as the marriages where both partners are employed.

Number of children in the family is also an important determinant of the burnout syndrome. In their study, Boštjančič et al. (2015) found that the cluster named "high emotional exhaustion" contained the largest number of respondents with small children, while the largest number of respondents without children was in the "low personal accomplishment" cluster. These findings can be supported by earlier empirical evidence on the presence of a small child in the family in terms of a positive link with emotional exhaustion, while the employees with older children reported reduced levels of burnout (Ten Brummelhuis, Van der Lippe, Kluwer, & Flap, 2008). However, when explaining these results, the age of the respondents and some other factors should be taken into account. Namely, younger employees either have smaller children or no children, and they are at the same time without sufficient work experience, but also trying to prove themselves in front of the others, which in itself creates pressure and can lead to symptoms of burnout syndrome.

There are not that many studies on job burnout syndrome in Serbia when compared to the number of studies conducted abroad (Schaufeli, Leiter, &Maslach, 2009). In addition to this, some European countries (such as, Sweden and the Netherlands), recognise job burnout syndrome as a formal medical diagnosis (Schaufeli et al., 2009), while in our country it is still only a phenomenon that is recognized as relevant because it leads to negative consequences, both for the individual and the society as a whole (Popov, Latovljev & Nedić, 2015). Bearing in mind the above, the main goal of this paper is to examine the predictive power of individual factors (personality traits and social and demographic characteristics) in the prediction of burnout among employed Serbian citizens. Taking into account the existing empirical evidence, the hypothesis expects to prove that the personality traits, as well as gender, age, education, marital status and number of children in the family are statistically significant predictors of burnout.

Method

Sample

The geographic cluster sample included 1282 inhabitants of Serbia with the age range between 18 and 63 years (AS=37.99; SD=10.96). The sample consisted of 715 (57.1%) female respondentsand 538 (42.9%) male ones, while 29 did not specify their gender.The sample of the survey included only the employed people, such as entrepreneurs (N=147, 11.5%), people working for state-owned companies (N=417, 32.5%) and privately held companies (N=558, 43.5%), as well as those who are not registered or who work multiple jobs (N=160, 12.5%). With regards to the level of formal education, marital status and number of children in the family, the structure of the sample is shown in the following tables (Table 1, Table 2, Table 3).

Table 1. Sample structure with regard to the level of formal education

Education	N	%
Did not finish primary school	3	0.2
Primary school	37	2.9
High school	706	55.7
College	172	13.6
University or master degree	338	26.7
PhD	11	0.9
Total	**1267**	**100**
No answer	15	1.2
Total	1282	100

Based on the data presented, it can be concluded that the most sample respondents had high school degree, they are followed by those with a university degree or master degree (this refers to the master studies based on the Bologna process), and the least number of respondents do not have any formal education; there is also a small percentage of respondents with a doctorate as the highest level of formal education. Around 3% of respondents said they had only finished primary school, which probably does not reflect the realitywithin the adult population, but only applies to those who are employed.

Table 2. Sample structure with regard to marital status

Marital status	N	%
Single	182	14.7
Divorced	72	5.8
Widowed	23	1.9
Married	762	61.8
Love affair	180	14.6
Marriage and love affair	15	1.2
Total	**1234**	**100**
No answer	48	3.7
Total	1282	100

Out of 1,234 respondents who answered the question about marital status, the majority of them are married, while the least number of respondents have a love affair besides a spouse, and there was also a low number of widows or widowers.

Table 3. Sample structure with regard to the number of children in the family

Number of children in the family	N	%
0	571	44.5
1	278	21.7
2	380	29.6
3	44	3.4
4	7	0.5
6	2	0.2
Total	**1282**	**100**

When it comes to the number of children in the family, the data show that the most of the respondents (44.5%) have no children, which indicates the very prominent trend in Serbia to start the family late and delay the parenthood, probably due to uncertain employment and low standard of living. Among the respondents who have children, 30% have two children and around 22% have only one child. It is not surprising that there are the least of those who have three or more children.

The instruments

PORPOS battery (2011) is a purposefully designed instrument consisting of 389 items grouped in several scales and used to asses a larger number of constructs for the purpose of the project 179002, aimed at assessing the modalities of balancing family and job roles. More precisely, the PORPOS battery will be used to assess the following items: 1) conative psychological dispositions; 2) family and partner relationships and roles; 3) ways of behaving in a business environment, and 4) social and demographic characteristics of the inhabitants of Serbia, as well as an individual's job characteristics (Hedrih, Simić, &Ristić, 2013). In this research, personality dimensions were examined using short scales, that is, the markers, created in accordance with the operationalization of the Five-factor personality model – NEO PI-R (Costa & McCrae, 1995; Đurić-Jočić, Džamonja-Ignjatović&Knežević, 2004). Neuroticism (N) and Openness to Experience (O) were operationalized based on 6 items (such as: "I am often tense and anxious"; "I think that I am open-minded and tolerant towards others. Extraversion (E) was operationalized using 5 items (for example, "I prefer the jobs I can do alone, without interfering with other people"). Agreeableness (A) was operationalized based on 4 items (such as: "I prefer to cooperate with other people than to compete with them"), while Conscientiousness (C) was operationalized using 7 items (for example, "I very frequently manage to organize myself, and finish the job in time". Job burnout syndrome was defined based on the dimension of emotional exhaustion from the Christina Maslach'smodel, that is, based on the 4 items from theMaslach Burnout Inventory – MBI (Maslach, Jackson, &Leiter, 1996). Some examples of the items are: "While I am at work, I feel exhausted and physically and mentally drained"; "I feel emotionally drained when I finish work". All items were evaluated using the five-level Likert-type scale (from 1 = completely wrong to 5 = completely accurate).

Internal consistency of short scales used to test personality traits was satisfactory (N: $\alpha = .79$; O: $\alpha = .74$; C: $\alpha = .83$), except for Extraversion testing scales ($\alpha = .53$) and Agreeableness ($\alpha = .55$) on the sample of 2023 inhabitants of Serbia (Hedrih et al., 2013). The reliability of measurement scale for burnout measurement was $\alpha = .84$. On the part of the sample used in this study, the check of the internal consistency of scale shows the same measurement reliability coefficients. The lowest measurement reliability values were recorded for that scales that consist of the least items, which was expected; however, the instrument as a whole was very extensive and therefore each individual variable was represented by a small number of representative items.

Procedure

The survey was carried out on the territory of the Republic of Serbia (without Kosovo and Metohija) by dividing it into administrative districts, using the number of inhabitants from the last census for each district. In this way, the data on the percentage share of the population of each district in the total population of Serbia was obtained. Data collection process was carried out by the project researcher with the help of interview teams. The interviewers were students from the universities in Nis, Belgrade, Novi Sad and the State University in Novi Pazar. The survey was anonymous and was carried out during 2011.

Results

Descriptive indicators

Descriptive data of personality traits and burnout show that the data obtained through the evaluation of Extraversion and Agreeableness follow the normal distribution, while the distribution of data for Neuroticism, Conscientiousness and Openness to experience is leptokurtic (Skewness and Kurtosis +/- 1) (Table 4). The distribution of data on burnout is positively asymmetric, that is, the most of the scores are concentrated around low values. This means that the employed inhabitants of Serbia included in this research have no significant symptoms of job burnout syndrome. Although the data indicate the need for the transformation of the scores, none of the score normalization methods was applied for the purpose of further analysis, since we are talking about minor deviations.

Table 4. Descriptive data on personality traits and job burnout (N = 1282)

Varijable		Min	Max	AS	SD	Sk	Ku
Personality traits	Neuroticism	1.00	5.00	**2.42**	**.83**	.519	1.182
	Extraversion	1.33	5.00	**3.40**	**.52**	-.340	.382
	Agreeableness	1.00	5.00	**3.49**	**.71**	-.33	.92
	Conscientiousness	1.00	5.00	**3.95**	**.66**	-.969	2.117
	Openness to Experience	1.00	5.00	**3.78**	**.65**	-.663	1.341
Bournout syndrome	Emotional exhaustion	1.00	5.00	**2.28**	**1.05**	1.113	2.642

Note. *Mean (M); Standard Deviation (SD); A Measure of Symmetry - Skewness (Sk); A measure of the Tailedness - Kurtosis (Ku)*

By reviewing the mean values of personality traits, we notice that respondents showed a somewhat lower degree of agreement with claims denoting Neuroticism, compared to the degree of agreement on items used to estimate the remaining personality dimensions, which is in line with the assumed distribution of these personality dimensions within the population (Đurić-Jočić et al., 2004).

Inter-correlations between variables

The first part of the correlation analysis examined the relationship between personality traits and job burnout (Table 5). From the results relevant for this research, we can distinguish the significant correlations between Neuroticism, Extraversion, Conscientiousness and Openness to Experience, on one hand, and burnout, on the other hand. Neuroticism is a positive correlate of burnout, while the remaining three personality dimensions have a negative correlation with the aforementioned phenomenon.

Table 5. Correlations between personality traits and burnout (N = 1282)

	Neuroticizam	Ekstraverzija	Saradljivost	Savesnost	Otvorenost
Neuroticism					
Ekstraverzija	.38***				
Agreeableness	.13***	.12***			
Conscientiousness	.15***	.31***	.36***		
Openness	-.053	.32***	.47***	.47***	
Bournout	.33***	-.29***	.035	-.14***	-.11*

Note. * *p*< .001;* *p*< .05.**

In the second part of the correlation analysis, it was important to examine the relationship between social and demographic characteristics (gender, age, education and the number of children in the family) and job burnout syndrome. Of all the above mentioned social and demographic characteristics, only education negatively correlates with burnout syndrome (r = -.11; p<.01), and data suggest that more educated people are less likely to develop job burnout syndrome.

Differences in the burnout distribution based on marital status of respondents

Marital status of employees was treated as a categorical variable; hence the analysis of the variances was applied in order to test the existence of significant differences for the burnout variable compared to this social and demographic characteristic. The results of the ANOVA analysis indicate that based on the marital status, there were no significant differences in the degree of burnout for this sample of respondents ($F_{(5,1221)}$ = .892; p = .485).

Personality traits and education of respondents as the predictors of job burnout syndrome

Hierarchical Regression Analysis was conducted in order to examine how significantly personality traits and education of respondents affect the level of burnout. The criterion variable was the burnout syndrome. In order to control the effect of

education of respondents on the burnout syndrome, the aforementioned social and demographic variable was added as a predictor in the first stage of the analysis, while the personality traits which have been proven to be significant correlates of burnout in the correlation analysis were added in the second stage of the analysis.

Table 6. Results of hierarchical regression analysis

Model	Predictors	Model summary	Independent contribution of predictors
1	Education	R=.077; R^2=.006; ΔR^2=.005 $F_{(1,1255)}$=7.489; p<.01	**ß= -.11; p<.01**
2	Education	R=.399; R^2=.159; ΔR^2=.155 $F_{(5,1251)}$=47.250; p<.001 R^2change=.153; p<.001	ß=- .036; p=.175
	Neuroticism		**ß= .257; p<.001**
	Extraversion		**ß= -.198; p<.001**
	Conscientiousness		**ß= -.140; p<.05**
	Openness		ß= .044; p=.150

Note. R – MultipleCorrelationCoefficient; R^2 –coefficientofmultipledetermination; ΔR^2 – adjustedcoefficientofmultipledetermination; ß – standardizedregressioncoefficient.

As seen from Table 6, both predictive models are statistically significant. The level of formal education is a statistically significant predictor of burnout syndrome, but its predictive power is small – it explains only 0.6% of the variance criteria. The common variance of education and personality traits is 15.9%, and the change in the percentage of the explained variance, after adding personality traits into the model, is significant. After the personality traits were added into the analysis, the level of formal education loses its statistical significance, while the following personality traits were identified as significant predictors: Neuroticism, as a positive correlate of burnout, as well as Extraversion and Conscientiousness which are the negative correlates of job burnout. The personality trait which independently contributes to the prediction of job burnout is Neuroticism, which is in line with the initial expectations.

Discussion and conclusion

The main purpose of this paper was to investigate individual predisposing factors of job burnout syndrome in the employed population of Serbia. Results have shown that the disposition personality characteristics were seen as more important burnout predictors in comparison with social and demographic characteristics. Neuroticism and Extraversion are the most important predictors of burnout, followed by Conscientiousness as a personality trait. Neuroticism is a positive correlate of job burnout, while Extraversion and Conscientiousness are negative predictors of burnout. These findings agree with the former empirical evidence (Cano-Garcia, Padilla-Munoz, & Carrasco-Ortiz, 2005; Hudek-Knežević, Krapić, & Kardum, 2006; Piedmont, 1993; Popov et al., 2015; Schaufeli & Enzmann, 1998, based on Schaufeli et al., 2009; Stojiljković &Ranđelović,

2012; Storm &Rothmann, 2003; Zellarset al., 2000). Since Neuroticism is a personality dimension that relates to the tendency to experience negative emotions and is associated with the general vulnerability of a person, one can understand the high consistency of its contribution to the prediction of job burnout symptoms in a series of studies conducted on different samples and in different environments. As a reminder, the burnout syndrome was operationalized in this paper using the indicators of emotional exhaustion from the model of Christina Maslach. It is well-known that individuals who score high on neuroticism have trouble with impulse control, act irrationally, and have less capacity to deal with stress. Such individuals are often tense, worried, have trouble sleeping, and are affected by psychosomatic disorders. Apart from being frequently very intensely responsive to a wide range of stimuli that they see as a threat, these people tend to reflect on the events in which they were emotionally invested (Stojiljković &Hedrih, 2013). This type of behaviour undoubtedly leads to emotional exhaustion both in private life and work environment, which results in a decrease in work efficiency and overall well-being.

An important finding of this study is that Neuroticism and Extraversion are the most important indicators of emotional exhaustion, and that they both independently and jointly help explain the burnout syndrome. These personality dimensions are characteristics of temperament and are greatly influenced by hereditary factors. Bearing in mind that these basic personality dispositions are responsible for experiencing negative and positive emotions, as well as the way of regulating emotions, there is a lot of reason to expect that Neuroticism is a facilitative factor of emotional exhaustion, while Extraversion is an inhibitory factor. More specifically, individuals who score high on Neuroticism and low on Extraversion are more likely to develop emotional exhaustion at work. These findings were also confirmed on the sample of health and education workers in the territory of Vojvodina (Popov et al., 2015). The advantage of our research is that the sample included employees of different profiles, that is, the employees from different areas of work, thus the possibility of result generalisation is higher. The findings on the contribution of neuroticism and extraversion to the development of psychosomatic disorders are on the very edge of the obtained results: Neuroticism is consistently positively linked with the development of these disorders, while the link between Extraversion and certain disorders is negative (Stojiljković et al., 2012). It should be emphasized that this sample was even bigger and represented a geographically clustered sample of the Serbia population (N=2282 respondents from 36 Serbian towns, with a balanced share of urban and rural population with the age range between 13 and 65 years.

As already said, the existing findings on the role of personality trait Conscientiousness in explaining the burnout syndrome are not consistent –in some of the previous studies (such as Storm &Rothmann, 2003) it proved to be a negative correlate of emotional exhaustion, while in some other studies there was no significant link between the these constructs (such as with Popov et all., 2015). The findings of our study are in favour of the first group of studies. Conscientiousness is the personality dimension that refers to the level of organization, persistence and motivation trying to accomplish a set goal (Đurič-Jočić et al., 2004). Therefore, people who are well-organized, responsible, conscientious, accurate and reliable in terms of their obligations, and have the opportunity to do their work efficiently and

in a timely manner, which reduces stress of work. However, caution is advised in the interpretation of such results because there are also data that indicate that high level of conscientiousness can lead to emotional exhaustion (for example, Mills & Huebner, 1998). Namely, if a person is too perfectionistic, which is commonly followed by workaholic behaviour, that individual undoubtedly "consumes" various resources in order to meet one's own high standards, which can lead to emotional exhaustion and depersonalisation. The inconsistency in the findings can be explained by the level of expression of certain personality traits. It seems that there is an "optimum level" of the expression of Conscientiousness, and even Extraversion (Piedmont, 1993) and some other traits that enable behavioural functionality. On the other hand, "too much" or "too little" of Conscientiousness and Extraversion can have negative effects and contribute to the emotional exhaustion of employees.

Although some foreign studies (such as, Alarkon et al., 2009; Bakker et al., 2006; Piedmont, 1993; Stojiljković &Ranđelović, 2012; Zellars et al., 2000) found a significant negative correlation between agreeableness and emotional exhaustion, this study, however, as well as some other studies carried out in Serbia (such as, Popov et al., 2015), did not show a significant correlation between these constructs. The same applies to the relationship between Openness to Experience and Emotional Exhaustion. At this point, it is necessary to mention the importance of the situational factors for the development of burnout syndrome, relating to the workplace (for example, heavy workload, long hours, poor interpersonal relationships and lack of support from colleagues, as well as the overall work climate). For example, one of the recent studies has shown that work climate negatively correlates with the burnout syndrome among teachers and that some basic psychological needs can be a mediator in the relations between work climate and job burnout (Ranđelović & Stojiljković, 2015). Namely, the complexity of the job burnout phenomenon, as well as the fact that it is multifactorial should not be ignored. In other words, it is possible that some of the job characteristics have "blurred" or moderated the role of Agreeableness and Openness to experience. Therefore, the recommendation for the following studies is to include job characteristics, as well as the examination of more complex prediction models of the burnout syndrome, that is, emotional exhaustion. Moreover, we can refer to the conclusion of Alarkon and associates (2009) from their meta-analytical study, according to which "although hypotheses predict that each of the personality traits represents a significant correlate of all three burnout dimensions, it should be emphasized that some of the personality traits have a stronger correlation with burnout than others "(page 257).

In the end, here is a brief comment on the findings of the relationship between the social and demographic characteristics of employees and emotional exhaustion. The obtained results indicate the absence of significance of most of the social and demographic features in the prediction of job burnout. These findings are inconsistent with the previous ones (for example, Arnten et al., 2008; Blau et al., 2013; Boštjančič et al., 2015; Doyle & Hind, 1998; Johnson et al., 2013; Maslach et al., 2001) that show that gender, age, number of children in the family and marital status of respondents significantly influence the development of burnout. The fact is, however, that studies offerdifferent findings, which on one hand speaks of the

complexity of the job burnout phenomenon, and, on the other hand, of an insufficient control of all variables included in the prediction models.

Even though our research has singled out the level of formal education as a statistically significant (negative) predictor of emotional exhaustion, this data should be taken with a grain of salt because the observed relationship is not strong enough, while the statistical significance of education is lost in the second stage of the prediction model. One of the important limitations of this finding is that on this occasion, the job conditions, job characteristics, types of jobs and requirements of a certain job, work climate and other job-related characteristics were not controlled. Bearing this in mind, the guidelines for future studies are to have a more detailed examination of the role of social and demographic characteristics of employees in specifically defined job areas, that is, of the employees with clearly defined job characteristics.

Instead of the conclusion, we consider it important to point out one of the significant positive characteristics of this research. Rarely do the studies have such a large and carefully planned sample of respondents, with also a large scope of variables. Given that a geographic cluster sample of the population of Serbia was used, it was possible to reduce the so-called "Healthy Worker Effect" (Popov et al., 2015), which is present in most empirical studies, both domestic and foreign. This effect was named after the fact that in the majority of the surveys, the respondents were the workers who were surveyed while they were at work. The assumption is that these individuals are healthy and functional, that is, they do not suffer from the burnout symptoms, while those who are a vulnerable group are absent from work due to illness or other ailments, which would mean that the exact people who should be surveyed are not being addressed.

We hope that our study, designed in this way, could be seen as a step forward towards the greater cognitive value of the collected data and the resulting findings.

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GENERATIVITY ANDSATISFACTION/ STRESSFULNESS OF FAMILY AND WORK ROLES[2]

Abstract

This investigation studied the relationship between generativity and satisfaction/ stresfullness with family and work roles (parent, caring for one's own parents, partner, householder, employedindividual). It was also investigated whether there are significant differences considering generativity in relation to gender, age, education, the number of children and the employment status. The research has been conducted on the sample of 954 respondents who are married, 30 to 75 years of age (M=46.7, SD=10.43, women make up 58.9% of the total sample). The instruments which have been applied are the PORPOS battery, constructed with the purpose of examining the interaction between family and work roles, which contains short scales for the evaluation of generativity, satisfaction/stressfulness of the given family and work roles. The results have pointed out that there is a positive correlation between generativity and satisfaction with family and work roles on the whole (r=.224, p<.001). It has also been determined that there is an individual positive correlation between generativity and satisfaction with each of the examined family or work roles, whereby all the obtained correlations are low, in the range from r=.138 to r=.203, p<.001. On the other hand, there is a negative correlation between generativity and stressfulness of the given roles, both on the whole ((r=-.121, p<.001), and in relation to each of the examined roles. The stressfulness of all examined roles has a negative correlation with the satisfaction with the given roles (r=-.220 to r=-.568, p<.001). There are no significant differences considering generativity in relation to gender, age, education and the number of children of respondents. No noteworthy differences have been determined in the level of generativity nor between employed and unemployed respondents. However, the results still indicate that there are important differences in relation to the sector in which the respondents work (F (5, 946) =4.905, p<.001).

Key words: *generativity, satisfaction with roles, stressfulness of roles, family, work*

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Introduction

Generativity, as one of the basic tasks of adulthood, which is the central interest of this paper, is directly connected with different social roles: parents, spouses, as well as those which are achieved on professional or social plans. Prolonged, insecure and often unfavourable social circumstances in which we live, with a high unemployment rate, can hinder parents' wish to provide safe future for their children and to realise themselves through the care for their children, and for the generations to come. Therefore, the question can be asked what kind of relation there is between generativity and certain family and work roles within the environment in which we have continually been exposed to stress for a longer period.

In one of the most used definitions of the concept of generativity whose authors are McAdams and others (McAdams, de St. Aubin, Logan,1993), generativity is defined as a complex construct which includes procreation and taking care of the offspring, as well as the creation and taking care of material products and ideas which will outlive us and contribute to the welfare and the continuity of the society in which we live.

Otherwise, the creator of the concept of generativity, Erikson (1963/2008), stated that the term generativity refers to all that which is created from generation to generation: children, material products, ideas and artwork, that is, generativity can be expressed through having children, through parenthood, through helping and guiding young generations, through personal professional contributions, through social and political engagement, etc. There is also indication that an individual can be generative in his/her parental role, but not generative on professional or social plans. Contrary to individuals who have developed generativity, individuals who do not have the need to start a family and have offspring, who care only for themselves, and fulfil only their own needs, are said to have failed to develop generativity.

Many authors (Vaillant,1980; according to Anđelković and Zubić, 2017; McAdams and de St. Aubin, 1993), Stewart and Vandewater, 1998), have expanded Erikson's ideas on generativity. Even today, it is believed that within McAdams and de St. Aubin's model of generativity, Erikson's concept is the most developed and used in most researches. In McAdams and de St. Aubin's model generativity is determinedthrough theseven interrelated components of generativity (cultural demand, inner desire, generative concern, belief in the species, commitment, generative action, and personal narration) whose common goal is to spread welfare and development of future generations.

Generative action, as one of the components of generativity, is more or less connected to some of the other six components of generativity. It can be directly induced by cultural demands (the society's expectation that adults should assume different generative roles, such as the role of parents, pedagogues, mentors) or a generative inner desire (an honest, authentic desire to be needed by others and to leave a significant mark on others to be remembered by even after one's death). Ideally, as stated by McAdams and de St. Aubin (1992), generativity represents

a natural consequence of a strong commitment to generativity, that is, to making decisions and setting goals which in turn produce generativity.

McAdams and de St. Aubin (1992), also state three basic forms of generative action. . Those are: (1) creation of positive products, in the widest sense of the word (individuals, objects, ideas, outcomes); (2) preservation, maintenance, regeneration, enhancement and nurturing of something that is considered important and valuable (taking care of children, maintaining positive traditions, protection and improvement of environment) and (3) transferring something that has been created or preserved to future generations.

Although most authors (Keyes and Ryff, 1998; McAdams et al., 1993; Stewart, Ostrove and Helson, 2001) believe, while relying on Erikson's postulations, that generativity reaches its peak during mid-age, the results of the research are not consistent.

One of the answers to the possible reasons of inconsistency in the findings of researches and studies on generativity, is certainly provided by the model of generativity development in adulthood as proposed by Stewart and Vandewater (1998). According to this model, generativity should be viewed through three components which have different development directions during the period of adulthood. In early adulthood, the most prominent are generative desires and goals, in mid-adulthood this is the feeling of generative capacity, while the feeling of generative self-realisation grows during the entire period of adulthood, and it reaches its climax in old age. Stewart and Vandewater believe that the measures of generativity and generative desires (McAdams, de St. Aubin, and Logan, 1993) can be used for the evaluation of the feeling of generative capacity. The authors point out that in the mid-adulthood as well, all three components of generativity are very prominent, but the feeling of generative capacity is what makes this period of adulthood different than the other two. The longitudinal research by Stewart and Vandewater (1998) on the two samples of highly educated women has shown that generative desires are not common in mid-adulthood and that they are either not connected to different indicators of well-being in mid-adulthood (for example, satisfaction with life, satisfaction with family, general health) or they are negatively correlated with them. Unlike generative desires, generativity in mid-adulthood is positively correlated with different aspects of well-being.

The results of the research (Tucak Junaković, 2009) on age-heterogeneous samples of adults from different parts of Croatia, in which the components of generativity from McAdams and de St. Aubin's model have been examined, have also not confirmed the assumptions that generativity is expressed the most during mid-adulthood. Namely, individuals in their early, middle and late adulthood did not differ in most examined components of generativity. Furthermore, the research (Anđelković and Zubić, 2017) on the sample of 1,862 respondents from 33 cities and villages in Serbia, 25 to 70 years of age, indicated that generative desires and goals are more important to women in their early adulthood than in other two periods of adulthood.

Besides their research of the developmental process of generativity, as one of the most important questions related to this concept, researchers have also given special attention to the relation between generativity and many aspects of family functioning. For example, the research (Pratt et al., 2001, according to Tucak Junaković, 2009) shows that generativity of parents is related to the investment of time and effort into raising one's children, rewarding of desirable children's behaviour, as well as the authoritative style of parenting. The interesting fact is that Rothrauff and Cooney (2008) confirmed the correlation between generativity and subjective well-being in parents, but also in adults who do not have children (Rothrauff and Cooney, 2008, according to Tucak Junaković, 2009).

Being that generativity is also expressed through professional and social engagement in general, a certain number of studies examined the significance of the employment status, i.e. professional orientation, for generativity. While the findings which were obtained by Lacković Grgin in 2002, (as well as Škraban and Žorga, 2005) confirmed that relationship, in the research by Tucak Junaković (2009), both the work status and the importance of employment did not prove to be connected with generative care and action. Inconsistent results were also obtained in relation to generativity of women and men. As the most common reason for inconsistency of the results which refer to gender (Hart, McAdams, Hirsch and Bauer, 2001; McAdams and de St. Aubin, 1992; Peterson and Duncan, 1999) different ways of the evaluation of generativity are stated. However, researches have not confirmed in a consistent way that the evaluation of generativity as a global construct masks the possible differences between genders which would appear on certain dimensions of McAdams and de St. Aubin's model. The results which refer to the importance of the aspects of action and community for the generativity of women and men are also not unambiguous. Some findings indicate that the tendency to help others and to closely connect with them (community) is more present in generative preoccupations of women, and the tendency to be independent, dominant and to have influence over others (action), in generativity of men. The results of other researches have not confirmed the differences between these two dimensions of generativity or they were only partial (Ackerman et al., 2000; Bradley and Marcia, 1998; Morfei et al., 2004, according to Tucak Junaković, 2009). Furthermore, the level of education has proven to be less significant for some of the components of generativity, but not for the other ones. The absence of these connections is explained by the very universal developmental task of adulthood. Namely, individuals in mid-adulthood experience this period of life in a similar way. As life experience grows, the feeling of self-confidence, the awareness of one's own capabilities and the feeling of the ability that one can contribute to the community and future generations grow as well, and that does not depend on economic and racial privileges. In fact, it is more probable that the interest in the community and future generations will be expressed right there where there are no privileges (Stewart and Ostrove, 2001).

Being that generativity is, in fact, expressed through different generative roles (parent, teacher, mentor and the like), we believed that it was important to see how much changes in family and professional life of people, which were brought about by

the modern society, are reflected in generativity as the universal developmental task of adulthood. We were also interested in seeing how much each of the roles (parent, caring for one's parents, partner, householder, employed individual) contribute to generativity. As it has been stated before, the review of empirical research shows that the nature of the correlation between generativity and numerous life roles is not explored enough. This encouraged us to investigate in what way generativity is connected with satisfaction/stressfulness of the given family and work roles. It has also been examined whether there are significant differences considering generativity in relation to gender, age, education, the number of children and the employment status of respondents.

Method

Sample

The research has been conducted on the sample of 954 respondents who are married, 30 to 75 years of age (women make up 58.9% of the total sample). The examined sample is a part of a wider geographical cluster sample of citizens from Serbia collected within the project oriented towards the evaluation of the modality of balancing between family and work roles.

Table 1: *Sample structure according to the age*

Age range	Frequency	Percent
30 – 40 years	311	32.8
41 – 50 years	293	30.7
above 50 yerars	348	36.5
Total	954	100.0

The most of the participants have more than 50 years, after them are participants aged between 41-50, and then participants between 30-40 years.

Table 2: *Sample structure according to the educational level*

Educational level	Frequency	Percent
Unfinished primary school	5	.5
Primary school	57	6.1
High school	534	56.7
College	127	13.5
Bachelor's or Master's degree	208	22.1
Phd degree	10	1.1
Total	941	100.0

The most of the participants from the sample finished High school, and the least did not finish primary school.

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Table 3: *Sample structure according to the number of children*

Number of children	Frequency	Percent
Without children	47	5.0
One child	239	25.5
Two children	554	59.1
Threechildren	80	8.5
Fourchildren	13	1.4
Five and morechlidren	4	.5
Total	938	100.0

The most participants have two children and the least five and more children.

Table 4: *Sample structure according to the employment status*

Employment status	Frequency	Percent
Employed	719	75.4
Unemployed	235	24.6
Total	954	100.0

The most of respondents that participated in the research were employed.

Table 5: *Sample structure according to the the the sector in which the respondents work*

Sector in which the respondents work	Frequency	Percent
Entrepreneur	102	10.7
Government sector	285	29.9
Private sector	261	27.4
Unregistered employees	35	3.7
Freelancer	36	3.8
Other (Author's works, rent, pension, welfare,dependent)	235	24.6
Total	954	100.0

The most of participants work at Government sector and the least of them are Unregistered employees or Freelancer.

Instruments

The instrument which has been applied is the *PORPOS battery*, a specifically constructed instrument containing 389 items and questions for examining the interaction between family and work roles, which, among other things, also contains short scales for the assessment of *generativity, satisfaction and stressfulness of family and work roles*.

The scale of generative action- skraćena i adaptirana verzija Skale generativnog delovanja(Ćubela – Adorić i sar., 2006).Answers are rated on a 5-point Likert scale (1= completely agree, 5= completely disagree). The example of the item "I love to

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teach other people specific knowledge and skills." In data analysis summarized score of all four items was used. Scale reliability assesed as Cronbah's α was .781.

The scale for the evaluation of satisfaction and stressfulness of family and work roles (parent, caring for one's parents, partner, householder, employed individual) consists of 10 items and represents the adaptation of the *Role quality scale* (Tsai, 2008). Five items are related to satisfaction with family and work roles, and other five are related to the stressfulness of the same. Answers are rated on a 5-point Licert scale (1= completely agree, 5= completely disagree). Scale reliability of satisfaction with family and work roles assesed as Cronbah's α was .796, and of stressfulness with family and work roles was α=.868. Each role is analysed according to one item in relation to the satisfaction and stressfulness of the roles. The examples of the items include "I am satisfied with my role as a parent." and "I find the role of a parent difficult."

Results

Descriptive statistics measures

Results of the descriptive measures for generativity are presented in Table 6.

Table 6: *Descriptive statistics for generativity*

Variables	M	SD	Min	Max	Sk	Ku
Generativity	3.32	.96	1.00	5.00	-.347	-.144

Skewness has negative value which means that distribution is slightly negative asymmetric.

Tables 7 and 8 provide results which refer to the correlation between generativity and satisfaction/stressfulness of family and work roles.

Table 8: *The correlation between generativity and satisfaction with family and work roles (parent, caring for one's own parents, partner, householder, employedindividual)*

Variables	Coefficient of correlation	Satisfaction with the parental role	Satisfaction with the role of the carer of parents	Satisfaction with the role of a husband/ wife, love partner	Satisfaction with the role of an employed individual	Satisfaction with the role of a housewife/ householder	Satisfaction with the roles in general
Generativity	R	.138**	.149**	.203**	.201**	.182**	.224**

**p<.001

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The results have shown that there is a positive correlation between generativity and satisfaction with family and work roles in general. It is also determined that there is an individual positive correlation between generativity and satisfaction with each of the examined family, or work roles, whereby all the obtained correlations are low. The lowest correlation has been determined between generativity and satisfaction with the parental role, in relation to the role of a husband/wife, i.e. a love partner.

Table 9: *The correlation between generativity and stressfulness of family and work roles (parent, caring for one's parents, partner, householder, employed individual)*

Variables	Coefficient of correlation	Stressfulness of the parental role	Stressfulness of the role of the carer of parents	Stressfulness of the role of a husband / wife, love partner	Stressfulness of the role of an employed individual	Stressfulness of the role of a housewife/ householder	Stressfulness of the roles in general
Generativity	R	$-.070^*$	$-.066$	$-.177^{**}$	$-.133^{**}$	$-.105^{**}$	$-.121^{**}$

**p<.001

A negative correlation has been obtained between generativity and stressfulness of the aforementioned roles, both in general, and in relation to each of the examined roles. The same as with the satisfaction with roles, the highest correlation has been obtained between generativity and stressfulness of the role of a husband/wife, i.e., a love partner, and the lowest between generativity and stressfulness of the parental role. There has been no correlation only between generativity and stressfulness of the role of the one who is a carer of his/her parents.

The stressfulness of all examined roles has a negative correlation with the satisfaction of the given roles.

Differences considering generativity in relation to gender, age, education, the number of children and the employment status of respondents

Tables from 10 to 17 present results which refer to differences considering generativity in relation to gender, age, education, the number of children and the employment status.

Table 10: *Differences considering generativity in relation to gender*

Variables	Gender	N	AS (SD)	t	df	p
Generativity	Male	385	3.31(.97)	$-.357$	936	.721
	Female	553	3.33 (.95)			

There are no significant differences considering generativity in relation to gender.

Table 11: *Differences considering generativity in relation to age*

Variables		Sum of squares	Df	F	p
Generativity	Among groups	.086	1	.092	.761
	Within groups	1251.753	1349		
	Total	1251.839	1350		

There are no significant differences considering generativity in relation to the age of the respondents.

Table 12: *Differences considering generativity in relation to education*

Variables		Sum of squares	df	F	p
Generativity	Among groups	24.228	5	5.368	.000
	Within groups	842.254	933		
	Total	866.482	938		

There are significant differences considering generativity in relation to education. By applying post hoc tests, it has been determined that respondents who have completed their Bachelor's or Master's degree have more prominent generativity (M=3.59, SD=.87) than respondents who only finished high school (M=3.21, SD=.97) or completed three years of college (M=3.25, SD=.95) . Among other educational groups there have been no significant differences in relation to education. The results of the post hoc test are shown in Table 13.

Table 13: *Differences in generativity in relation to individual educational groups (LSD post-hoc test)*

Variables	Educational group[2]		Difference AS	p
Generativity	Bachelor's or Master's Degree	High School	.37756	.000
		College	.29661	.006

Table 14: *Differences considering generativity in relation to the number of children*

Variables		Sum of squares	Df	F	Sig.
Generativity	Among groups	3.528	6	.633	.704
	Within groups	1248.312	1344		
	Total	1251.839	1350		

There are no significant differences considering generativity in relation to the number of children of respondents.

Table 15: *Differences considering generativity in relation to the employment status*

Variables	Employment status	N	AS (SD)	t	df	P
Generativity	Employed	718	3.31 (.94)	.978	950	.328
	Unemployed	234	3.38 (1.02)			

There are no significant differences considering generativity in relation to the respondents' employment status.

Table 16: *Differences considering generativity in relation to the sector in which the respondents work (LSD post-hoc test)*

Variables		Sum of squares	Df	F	Sig.
	Among groups	18.533	5	4.095	.001
Generativity	Within groups	856.320	946		
	Total	874.853	951		

The results shown in Table 17 indicate the existence of significant differences considering generativity in relation to the type of work the respondents perform. By applying post hoc tests, it has been determined that generativity is less prominent with private entrepreneurs (M=3.27, SD=.95) than the respondents who are employed in the government sector (M=3.49, SD=.86) as well as, the respondents from the government sector have more prominent generativity in relation to those employed in the private sector (M=3.15, SD=.95). The results of the post hoc test are shown in Table 17.

Table 17: *Differences in generativity in relation to the sector in which the respondents work (LSD post-hoc test)*

Variables	Sector in which the respondents work[3]	Difference AS	P
Generativity	Government sector	Entrepreneurs	.22294	.043
		Private sector	.34268	.000

Discussion

In most cultures, adults are expected to take care of and take responsibility for future generations. This aspect of psychosocial maturity in adulthood is viewed by many authors through different generative roles, in the family, at work and in social community. We are witnessing that the family is going through important social and structural changes. The demands of the society for accepting the rules of behaviour of the family and within the family are becoming weaker and the freedom of choice is much greater. Fewer and fewer people live in traditional families, but within them there are certain changes in the roles and relations. These changes can be partly attributed to social changes during the previous years, the economic crisis and demands for accepting certain value systems (Senett, 1998). In our country, certain changes in the domain of family and work are also brought about by the continuous exposure of this society to stress related to the financial state and physical safety over the last few decades (Tomanović, 2004). Taking into consideration the aforementioned, we have asked the question in which way generativity is related to to satisfaction/stressfulness of family and work roles (parent, carer of one's own parents, partner, householder, employed individual).

The results obtained in this research have shown, firstly, that there is a correlation between generativity and satisfaction/stressfulness of family roles, both in general and with each of the roles. The greater the satisfaction with these roles, the more prominent generativity we get, and when the stressfulness of the role is greater, generativity is smaller. Out of all the examined family roles considering both satisfaction and stressfulness in relation to generativity, two roles have stood out: the role of the parent and the role of a husband/wife, e.g. a love partner. This aspect of generativity correlates the most with the role of a husband/wife, i.e. a love partner, and the least with the role of a parent. Nevertheless, regardless of generativity, when it comes to family functioning, as stated by, for example, Byron (2005) and Milkovich and Gomez (1976), we mostly speak of satisfaction/dissatisfaction which is related to two important family domains – relations with one's partner and with children.

The fact that parenthood correlates with generativity is entirely expected because generativity is most often expressed through the roles of a mother and a father. The obtained finding is also consistent with previous researches. Pratt et al., 2001 (according to Tucak Junaković, 2008) state that the generativity of parents is connected to the investment of time and effort in raising one's children, in rewarding the desirable behaviour of children, as well as the authoritative style of parenting. Some researchers (Snarey and Clark, 1998) claim that parents who are generative in their caring for their children are more successful in the realisation of caring for future generations in general. Since the cultural context is very important for understanding generativity, as well as the roles of a mother and a father, we should add the results of the comparative research about the predictive value of parenthood for generativity, which was conducted in Slovenia and Croatia. According to these findings, if adults evaluate the role of a parent as very important, this is a significant predictor of generativity in Slovenia, but not in Croatia (Penezić et al., 2008). It is also emphasised that adults who do not have children can express a high level of generativity within the community, due to their life goals, i.e., life orientation towards activity and communion. This is, in a way, also confirmed by the results of the research obtained by Rothrauff and Cooney (2008) about the correlation between generativity and subjective well-being in parents, but also in adults who do not have children.

When it comes to satisfaction or stressfulness of the role of a parent in adulthood, it is very important to point out that the basic developmental steps in adulthood, which are also related to generativity, can be viewed, to a great extent, through the changes which occur when children are born, when they grow up, that is, when children leave their parents and start their own new families. Surely, fatherhood and motherhood are complementary processes which are performed within certain family dynamics and a certain social-cultural context. The experience of parenting also depends on the gender and age of both parents, as well as children, the quality of partner relations, and also on personal experience of both parents' growing up.

The findings of this research, that satisfaction and stressfulness of the role of a husband/wife, i.e. a love partner, are correlated with generativity, are not surprising as well if we are aware of the fact that being a husband/wife is one of the forms of generativity, and

that the quality of parenting depends, among other things, on the satisfaction and feeling of security in the marital dyad (Vidanović, Todorović and Hedrih, 2006, Anđelković, 2016). When it comes to satisfaction/dissatisfaction with the role of a partner, there is a substantial discrepancy among the results of the previous researches concerning the evaluation of the marriage quality and satisfaction with marriage in relation to gender (Umberson, Williams,Powers, 2006; Broman, 2005). The reasons for that are numerous. Hochschild (1989), for example, states that satisfaction with marriage is higher in couples who share marital and work roles more equally, that is, that those couples which have an asymmetrical balance of power, in which husbands have more power than women, are less satisfied with marriage (Gottman, 1994). Understandably, employment and financial independency of the wife can have an influence on different roles within the family. Namely, financial independence can lead to the change in the balance of power in the family division of labour, a more righteous exchange of power in the decision-making processes, and responsibility in family and marital roles, in general (Rogers and DeBoer, 2001). In a way, this is illustrated in the research by Vidanović et al. (Vidanovic, Andjelkovic,Stojilkovic and Todorovic,2015) about satisfaction/stressfulness of different family roles in the Serbian society today. By comparing men and women in this research, the unemployed women find the role of a parent and a housewife more stressful than men, while the employed women are more satisfied with the parental role than men, and the roles of a partner and a housewife are more stressful for them. However, besides the complexity of viewing satisfaction with marriage from the perspective of both partners, it would be interesting to examine the way in which satisfaction/stressfulness in the role of one and the other partner, is reflected in generativity, all the more so, because the researchers have not paid enough attention to the relation between generativity and satisfaction with marriage.

One of the most important questions related to the concept of generativity refers to its course of development. Whereby, due to some previous studies (Hart et al., 2001; McAdams and de St. Aubin, 1992; Peterson and Duncan, 1999), it has been believed that all components of generativity should be the most developed in the mid-adulthood, other studies (for example, Stewart and Vandewater, 1998) have not confirmed it.

Our research has not determined that there are noteworthy differences in generativity among respondents in their early, middle and late adulthood. This practically means that the hypotheses and results of some previous studies (Hart et al., 2001; McAdams and de St. Aubin, 1992, Peterson and Duncan, 1999), that generativity reaches its peak during mid-adulthood, have not been confirmed. Due to the developmental stages of adults, we tend to view the obtained findings on generativity from the perspective of the model proposed by Stewart and Vanderwater (1998), according to which the components of generativity have different development courses in different stages of adulthood. We should add that Erikson (1963/2008) also believed that generativity represented a dominant mark on the seventh stage of development, but that it was also present, in a certain form, in other stages of development.

The obtained findings have also confirmed the assumption that differences between men and women, considering generativity, should not be significant, which has

also been found in some other studies (Hart et al., 2001; McAdams et al., 1993; Tucak Janković, 2011). Consistent to Erikson (1963/2008), many authors are of the opinion that generativity is immanent in human nature – both male and female. In some studies (Morfei et al., according to Tucak Janković, 2011), it was determined that generativity in women, in relation to men, is more expressed through generativity which is a reflection of communion, i.e. caring for other people, while in generativity which is a reflection of activity, i.e. a desire to leave one's own mark on the world, there have been no differences between the two genders. In this context, it can be expected that generativity in women in this research will be more prominent in relation to men, because the items in the Questionnaire on Generativity, which we have been used, mostly refer to pro-socially oriented helping activities, but this has not been determined.

Since generativity is also expressed through one's profession, we have thought that the employment status could be relevant for the field we have examined. However, in this research, this has not proven to be primary and dependent on the employment status of the respondents. Still, it has been determined that generativity is more expressed in government sector than in respondents who are employed as independent entrepreneurs, as well as in those employed in the private sector. These findings asks for further empirical testing, particularly due to the fact that even if the role in question is only the role of the employment status in generativity, the results of the research are not consistent. Although some studies (Lacković Grgin, 2002; Škraban and Žorga, 2005) have confirmed that relationship, the findings of the study by Tucak Junaković (2009) confirm that the employment status and the importance of employment are not significant for generativity and generative caring.

Unlike previous demographic variables, the level of education have proven to be significant for generativity. Those respondents who have Bachelor's or Master's degree have more prominent generativity in relation to respondents who have finished high school or college, whereby no significant differences have been determined among other educational groups. Although Stewart and Ostrove (2001) point out that the level of education is less significant for some components of generativity, but not for the other ones, and the absence of these correlations is explained by the fact that generativity is the universal developmental task of adulthood. In addition, authors suggest that the interest in the community and future generations does not only depend on financial well-being, but that it could be expected right there where there are no such privileges. We should be reminded that our research has found no differences among the employed and unemployed in generativity.

Conclusion

The results of this research have shown that there is a correlation between generativity and satisfaction/stressfulness of each of the examined roles. This aspect of generativity is connected the most with the role of a husband/wife, i.e. a love partner, and the least with the role of a parent. It should be said that, although statistically significant, all the obtained correlations are low.

The findings have not confirmed the opinion of some authors that generativity reaches its peak in mid-adulthood and that men and women differ by its intensity. Also, it has been shown that unemployment, besides all the ailments that it brings, still does not disrupt generativity which is considered to be a significant result of this research. However, the obtained findings should not be generalised without taking into consideration the specificities of a certain society, that is, their socio-cultural context.

Although generativity and its relation with the family and work functioning is more and more often the subject of interest of contemporary research, the researchers pay significantly less attention to satisfaction/dissatisfaction with different family and work roles. This has certainly contributed to the way of viewing and interpreting results of the research which are presented in this paper. Besides these aspects, future research should also be directed towards the evaluation of generativity in individuals of different professional orientation, and particularly whether this characteristic of adulthood is more prominent in helping professions, in relation to other professions. To what extent is generativity present in the social community? What is the role of the specific culture in which someone lives and what are the expectations which it sets regarding generativity? In addition, as the concept of generativity is very complex, we believe that the research of its different components would provide a more complete picture about this, according to some authors, universal developmental task of adulthood.

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Original scientific paper

DIFFERENCES IN ORGANIZATIONAL CITIZENSHIP BEHAVIOR IN RELATION TO THE DEMOGRAPHIC CHARACTERISTICS OF EMPLOYEES

Abstract

This research paper explores the construct organizational citizenship behavior, its definition, classifications, dimensions, antecedents, etc. Two questionnaires for organizational citizenship behavior were used (Smith, et.al., 1983; Van Dyne, et.al., 1994), both with good psychometric values (Cronbach's α is above 0,7). 359 employees from different organizations in Bulgaria (mainly in the IT, Finance, HR, Construction sectors, etc.) with different demographic and positional characteristics within the organizations (hierarchy level, working experience, etc.) took part in this study. There are no differences by gender and hierarchy level for any of the organizational citizenship behavior forms. Age influences significantly only obedience ($F=2,63$, $p<0,05$) as people aged 46-55 years have the highest value ($M=3,57$, $SD=0,71$). Loyalty depends on the education of the respondents: those who have graduated a college have the highest mean value ($M=3,06$, $SD=0,54$). The results also show that total work experience impacts the manifestation of different forms of organizational citizenship behavior – altruism ($F=3,159$, $p<0,01$), obedience ($F=3,334$, $p<0,01$), participation ($F=2,386$, $p<0,05$)   and loyalty ($F=2,299$, $p<0,05$). For all of them employees with less than a year of working experience have the highest mean value which might be explained with the adaption period within the organization and getting used to the organizational work processes.

Key words: organizational citizenship behavior, age, education, total work experience

Organizational Citizenship Behavior Concept

Organizational behavior as a whole is a scientific sphere of great interest that explores the complex relationships between the organization and its employees. It focuses on the mutual expectancies and contributions of both sides (March & Simon, 1958). How people behave within the organizations and why they are behaving in

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a specific way is a subject of various studies. More interesting, however, is what makes them put extra efforts in what they do? What is the key driver of performing more without being asked for that?

All those questions lead us to the concept of organizational citizenship behavior. It starts to develop at the beginning of 20th century but it gains a solid research base in the 1980s and 1990s, mainly with the study of Dennis Organ who defines the concept as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization. By discretionary, we mean that the behavior is not an enforceable requirement of the role or the job description, that is, the clearly specifiable terms of the person's employment contract with the organization; the behavior is rather a matter of personal choice, such that its omission is not generally understood as punishable" (Organ, 1988, p.4). That's why it is usually associated with extra-role (Katz & Kahn, 1966;1978; Zhu, 2013) or prosocial behavior (Brief & Motowidlo, 1986; Puffer, 1987), organizational spontaneity and other similar (Van Dyne, et al., 1994; Smith, et al., 1983; Podsakoff, et al., 2000). Other authors consider the citizenship behavior close to the contextual performance – a behavior that extends the range of the different processes out of the requirements of the specific job (Borman & Motowidlo, 1997). This kind of behavior can also mediate the interpersonal relationship and work dedication (Spector & Fox, 2002).

There are two main research tendencies in the analysis of organizational citizenship behavior (Ilieva, 2006). The first of it is related with the "active citizenship syndrome" (Van Dyne, et al., 1994). This syndrome includes three categories based on civic citizenship concept. Obedience involves respect to structure and processes. Legal authority is well recognized and the law is strictly followed. Loyalty is related to serving the interests of the community and its values. Loyal employees promote their organization within their social and professional networks, protect it from external influences and volunteer for some extra activities in the name of the well-being of all. The third category of that syndrome is participation. It is the active and responsible involvement in the organizational processes that also includes constant gathering of information and exchange of ideas.

The other perspective of the organizational citizenship analysis comes from social psychology and the idea of prosocial behavior and altruism. This view is connected with the willingness to help others and to assist their adaptation process within the organization. It is composed of two elements of citizenship behavior – altruism and general compliance (Smith, et al., 1983). Altruism is understood in the terms of helping a specific person within the organization during working processes. General compliance has wider meaning and it is more impersonal, related to consciousness and following the rules for the sake of the system itself. It is closer to the "good soldier" concept (Organ, 1988).

There are different classifications of the types of organizational citizenship behavior. One of the most accepted and widely used classification includes the following dimensions (Podsakoff, et al., 2000; Organ, 1988):
- *Helping behavior* - involves voluntarily helping others and preventing the occurrence of work-related problems. This means that such are provoked

by the personal will of the employee to facilitate the work of the co-workers, demonstrating courtesy and intentions for the well-being of all.

- *Sportsmanship* – the idea of the sportsmanship is somehow related with the equality tolerance and overcoming the unfavorable conditions. Employees that show such behavior do not complain, accept criticism and confrontation of their ideas, adapt to inevitable inconveniences and are ready to sacrifice themselves in the name of the good of the work group.
- *Organizational loyalty* – this is a well-known construct in organizational and work psychology. Closely related with commitment to the organization, loyalty is a deeply formed belief that influences employee's behavior. The loyal ones promote their organization to outsiders; defend its image, values and goals. No matter of the conditions, the company that someone is working in is the best working place and this employee has the tendency to stay in and support it in long-term period.
- *Organizational compliance* - this dimension captures person's internalization and acceptance of the organizational rules, regulations, and procedures, which results in strict adherence to them, even when no one observes or monitors compliance. The "good citizen" is the one that doesn't need constant control in order to fulfill his/her tasks and even to excel the normally expected.
- *Individual initiative* – business organizations nowadays value most the outstanding performers that go beyond their job description tasks. Those are the people with intrinsic motivation and internal locus of control that want to do more and more. These employees are not satisfied only by the completion of given task but with optimizing the processes, giving ideas, even learning and developing themselves in order to achieve more and more. They don't like waiting the change to come but want to urge it and manage it.
- *Civic virtue* – this type of organizational citizenship behavior represents a macro-level interest in the organization as a whole. This is shown by a willingness to participate in its activities, concerning the organizational policy and welfare (e.g., attend meetings, engage in policy debates, express one's opinion about what strategy the organization ought to follow, etc.); to monitor its environment for threats and opportunities (e.g., keep up with changes in the industry that might affect the organization); and to look out for its best interests (e.g. reporting fire hazards or suspicious activities, locking doors, etc.), even at great personal cost. These behaviors reflect a person's recognition of being part of a larger whole in the same way that citizens are members of a country and accept the responsibilities which that entails (Podsakoff, et al., 2000).
- *Self-development* – in order to excel and be outstanding, everyone should constantly learn. When someone is self-development oriented he/she does not wait for the organization to train him/her but is the one who involves himself/herself in different professional courses that enrich

your knowledge. Those employees are usually engaged with different educational and qualification programs and spend a solid amount of time in following the latest tendencies in their professional sphere.

Different researches examined the antecedents of the organizational citizenship behavior. Those can be grouped in personal, situational and positional. It was discovered that satisfaction, fairness and organizational commitment correlated with such citizenship behaviors (Organ & Ryan, 1995). Personal factors such as positive job attitudes, A-type behavior (Organ & Hui, 1995), individualism-collectivism (Moorman & Blakely, 1995), and cynical behavior to others (Van Dyne, et al., 1994) influence the occurrence of organizational citizenship behavior. Situational factors as the organizational values, job characteristics, etc. also have an impact on the "out of the role behavior" (Van Dyne, et al., 1994). Leadership is also a predictor of extra-role behavior (Podsakoff, et al., 1990). The main focus is put on the exchange between the leader and the ones he manages. Fairness in decision making is also important for the adequate perception of organizational processes (Moorman, et al., 1998).

Another group of such factors are the positional ones. Some researches state that the longer the total work experience is, the more are the forms of organizational citizenship behavior that occur. The same is valid for the hierarchy level (Van Dyne, et al., 1994). Together with that, the hierarchy level influences the evaluation of demonstrating such kind of behaviors.

Research Methodology

Two questionnaires for organizational citizenship behavior were used. The first one (Smith, et al., 1983) contains 16 items, 2 of which were removed after a principal-factor analysis with varimax rotation made by Smith and colleagues. The participants use 5-point Likert scale that vary from "fully agree" to fully disagree". The main model from the original study is used for the factorial distribution. The subscale Altruism consists of 7 items and has internal consistency of α=0,87. Some of the items are: Most of the people in the organization: "Help others who have been absent"; "Volunteer for things that are not required"; "Make innovative suggestions to improve department".

The other subscale is General Compliance that again has 7 items. The internal consistency of it is α=0,76. Some of the items are: Most of the people in the organization: "Take undeserved breaks (reversed item)"; "Give advance notice if unable to come to work"; "Does not spend time in idle conversation".

The internal consistency of the whole questionnaire is α=0,90. This is quite good psychometric value that allows further analyses.

The second questionnaire for organizational citizenship behavior (Van Dyne, et al., 1994) presents the construct as multidimensional. It includes obedience, loyalty and participation. After an exploratory factor analysis 34 (out of 54) items

are proposed. Initially, they form 5 factors but after additional statistical operations the final solution includes 3.

Obedience as a factor includes 11 items and has internal consistency of α=0,86. Some of those questions are: Most of the people in the organization: "Always come at work on time"; "Do not meet all deadlines set by organization (reversed item)", etc.

Participation also includes 11 items and has internal consistency of α=0,84. Some of the items are: Most of the people in the organization: "Encourage other to speak up at meetings"; "Have difficulty cooperating with others on projects", etc.

Loyalty contains 12 items and its internal consistency is α=0,82. Some of the questions are: Most of the people in the organization: "Represent organization favorably to outsiders"; "Do not defend organization when employees criticize it (reversed item)", etc.

The internal consistency of the whole questionnaire is α=0,92. This is also a reliable value that reconfirms the organizational citizenship construct that is measured.

The aim of the current study is to establish the influence of some demographic and positional characteristics, e.g. gender, age, education, hierarchy level, total work experience on the dimensions of organizational citizenship behavior.

Sample

359 participants took part in this study – all of them employed in companies from different sectors in Bulgaria. 176 of those (49%) are men and 179 (49,9%) – women. Based on age, most of the people are between 26 and 35 years old (181 people, 50,4%), followed by those between 36 and 45 years (103 people, 28,7%), 46-55 years (37 people, 10,3%), under 25 years (20 people, 5,6%) and over 55 years (12 people, 3,3%). 79,1 % of the respondents (284 people) have university degree. Total work experience is divided in 7 groups: 94 of the participants (26,2%) have total work experience between 11 and 15 years, followed by those between 6 and 10 years (93 people, 25,9%), 3-5 years (57 people, 15,9%), over 20 years (50 people, 13,9%), 16-20 years (44 people, 12,3%), 1-2 years (12 people, 3,3%), under 1 year (3 people, 0,8%). The work experience within the current organization varies between 0 and 35 years with mean value M=4,64. Based on the industry, most represented are the professionals from "Information Technology" – 104 (29%), followed by "Construction, Architecture and Installing Activities" (64 people, 17,8%), "Human Resources" (41 people, 11,4%), "Financial, Banking and Insurance Institutions" (30 people, 8,4%), etc. Hierarchy level as a demographic factor is applied to 295 respondents (except for those from "Construction, Architecture and Installing Activities" sector): 90 "Senior Specialists" (25,1%), 82 "Specialists" (22,8%), 46 representatives of mid-level management (12,8%), 26 (7,2%) "Senior Management" and "Junior Specialists", and 25 "Team Leaders" (7%).

Results and Discussion

The descriptive statistics of the five forms of organizational citizenship behavior show that general compliance has the highest mean value (M=3,40, SD=0,70), followed by altruism (M=3,29, SD=0,82), obedience (M=3,22, SD=0,70), participation (M=3,13, SD=0,69) and loyalty has the lowest mean value (M=2,94, SD=0,65). Those resultsare in congruence with a study from 2016 by 70 participants (Alexandrova, 2016). This shows consistency of the attitudes towards organizational citizenship behavior within Bulgarian samples.

There are no differences by gender for any of the organizational citizenship behavior forms. This result is not so strange, having in mind that in work context more and more jobs become independent of the employee gender. The focus is put more on the professional skills, knowledge, adaptability, desire to learn and potential to develop. All employees have equal chances to take a managerial role on the basis of proven results.

Age influences significantly only obedience (F=2,63, p<0,05). The distribution is as follows: 46-55 years (M=3,57, SD=0,71), over 55 years (M=3,38, SD=0,52), 26-35 years (M=3,24, SD=0,67), 36-45 years (M=3,19, SD=0,72) and the participants under 25 years have the lowest value (M=3,08, SD=0,84). These results, with small differences were received in other studies within Bulgarian sample (Ilieva, 2000). It is obvious that by becoming older employees are more willing to strictly follow the internal rules and politics. Young employees are quite flexible and short-term results oriented and their main stimuli are related to remuneration and fast career development through hierarchy ladder climb-up promotion. By gaining more work experience they become more settled and have a readiness to subordinate and follow strictly the rules that give them a sense of security. Between 46 and 55 years employees have reached most of their goals, developed themselves from a career perspective. The accent then is put more on cooperation, helping newcomers to integrate easier, following the organizational politics.

Loyalty as a form of organizational citizenship behavior depends on the education of the respondents in the current study. It seems that those who have graduated a college have the highest mean value (M=3,06, SD=0,54), followed by those with academic title (M=2,98, SD=0,41), university degree (bachelor or master) (M=2,94, SD=0,65), (professional) high school (M=2,69, SD=0,51) and those with secondary education have the lowest mean value (M=2,13, SD=0,55). Based on the economic and educational systems in Bulgaria in the last 20-30 years, we may say that those results are not surprising. Most of the people who graduated in the 80's started to work around 18 years. Many of them didn't go to a university but enrolled for the shorter 3-year course of education within colleges. Thus they have longer work experience which is a prerequisite of forming loyalty. On the other hand, people with higher level of education develop different skills and gain specific knowledge from a theoretical perspective that leads to better performance and good results that create more benefits both for the employees and the organization and this also leads to loyalty and the tendency to stay longer in a certain organization.

Table 1. Differences in the forms of organizational citizenship behavior by age and education

Age		Mean Values	F	Sig
Obedience	under 25 years	*3,08*	2,629	0,034
	26 – 35 years	3,24		
	36 – 45 years	3,19		
	46 – 55 years	**3,57**		
	above 55 years	3,38		
Education		Mean Values	F	Sig
Loyalty	Secondary Education	*2,13*	3,460	0,009
	Professional High School	2,69		
	College	**3,06**		
	University Degree (Bachelor/ Master)	2,94		
	Academic Title	2,98		

The results also show that total work experience impacts the manifestation of different forms of organizational citizenship behavior – altruism (F=3,159, p<0,01), obedience (F=3,334, p<0,01), participation (F=2,386, p<0,05) and loyalty (F=2,299, p<0,05). It is interesting, that for all four forms, employees with total work experience under 1 year have the highest mean values and those between 3 and 5 years – the lowest. This can be explained by the fact that people who have not work for a long period are still building their working habits. They don't have well established working style, various skills and expertise. That's why they rely on following the rules, helping others, be precise, so that they can be accepted easily and integrate fast in the organization. This is the phase of adaptation to the organization. By the time those employees become more confident in their knowledge and professionalism. Usually, between the 3rd and the 5th year within one and the same company people should reconsider their opportunities for career development and focus more on deepening of their skills in a specific sphere. This somehow shifts the focus from the others to the own and out of the job role behavior decreases. Together with that, if the employee has had unrealistic expectations about the organization, the job role, etc., this might have led to disappointment and alienation in the work processes.

Table 2. Differences in the forms of organizational citizenship behavior by total work experience

Total work experience		Mean Values	F	Sig
Altruism	less than 1 year	**3,81**	3,159	0,005
	1 – 2 years	3,31		
	3 – 5 years	*3,07*		
	6 – 10 years	3,42		
	11 – 15 years	3,12		
	16 – 20 years	3,23		
	above 20 years	3,57		

Obedience	less than 1 year	**3,76**		
	1 – 2 years	3,34		
	3 – 5 years	*3,08*		
	6 – 10 years	3,37	3,334	0,003
	11 – 15 years	3,11		
	16 – 20 years	3,18		
	above 20 years	3,51		
Participation	less than 1 year	**3,61**		
	1 – 2 years	3,23		
	3 – 5 years	*2,95*		
	6 – 10 years	3,22	2,386	0,028
	11 – 15 years	3,01		
	16 – 20 years	3,00		
	above 20 years	3,27		
Loyalty	less than 1 year	**3,22**		
	1 – 2 years	2,98		
	3 – 5 years	*2,66*		
	6 – 10 years	2,94	2,299	0,034
	11 – 15 years	2,90		
	16 – 20 years	2,90		
	above 20 years	3,07		

The industry that participants in this research are employed in is also a factor that determines citizenship behavior. Representatives of "Administrative and Office Activities" have the highest mean values for altruism and participation. This result is visible in the practice, having in mind that the work essence is closely related with communication, serving others, actively participating in the daily activities, assisting the employees in different aspects, etc. Engineers are those who rated loyalty the highest. Being in the manufacture sector means a definite number of job opportunities. Those professions are rather specific and this is a predisposition for staying longer in the organization. This fact creates loyalty and mutual dependence – the organization gives a job to the specialist and the specialist produces so that all have benefit.

In the current study hierarchy level has no statistical significance on organizational citizenship behavior. However, in other researches (Ilieva, 2000) the values of altruism and obedience vary based on that. The higher the hierarchy level is, the lower their mean values are. Participation is also most visible within the specialist level and less shown within the mid- and senior management. These results show that being on the top of the organizational structure means more clear view and focus on the strategic integration of the business process and less on the behaviors that may change that direction.

Conclusion

Contemporary organizations have realized the need of alternative and innovative thinking in order to optimize their effectiveness. Organizational citizenship behavior

is a mechanism to do so (Podsakoff, et al., 2009; Ariani, 2012) and to reach a competitive advantages and success. By expanding the opportunities for gathering positive work experience, companies create value for their employees as a part of the whole human resources management strategy (Wright & McMahan, 2011).

Different demographic factors have an impact on some of the organizational citizenship behavior dimensions. Employees aged between 46 and 55 years have reached most of their goals, developed themselves from a career perspective. The accent then is put more on cooperation, helping newcomers to integrate easier, following the organizational politics. That is why obedience has the highest value within that group.

Loyalty depends on the education degree of the participants in the study. It is either related with the higher degree, respectively more skills and knowledge, more demanding professionals, or a degree that just gives specialty and basic professional orientation as the college does.

Total work experience impacts the manifestation of different forms of organizational citizenship behavior – altruism, obedience, participation and loyalty. It is interesting, that for all four forms, employees with total work experience less than 1 year which can be explained by their integration period within the organization. During that time new joiners strive to adapt, to win positions and fully accept the internal principles of work. They are quite active and cooperative, willing to take over more activities so that they can prove themselves and create new opportunities for career development.

Industry also plays a key role when we are talking about citizenship behavior. Administrative roles tend to provoke more altruism and participation as they are key communicators within organizational life. Other, specific professions (like engineers for example) tend to become loyal to the organizations they work for. The main reason might be searched within the limited opportunities for career development and finding a job that your university degree is.

All these results show that organizational citizenship behavior varies according specific demographic characteristics. Those should be taken into consideration when the human resources management and the whole organizational strategies are planned. It is proven that going beyond what is purely in the job characteristics creates different opportunities for making the employees happy, satisfied, more productive, etc. and this increases the overall benefits and advantages of organizations.

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Original scientific paper

VALUE FOUNDATIONS OF MANAGEMENT IN PRESCHOOL EDUCATIONAL INSTITUTION

Abstract

The article explains the importance of the study of management values in preschool educational institution. The author presents the results of the study of managers' personal values and their image of the ideal preschooler-graduate. The methods used in the study: group interview, content analysis of interviews, theoretical modeling, "Values questionnaire"; nonparametric method of gamma-correlation. The correlations between the values and image of the ideal preschool are established.

Key words: preschool education, value foundations, managers' values, management, image of preschooler.

Introduction

Every human activity is based on a certain value foundations. In particular, management activity requires a clear definition of their value orientations.

S.Schwartz and W.Bilsky conclude from the numerous definitions of values their own generalized definition: "values are concepts or beliefs about the desired states or behaviors which go beyond specific situations, manage the selection and evaluation of behavior and events, and which are ordered by relative importance" (Schwartz & Bilsky, 1987: 551). Thus, the values are the regulatory aspect of the activity.

At management the values define the meaning of activity of a particular organization or group of people, as well as the content of this activity.

Preschool educational institution (PEI) as the organization is based on certain values. However, in this area there is a particular situation - management of PEI is closely related with preschool education, and it brings into focus the preschool child who attends the PEI, and his development and education. V.V. Rubtsov and E.G. Yudina determine the following main questions which must meet the preschool education: - "What education should be for young children? What do they have to be taught before they go to school?" (Rubtsov & Yudina, 2010: 4). Nowadays, however, even for preschool children it is not enough standard education. Life in a changing

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global world requires an active search for combination of traditions and innovations, the broadcasting and development of the necessary values for the modern world. Preschooler, coming to school, gets in terms of preparation for life in high-tech, global and competitive world. So, we need to ensure the continuity of such transition. It means finding answers to questions about the values that are given to preschoolers, the values of teachers, according to educational programs and technologies evolving society values.

Moreover, "in management there are a number of phenomena and stereotypes that are psychological barriers for reforming economic and social life" (Zakharova, 2007: 300), and which require their detection and determination of their role in the management of the organization.

Psychological bases of management in preschool educational institution are located at the intersection of the two branches of psychology: psychology of management and child psychology. This is due to the complexity of the object of management: on the one hand, it is the PEI employees, its teaching staff; on the other - it is necessary to understand that PEI is an educational organization that deals with the education and upbringing of children. In the second case, the object of management becomes an education of preschool children, what is a mission of PEI.

The author proposes that the mission of PEI is the following one: preschool institution, on the one hand, realizing the principles and objectives of the educational process, stated in the Federal Educational Standards, and on the other hand, the being relevant for challenges of the modern world, global processes and characteristics of society, is devoted to prepare preschoolers for effective socialization and personal actualization (Kostrigin, 2015a, 2015b, 2016).

E. Shane claimed that the organizational culture and, consequently, the mission of the organization affect the personality of the manager (Shane, 2002). Following his idea, we can formulate the such statement: strategy of management of PEI depends on personal values of managers. Moreover, the planning of the variable part of the educational process in preschool institution depends on the image of the ideal preschool graduate, on how they see preschoolers after education.

Thus, the basis of implementing of management in preschool institution is representations of an ideal graduate preschooler.

Design of study

Author based on the following hypothesis: there is a relation between the values of PEI managers and their image of the ideal graduate preschooler.

The objective of the study is to reveal value bases of management of the preschool educational institution.

Methods: group interview of heads called "Portrait of an ideal graduate preschooler, content analysis of interviews, theoretical modeling, the method "Values questionnaire of S. Schwartz" (in adaptation of V.N. Karandashev) (Karandashev, 2004); nonparametric method of gamma-correlation.

The sample is 28 heads of preschool educational institutions of Nizhni Novgorod and Nizhny Novgorod region.

The study had two stages. On the first stage, heads were asked to write an essay called "Portrait of an ideal graduate preschooler". We used the method of content analysis to handle data. On the second stage, we used method of "Values questionnaire of S. Schwartz" (in adaptation of V.N. Karandashev). Nonparametric method gamma correlation was used to identify the correlations.

Results

Analyzing the managers' portrait of graduate preschooler we identified the following results (Table. 1).

Table 1 Representations of PEI heads about the characteristics of the ideal graduate

Block	Content (in the form of units of content analysis)	Sum of reference
Operational characteristics	School readiness: Logical thinking, reasoning; PC skills	26
Value characteristics	Assimilation of values, rules and norms of behavior in society (socialization); Moral values; Value of labor; Patriotism; Kindness to people and environment;	24
Characteristics of development	Physical and mental development; Psychologically mature; Cultural and aesthetic development; Many-sided person;	22
Characteristics of communication and interaction	Sociability; Grammatical Speech; Ability to communicate in a team; Leadership skills; Empathy;	20
Characteristics of self-regulation	Self-regulation of behavior; Emotional stability; Ability to cope with life's challenges;	18
Characteristics of cognitive and creative activity	Curiosity, cognitive activity; Creativity and creative ability; Spacious mind;	17
Characteristics of self-concept	Self-representation; Personal point of view;	13

Heads of PEI showed the number of characteristics that should be inherent to the ideal graduate preschooler. All representations of heads about the characteristics of an ideal graduate preschooler were grouped into several blocks: operational characteristics, value characteristics, characteristics of communication and interaction, characteristics of self-regulation, characteristics of self-concept, characteristics of cognitive and creative activity and characteristics of development.

Then we calculated the frequency of occurrence of these groups of characteristics among responses of heads (in parentheses – the number of heads indicated in their response any feature that is included in a specific group of characteristics): operational characteristics (26), value characteristics (24), characteristics of development (22), characteristics of communication and interaction (20), characteristics of self-regulation (18), characteristics of cognitive and creative activity (17), characteristics of self-concept (13). Thus, the most managers describe graduate preschooler with the operational characteristics and value characteristics. This means that the preschool children's readiness for school, as well as socialization and moral behavior are the most important for the heads. On the second place there are the characteristics of communication and interaction, self-regulation, cognitive and creative activity. The least important characteristics of graduate preschooler are the characteristics of self-concept, which is the idea about himself and the formation of his point of view.

The specifics of the study suggest that these characteristics are important landmarks in the management of preschool education for heads, which can be defined as a value basis.

In the process of analyzing of the characteristics ideal graduate preschooler we revealed the trouble spots. The heads used stereotyped expressions and clichés in describing the ideal graduate preschooler, such as "physical and mental development", "many-sided person", "psychologically mature," "moral qualities" and others. The use of such common phrases may indicate the desire to give a socially significant responses or the lack of a complete understanding of such expressions.

In the second stage we make the analysis of the data got by the method "Values questionnaire of S. Schwartz" (Table 2).

Table 2 Average number on the index of values among heads of PEI (method "Values questionnaire of S. Schwartz")

Values	Average number
Benevolence	5.09
Safety	5.01
Independence	4.57
Achievement	4.54
Universalism	4.3
Conformity	4.19
Tradition	3.51
Stimulation	3.28
Power	3.11
Hedonism	2.04

The profile of personal values consists of a hierarchy of 10 values: Conformity, Tradition, Benevolence, Universalism, Independence, Stimulation, Hedonism, Achievement, Power and Safety. We obtained the following value profile of heads of PEI (in parentheses - the average number): Benevolence (5.09), Safety (5.01), Independence (4.57) Achievement (4.54), Universalism (4.3), Conformity (4.19), Tradition (3.51), Stimulation (3.28), Power (3.11) and Hedonism (2.04). This means that the heads has the greatest importance for conservation and promotion the welfare of loved ones (Benevolence), the safety and the stability of society, relationships and self (Safety), independence of thought and action (Independence), a personal success relevant to social standards (Achievement).

Scales of values questionnaire design two axes, which can determine the orientation of the person: it is openness to changes/conservatism and self-rising/self-transcendence. We show what blocks of values (orientation of the person) dominate in responses of the heads (Table. 3).

Table 3 The orientation of the heads' personality

Orientation of personality	Average number
Openness to changes	3.3
Conservatism	4.24
Self-rising	3.23
Self-transcendence	4.7

We can conclude that heads of PEI tend to be conservatism (4.24) and self-transcendence (4.7). This means that safety of society and network, the conservation of traditions and socially approved behavior (Conservatism) as well as the welfare of all people, including relatives (Self-transcendence) is important for them.

These two data sets were ranked and tested for correlations (Table 4).

Table 4 Correlations between indicators of the representations of ideal preschooler and heads values (method of gamma-correlation)

Indicators	Correlation coefficient ($p < 0,05$)
Tradition - value characteristics of preschooler	0.46
Universalism - Operational characteristics of preschooler	0.42
Hedonism - Operative characteristics of preschooler	0.4
Power - Operational characteristics of preschooler	0.43
Hedonism – Characteristics of development of preschooler	0.75
Universalism - Characteristics of self-regulation of preschooler	0.44
Conformity - Characteristics of communication and interaction of preschooler	0.45
Hedonism - Characteristics of communication and interaction of preschooler	0.63

Discussion

1. According to S.Schwarz and W.Bilsky, beliefs and values are considered the notion that man is guided in decision making and implementation of activities, as well as in the evaluation of events. Based on this definition, the heads' representations about graduate preschooler are value phenomena that head is guided in his management.

2. The heads of PEI consider that the most important features of ideal graduate preschooler are the operational characteristics, which are expressed in readiness for school, and characteristics of socialization.

3. The author identified the problems - clichés and stereotypes, as well as the lack of disclosure of the characteristics and description of their behavioral indicators. These problems can lead to an incorrect approach of the management in PEI and teaching.

4. Heads of PEI have the following dominate values - "Benevolence", "Safety", "Independence" and "Achievement". This means that the heads have the greatest importance of the conservation and the welfare of loved ones (Benevolence), the safety and the stability of society, relationships and self (Safety), independence of thought and action (Independence), a personal success relevant tosocial standards (Achievement).

5. Heads of PEI tend to conservatism and self-transcendence. This means that safety of society and environment, the conservation of traditions and socially approved behavior (Conservatism), as well as the welfare of all people, including relatives (Self-transcendence) are important.

6. We revealed a positive correlation between the values of heads and their image of ideal preschooler: tradition and value characteristics of preschooler, universalism (welfare of all people) and characteristics of self-regulation, conformity (socially approved behavior) and communicative characteristics, hedonism (pleasure from life) and communicative characteristics.

7. We identified a negative correlation between the values of heads and their image of ideal preschooler: universalism (welfare of all people) and operational characteristics, hedonism (pleasure from life) and operational characteristics, power and operational characteristics, hedonism (pleasure from life) and characteristics of development of preschool children.

Conclusion

The heads of the preschool institutions should be perceived as the most significant link in the organization's development strategy. This explains the interest in the values of the management of the PEI, which are realized in the personal values of the managers and their ideas about the characteristics of the ideal preschooler. The research goal was to determine the nature of the relationship between the values of managers and their ideas about the ideal graduate preschooler. The results show that

there are significant relations between representations about preschooler and personal values. The obtained correlations do not mean that the first variables determine the second ones, but it means the sustainable interaction of these variables. Therefore, we can formulate some conclusions for discussion in the further studies: the heads tend to develop in preschoolers the values and traditions that they themselves adhere to; the heads will develop conformist behavior and conformal communicative qualities in preschoolers; the heads will form in the preschoolers orientation to receive pleasure in communication.

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SUBJECTIVE WELL-BEING AND CHRONIC SOMATIC DISEASES AS PREDICTORS OF QUALITY OF LIFE OF CITIZENS OF SERBIA[2]

Abstract

The aim of this study was to examine the predictive role of certain chronic somatic diseases and Subjective Well-Being (positive attitudes towards life and positive affectivity) in relation to the dimensions of Quality of Life (physical health, psychological health, social relations, environment). The research was conducted on a stratified sample of citizens of Serbia (N = 2023, M = 39.35, SD = 14.02, 57.2% of women and 42.8% of men). The instrument used was PORPOS battery that was specifically designed for the research. The most frequent diseases among the examined ones were cardiovascular diseases (15.6%), rheumatic diseases (13.3%), migraine (8.2%) and skin diseases (6.3%). Therefore, they are included in the further analysis. The results show that these diseases and Subjective Well-Being account for 12.8% of the variance of physical health as a dimension of Quality of Life, whereas the presence of rheumatic diseases, migraines and both dimensions of Subjective Well-Being are distinguished as significant predictors. The same predictors are also significant in the overall variance of the dimension of the environment, whereby the percentage of the explained variances is 14%. The presence of cardiovascular diseases, rheumatic diseases and a positive attitude towards life as a dimension of Subjective Well-Being are important predictors of psychological health, whereby the model as a whole accounts for 1.2% of the total variance of the criterion. In terms of social relations, the model accounts for 18% of the variance and the presence of all of the examined diseases and the two dimensions of Subjective Well-Being are distinguished as significant individual predictors. The established results indicate that Subjective Well-Being, i.e. its dimensions in relation to the presence of certain chronic somatic diseases, contribute greatly to predicting all dimensions of Quality of Life except psychological health, whereby the positive affectivity as a dimension of Subjective Well-Being proved to be a stronger predictor than a positive attitude towards life.

Key words: *Subjective Well-Being,Chronic somatic diseases, Quality of Life*

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Introduction

It is certain that Quality of Life depends largely both on our physical and psychological health. Over the past decade, the prevalence of chronic diseases has increased, which certainly affects the quality of life of a diseased person. Although the majority of people want to live their lives filled with positive emotional states such as happiness, satisfaction, optimism rather than negative ones, until the last decades of the previous century, researchers paid less attention to the effect of positive emotions on health and a disease and generally the life of a modern man (Hadži Pešić & Anđelković, 2013).

Health-related quality of life (HRQoL) is a multidimensional construct which contains at least three domains: physical, psychological and social functioning and each of these domains can be modified under the influence of a disease and /or treatment of the disease (Megari, 2013). It is an individual perception of the physical, cognitive and emotional functioning of a person, i.e. a comprehensive assessment that is modified over the course of life due to various disabilities, states, perceptions and social conditions influenced by illnesses, injuries and various treatments (Patrik & Eriskson, 1993).

According to previous studies (e.g. Kilian et al., 2001) various somatic diseases (cancer, cardiovascular diseases, diabetes, multiple sclerosis, arthritis, respiratory diseases) have an important impact on all dimensions of Quality of Life as it is defined by the World Health Organization (WHO, 1997). It has also been found that the effect of a somatic disease on the quality of life is the result of a disturbance of functioning during the day, rather than the result of the severity of the disease in terms of its mortality. However, despite a large number of studies on the relationship between chronic diseases and Quality of Life in relation to health, it is difficult to make definite conclusions about the nature of their relationship due to different ethnic and cultural conditions of the research, different number of participants (occasionally small samples) and different stages of the disease of the participants in the examined samples.

Although HRQoL, primarily in medicine, is viewed through factors that influence health, the overall Quality of Life, which is examined in this study, covers all aspects affecting the lives of people. It is common nowadays to determine Quality of Life by both objective and subjective factors. According to Barcaccia et al. (2013), researchers often rely on the World Health Organization definition (WHO, 1997) whereby Quality of Life implies an individual's perception of the position of life in the context of the culture and the value systems in which they live and in relation to their goals, expectations, standards and concerns. It depends on physical and mental health, the level of independence, social relationships, personal beliefs, as well as the relationship to salient features of their own environment.

One of the main issues regarding Quality of Life is the question of what components it includes. Cummins (1997) believes that Quality of Life contains an objective and subjective component and that each of these consists of seven domains:

health, emotional well-being, material well-being, productivity, close relationships with other people (family, friends, partner, significant persons), security and social community. Apart from objective indicators and subjective assessments of all the specified domains, Quality of Life is also influenced by personal development, values and aspirations in different areas and in different periods of life. According to this theory, people have developed mechanisms enabling them to maintain a constant level of subjective Quality of Life in variable conditions. If environment changes markedly or if there is a change in certain psychological variables of an individual, a temporary violation of the optimal level of subjective assessment of Quality of Life occurs; however, in time, the person returns to the level of Quality of Life characteristic of him/her.

It is well known that Subjective Well-Being is most correlated with Quality of Life, and sometimes these two are used as synonyms (Anđelković & Hadži Pešić, 2013).

There are two prominent approaches to the definition of this construct: hedonistic that emphasizes the role of happiness, positive affect, the absence of negative affect, and satisfaction with life by authors such as Diener and Lyubomirsky and eudomonistic approach of Rogers, Reichs, Watermen who underline the importance of positive psychological functioning, the actualization of human potentials, realization of the essential nature of man (Petrov et al., 2011). What is common to the mentioned authors is the idea that it is a multi-dimensional construct which includes both hedonistic and eudomonial aspects.

Subjective Well-Being is defined as an evaluation of one's own life. This evaluation is at the same time a cognitive judgement, as well as an emotional response to various events. Subjective Well-Being includes several distinct components: 1. life satisfaction or satisfaction with various domains of life such as marital and business domains, the way of spending spare time, satisfaction with one's own household; 2. the existence of positive emotions and moods for a longer period of time (pleasant emotions and moods); 3. rare presence of negative emotions (depression, stress and anger); 4. assessment of one's own life as fulfilled and meaningful (Diener, 2003). Research has shown that extroversion, optimism, internal locus of control and self-respect are significantly correlated with Subjective well-being (Hadži Pešić &Anđelković, 2013). On the other hand, the presence of positive and the absence of negative emotions, as two important components of Subjective well-being, are associated with good physical health, which is one of the dimensions of Quality of Life. Behavioural and biological processes are the basis of this link. There is a correlation of positive well-being and multiple biological systems. Numerous studies have shown the relationship between well-being and neuroendocrine, inflammatory and metabolic biomarkers. In addition, measurements of biological activity during the day have shown the correlation of well-being, cortisol levels, blood pressure, and heart rate. The effect of well-being was observed, in psychophysiological studies, as the reduction of reactivity to physiological stress, as well as a more effective recovery from stress. Findings indicate that the experience of Subjective Well-Being has cardiovascular, neuroendocrine, immune and metabolic correlates which have a

protective role related to health. They are independent of socioeconomic influences, healthy behaviours, and negative affective states (Hadži Pešić & Anđelković, 2013).

Bearing in mind the similarity of the concepts of Subjective Well-Being and Quality of Life, but also the importance of chronic diseases for both of them the aim of this study was to examine the predictive role of the presence of certain chronic somatic diseases and Subjective Well-Being (positive attitude towards life and positive affectivity) in relation to the dimensions of Quality of Life (physical health, mental health, social relations, environment).

Method

Sample

The study was conducted on a stratified sample of 2023 Serbian citizens (M = 39.35, SD = 14.02, 57.2% women and 42.8% men). The sample is part of a wider geographic cluster sample compiled within the within the project "Indicators and Models of Harmonization of Professional and Family Roles"in Serbia in 2011.

Instruments

PORPOS battery - a test battery specifically designed for the research purposes with 389 items. The battery, contains short scales for assessing *Subjective Well-Being, Quality of Life*, as well as a *check list for the assessment of the presence / absence of 12 chronic somatic diseases.*

The scale of Subjective well-being consists of two subscales - Positive attitude towards life (an example item "To live is wonderful") and Positive affectivity (an example item "I often feel happy and exhilarated"). Each subscale consists of two items taken from the Short Scale of subjective well-being (Jovanović & Novović, 2008).

Quality of Life Questionnaire - a shortened and adapted version of WHOQOL-BREF (*World Health Organization Quality of Life-Brief*, 1998) by World Health Organization. It consists of 13 items to which a respondent provides answers through a five-step self-assessment scale of the Likert type. The obtained data on Quality of Life are operationalized through four domains: physical health, psychological health, social relations and environment. Domains include: *Physical health* (activities, medication and treatment requirement, the capacity of energy, mobility, the presence of pain, sleep quality, work capacity related to health; *Psychological health* (satisfaction with body-appearance, negative and positive emotions, self-confidence); *Social relations* (interpersonal relations, social support and sexual activity); *Environment* (financial sources, opportunities for recreation and rest). Examples of items: "*How satisfied are you with the support provided to you by others? Do you have enough money for your needs?*"

The presence of chronic somatic diseases has been confirmed on the basis of a checklist of 12 chronic diseases: skin diseases, cardiovascular diseases, bronchial

asthma, rheumatic diseases, gynaecological and urological diseases, migraine, gastric ulcer or duodenal ulcer, ulcerative colitis, hyperthyroidism, diabetes and malignant diseases, whereby the respondents were asked to check the disease(s) they suffered from.

Data analysis

In order to examine the predictive role of the presence of the above listed chronic somatic diseases and the dimensions of Subjective Well-Being (Positive attitude towards life and Positive affectivity) in relation to the dimensions of Quality of Life (physical health, psychological health, social relations, living conditions), hierarchical linear regression was used, whereby the model was composed of chronic somatic diseases that proved to be the most frequent and the dimensions of subjective well-being as predictors, while the dimensions of Quality of Life were considered as individual criteria.

Results

Among the examined chronic somatic diseases, the most common were heart diseases (15.6%), rheumatic diseases (13.3%), migraine (8.2%) and skin diseases (6.3%). Therefore, they are included in further analysis of the results. The results are shown in Table 1.

Table 1: *Frequency of the presence of the examined chronic somatic diseases on the representative sample of Serbian citizens*

Diseases	skin diseases	cardiova-scular diseases	bronchial asthma	rheumatic diseases	gynaecolo-gical and urological diseases	migraine	gastric ulcer	duodenal ulcer	ulcerative colitis	hyperthy-roidism	diabetes	malignant diseases
Frequencies	127	316	91	270	126	166	54	23	9	69	64	26
Percentage	6.3%	15.6%	4.5%	13.3%	6,2%	8.2%	2.7%	1.1%	.4%	3.4%	3.2%	1.3%

Table 2 presents the results of the physical health prediction as a dimension of Quality of Life based on chronic somatic diseases (skin diseases, heart diseases, rheumatic diseases and migraine) and dimensions of Subjective Well-Being (Positive attitude towards life and Positive affectivity).

Table 2: *Chronic somatic diseases and subjective well-being as predictors of Physical Health*

Criterion: Physical Health										
Predictors	1st step					2nd step				
	B	SE (B)	β	t	p	B	SE (B)	β	t	p
Skin diseases	-2.174	1.045	-.048	-2.080	.038	-1.876	.981	-.041	-1.913	.056

Predictors	B	SE (B)	β	t	p	B	SE (B)	β	t	p
Cardiovascular diseases	-.728	.731	-.024	-.996	.319	.487	.690	.016	.706	.480
Rheumatic diseases	1.083	.779	.033	1.390	.165	1.805	.733	.055	2.463	.014
Migraine	-2.500	.928	-.062	-2.695	.007	-2.147	.871	-.053	-2.465	.014
Positive attitude towards life						2.131	.374	.178	5.705	.000
Positive affectivity						2.211	.348	.200	6.353	.000
Model Summary	R =.085; R² =.007; Corrected R2 =.005; SE =11.02; F =3.465**					R =.357; R² =.128; Corrected R2 =.125; SE =10.33; Δ R2 =.120; F =46.08**				

The results indicate that the examined chronic somatic diseases account for 0.7% of the variance of physical health as a dimension of Quality of Life, whereby skin diseases and migraine are significant predictors in the first step. By adding the dimensions of Subjective Well-Being to the model, the percentage of explained variance increases by an additional 12%; therefore, a model composed of chronic somatic illnesses and the dimensions of subjective well-being as predictors, accounts for a total of 12.8% of the variance of physical health as a dimension of Quality of Life. Rheumatic diseases, migraine and both dimensions of Subjective Well-Being are distinguished as significant predictors. Thus, after adding of the dimensions of Subjective Well-Being to the model, skin diseases cease to have a significant share in the cumulative variance of physical health.

Table 3: *Chronic somatic diseases and subjective well-being as predictors of Psychological Health*

Criterion: Psychological Health										
Predictors	1st step					2nd step				
	B	SE (B)	β	t	p	B	SE (B)	β	t	p
Skin diseases	.386	1.260	.007	.307	.759	.308	1.253	.006	.246	.806
Cardiovascular diseases	-2.212	.889	-.060	-2.488	.013	-2.020	.889	-.055	-2.273	.023
Rheumatic diseases	2.017	.967	.051	2.086	.037	2.052	.964	.052	2.129	.033
Migraine	-.300	1.127	-.006	-.267	.790	-.464	1.123	-.010	-.413	.679
Positive attitude towards life						2.108	.481	.148	4.384	.000
Positive affectivity						-.815	.449	-.062	-1.813	.070
Model Summary	R =.068; R² =.005; Corrected R2 =.002; SE =13.14; F =2.137					R =.131; R² =.017; Corrected R2 =.014; SE =13.06; Δ R2 =.012; F =5.307**				

When it comes to psychological health as a dimension of Quality of Life, a model composed of chronic somatic diseases does not have a significant share in the total variance, although heart diseases and rheumatic diseases have an important individual contribution to mental health. If the dimensions of Subjective Well-Being are included in the model, the model as a whole becomes significant, and the total amount of the explained variance of mental health is 1.7%. Heart diseases and rheumatic diseases are distinguished as significant predictors with the addition of a Positive attitude towards life as a cognitive component of Subjective Well-Being.

Table 4: *Chronic somatic diseases and subjective well-being as predictors of Social Relations*

Predictors	Criterion: Social Relations									
	1st step					2nd step				
	B	SE (B)	β	t	p	B	SE (B)	β	t	p
Skin diseases	-4.986	2.095	-.054	-2.379	.017	-4.393	1.945	-.047	-2.259	.024
Cardiovascular diseases	-8.531	1.471	-.136	-5.800	.000	-6.079	1.371	-.097	-4.433	.000
Rheumatic diseases	-6.502	1.590	-.096	-4.091	.000	-5.081	1.477	-.075	-3.439	.001
Migraine	-5.291	1.865	-.065	-2.838	.005	-4.727	1.732	-.058	-2.729	.006
Positive attitude towards life						3.805	.744	.156	5.111	.000
Positive affectivity						5.464	.696	.241	7.852	.000
Model Summary	R =.212; R² =.045; Corrected R2 =.043; SE =22.07; F =22.04**					R =.424; R² =.180; Corrected R2 =.177; SE =20.47; Δ R2 =.135; F =68.42**				

All of the examined chronic diseases are distinguished as significant predictors of social relations as a dimension of Quality of Life, whereby this model accounts for 4.5% of the total variance of social relations. By adding the dimensions of Subjective Well-Being, the percentage of the explained variance of social relations increases by additional 13.5%, so that the total amount of the explained variance of the criteria is 18%, whereas all of the chronic somatic diseases and both dimensions of Subjective Well-Being are distinguished as significant predictors.

Table 5: *Chronic somatic diseases and subjective well-being as predictors of Environment*

Predictors	Criterion: Environment									
	1st step					2nd step				
	B	SE (B)	β	t	p	B	SE (B)	β	t	p
Skin diseases	-2.898	1.887	-.035	-1.536	.125	-2.254	1.779	-.027	-1.267	.205
Cardiovascular diseases	-3.545	1.329	-.063	-2.667	.008	-1.310	1.260	-.023	-1.039	.299
Rheumatic diseases	-6.605	1.411	-.111	-4.681	.000	-5.210	1.333	-.087	-3.908	.000
Migraine	-5.168	1.688	-.070	-3.062	.002	-4.486	1.592	-.061	-2.817	.005

Positive attitude towards life		2.929	.679	.133	4.314	.000
Positive affectivity		4.677	.634	.229	7.375	.000
Model Summary	R =.170; R^2 =.029; Corrected R2 =.027; SE =20.04; F =14.08**	R =.374; R^2 =.140; Corrected R2 =.137; SE =18.87; Δ R2 =.111; F =51.20**				

Chronic somatic diseases account for 2.9% of the variance of the Environment as a dimension of Quality of Life, with significant partial contribution of heart diseases, rheumatic diseases and migraine. When the dimensions of Subjective Well-Being are included in the model, the percentage of the explained variance in environment increases by 11.1%; therefore, chronic somatic diseases and the dimensions of Subjective Well-Being account for 14% of the variance of environment, whereas rheumatic diseases, migraine and both dimensions of Subjective Well-Being have a significant predictive role. Cardiovascular diseases with the addition of the dimensions of subjective well-being cease to be a significant predictor of the environment as a dimension of Quality of Life.

Discussion

The main aim of this study was to examine the predictive role of certain chronic somatic diseases (skin diseases, cardiovascular diseases, bronchial asthma, rheumatic diseases, gynaecological and urological diseases, migraine, gastric ulcer or duodenal ulcer, ulcerative colitis, hyperthyroidism, diabetes and malignant diseases) and Subjective Well-Being (Positive attitudes towards life and Positive affectivity) in relation to the dimensions of Quality of Life (physical health, psychological health, social relations and environment).

The most common among the examined diseases were cardiovascular diseases (15.6%), rheumatic diseases (13.3%), migraine (8.2%) and skin diseases (6.3%), and they are included in the further analysis of the results. According to the available data, cardiovascular diseases and malignant tumours accounted for more than three-quarters of all causes of death in Serbia in 2006 (Strategy for chronic non infective disease prevention and control in Serbia, 2006), whereby cardiovascular diseases accounted for more than half of all deaths (57.3%) in the mortality structure. Data from 2010 show that the prevalence of heart disease was 157 men and 31.7 women per 100 000 inhabitants at the age of 40-44, which is the average age of the sample in our study, that is, 255.6 men and 71.1 women per 100 000 inhabitants at the age of 45-49 (*Serbian Acute Coronary Syndrome Registry*, 2012). Thus, heart diseases, apart from being the most common, are also the diseases with the highest risk of fatal outcome. When it comes to rheumatic diseases, the prevalence of arthritis as one of the most frequent rheumatic disease, and other rheumatic diseases in the United States in 2012 was estimated at about 23% (Centres for Disease Control and Protection, 2012), which is a slightly higher percentage compared to the frequency of rheumatic diseases in Serbia in 2011. As for the frequency of migraine, it is about

12% in the general population (according to Nešić et al., 2013), which is also slightly higher than the frequency of this disease in our sample. Skin diseases represent a wide range of diseases. The most common among them are various types of eczema and dermatitis, prevailing from 1-10% in the general population depending on the type (Vesić, 2013), which is in line with the frequency of skin diseases in our sample.

The established results generally indicate that both chronic somatic diseases and Subjective Well-Being are significant for predicting Quality of Life, i.e. its individual dimensions, but also that the dimensions of Subjective Well-Being proved to be stronger predictors in the total variance of individual dimensions of Quality of Life, than it is the case with the examined chronic somatic diseases.

If we consider the results for individual dimensions of Quality of Life, chronic somatic diseases and the dimensions of Subjective Well-Being account for 1.7% to 18% of the variance of individual dimensions of Quality of Life. The smallest share of these predictors is in the total variance of psychological health, whereby the model becomes significant only by adding the dimensions of Subjective Well-Being in the second step. Heart diseases with negative share, rheumatic diseases with positive contribution and positive attitude toward life as a cognitive component of Subjective Well-Being, also with a positive contribution, are distinguished as significant predictors. The association of heart diseases and psychological health can be understood from the standpoint of uncertainty, acuteness, and the potential closeness of death that these diseases imply more than other examined diseases (e.g. Adamović, 1984, Hadži Pešić, 2009). Cardiovascular disorders are more common in persons with certain psychological structures, specific behavioural styles, and people who are prone to negative emotionality (e.g. Stožinić, 2010), which may also be negatively related to psychological health. On the other hand, the finding of a positive share of rheumatic diseases for psychological health remains unclear and requires further verification. The small share of these predictors in the overall variance of psychological health and the fact they are not distinguished as a significant model comprised only of chronic somatic diseases may be explained by the operationalization of psychological health (WHO, 1998) as a criterion which primarily involves satisfaction with the body appearance, self-esteem and the presence of positive and negative emotions. Thus, the results of the study imply that chronic somatic diseases and Subjective Well-Being have a small share in relation to these provisions of psychological health.

A model composed of chronic somatic illnesses and the dimensions of Subjective Well-Being as predictors accounts for approximately the same percentage of variance in physical health and living conditions - 12.7% of the overall variance of physical health, i.e. 14% of the total variance of environment. Rheumatic diseases and migraine are distinguished as significant predictors of both physical health and environment, whereby rheumatic diseases have a positive share in the variation of physical health, and negative in relation to environment. In this case also, the finding of a positive partial contribution of rheumatic diseases remains unclear. Physical health implies, among other things, mobility, working ability, activity, sleep quality, but also the absence of pain (WHO, 1998). It is known that rheumatic diseases are

characterized by pain, difficult mobility, stiffness of extremities (e.g. Nešić et al., 2013). Therefore, the question of the direction of the established relationship is raised. One of the possible explanations may be that in this research the questionnaire did not specify individual diseases from the group of rheumatic diseases, hence different educational and age structure of the sample may not have recognized certain diseases as rheumatic. In addition, a degree of severity of certain rheumatic diseases is different, which does not necessarily impair functioning in the physical sense. In any case, the finding requires verification in future research. The negative proportion of rheumatic diseases in the total variance of environment can be understood in relation to the mere explanation of this dimension, which implies realization of possibilities for recreation and relaxation that can be impaired by pain, but also by the difficulty of movement most commonly caused by these diseases (WHO, 1998). The difficulty moving and the deprivation it causes may be related to financial difficulties, which also fall within the dimension of environment. Rheumatic diseases also have a negative contribution to overall variance in social relations as a domain of Quality of Life; therefore, they are in a negative relationship with interpersonal relations, the ability of a person to receive social support and to function satisfactorily in the sexual sphere. Limitations in movement in rheumatoid arthritis as one of the most common rheumatic diseases can be understood in that the severity of the disease, social resources (i.e. social network) and personal resources have independent, additive effects on Quality of Life related to health and disability. Social and personal resources affect Quality of Life in relation to health and disability directly or indirectly, modifying the elements of the process of coping (Nicassio et al., 2011). On the other hand, as it is the case with cardiovascular diseases, persons of certain psychological structure i.e., those people who control expressing emotions, suppress negative feelings, have obsessive behavioural characteristics are also susceptible to rheumatoid arthritis (Adamović, 2005), which can be associated with difficulties in interpersonal functioning and contribute to the reduction of social support.

  Migraine contributes negatively to the variance of physical health and environment, but it is also a negative predictor of social relationships as a domain of Quality of Life. The severity of migraine pain may vary. 25% of migraine patients have ≥4 severe attacks per month, 48% have 1-4 severe attacks, and 38% have ≤1 severe attacks per month. 90% of migraine patients have some disability associated with headache, and approximately half of them are severely disabled and require resting in bed (Jensen & Stovner, 2008), which is a negative predictor in relation to the specific, already mentioned characteristics of these domains of Quality of Life. The disability and the pain associated with migraine also contribute to the disturbance of social relations, i.e. may influence a withdrawal from interpersonal relationships. The results of the studies suggest that migraine reduces Quality of Life more than any other chronic somatic disease (Merikangas & Lateef, 2011). A part of disability among patients with a headache may be caused by comorbidities that require an adequate care (Jensen & Stovner, 2008), and another part may also be associated with the financial costs resulting partly from direct costs of treatment, but much more because of the loss of work productivity and sick leave (Berg & Stovner,

2005). Therefore, migraine is a disease that affects and compromises many domains of Quality of Life.

In terms of social relationships, a model composed of chronic somatic diseases and the dimension of Subjective Well-Being accounts for 18% of the total variance. All of the examined diseases are distinguished as significant negative predictors, whereby the greatest partial contribution is related to cardiovascular diseases, and the smallest to skin diseases. Of all the examined chronic diseases in this study, skin diseases are distinguished as a significant negative predator only in relation to social relationships. The finding can be understood in that the skin represents the largest organ of the body which is in contact with the external environment, that is, an organ that has a communicative function more than other organs (e.g. Nešić et al., 2013); therefore, various visible skin diseases may contribute to the withdrawal from social relations, but also to the reduction of sexual activity due to the discomfort caused by the visibility of these diseases. On the other hand, most skin diseases, in contrast to other examined diseases in this study, do not cause such disability in other domains of functioning, and many of them are not necessarily painful, which may explain the finding that skin diseases are not predictive in other domains of Quality of Life.

The dimensions of Subjective Well-Being - positive attitude towards life and positive affectivity are distinguished as predictors for all dimensions of Quality of Life, except for psychological health, in case of which only the cognitive component is distinguished as significant. It is well known that Quality of Life and Subjective Well-Being depend on a number of factors, whereby Subjective Well-Being correlates with Quality of Life to the greatest extent (Anđelković & Hadži Pešić, 2013). The established finding indicates the importance of subjective dimensions such as cognitive assessments and emotional states of a person, in relation to the overall experience of Quality of Life. The result is consistent with the opinion that the two components of subjective quality of life are included in the notion of Subjective Well-Being in which life satisfaction is represented through a long-term cognitive component, and a sense of happiness through a short-term, affective (Diener & Ratz, 2000), but also with the view that quality of life implies general satisfaction with life of a person who estimates his or her life (Miberg, 1993).

Positive affectivity is distinguished as a dimension of Subjective Well-Being, which has the highest partial contribution in the prediction of physical health, social relations and environment. The experience of satisfaction, happiness, excitement, liveliness that this dimension implies is a part of the goal-oriented behaviours which make a person establish interpersonal relationships, expand social network and seek potentially rewarding situations that may contribute to the feeling of happiness (Basson, 2008), and these are also the provisions of social relations as a domain of Quality of Life. Furthermore, the experience of positive emotions is associated with increased activity and mobility (Diener, 2003), which are characteristics of physical health as a dimension of Quality of Life, but also with creativity, sociability, altruism, which relates to social relations and living conditions as a dimension of Quality of Life. The findings also indicate that positive emotions may be associated with reduced reactivity to stress and more efficient recovery from it, but at the same

time can have beneficial effects on cardiovascular, neuroendocrine, metabolic and immune activities, which has a protective function regarding physical health (Septoe, 2011). It is also assumed that a general positive view of the world, i.e. a cognitive component of Subjective Well-Being, is necessary for the normal functioning of each person. This view is in line with the opinion of Cummins et al. (1998) that Quality of Life is maintained by homeostatic control, that is, people have developed mechanisms that enable them to maintain a constant level of subjective quality of life in variable objective conditions (Anđelković & Hadži Pešić, 2013)

Conclusion

The results of the conducted study and the share of Subjective Well-Being in the variance of all domains of Quality of Life are in accordance with the findings of various researchers of this phenomenon that have shown that Quality of Life is related to Subjective Well-Being to a greater extent than to economic factors and health status of the participants. The findings confirm the ideas arising from the latest research into positive psychology about the significance of positive emotions and the absence of negative ones for a person's quality of life. The future researchers in this field should certainly place emphasis on the study of positive experiences that enable a person to develop and function optimally (Hadži Pešić and Anđelković, 2013).

Regarding the limitations of the conducted study, it is necessary to mention the operationalization of chronic somatic diseases that were, in this case, examined by a check list, whereby data on the presence of certain diseases within a specific group of diseases were not collected. In addition, there is a lack of data on the length of the diseases, the course of illness and the length of remission, which may be related to various domains of Quality of Life. Therefore, the recommendation for the future studies is to direct attention to examining the potential moderator and mediator effects of these variables.

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Original scientific paper

FAMILY AS A METAPHOR AND METAPHORS OF BULGARIAN FAMILIES FOR WORLD, FAMILY, CHILDREN AND SELF

Abstract

Metaphors are powerful tool that shape the meaning making process and influence thoughts and actions. They find correspondence between different spheres of human life and transfer qualities, structures and organization from domains of direct perceptual experience into more abstract fields. The process of mapping is implicit, mostly out of awareness which triggers powerful effects. Metaphors convey messages and evoke feelings and moral standards.

Family as a living experience for every human being is extensively used as a metaphor. In family studies metaphors are used to conceptualize the way different approaches define family realities.

A specially designed method based on sentence completion task is used to assess the spheres of overlapping and discrepancies in theoretical and implicit conceptualizations of family, world, children and self.

Total of 271 respondents grouped in 65 families participated in the study. Consistency in answers of family members points out towards the implicit shared world view; differences are revealing an interesting side path of meanings with high potential value in counseling process and research insights about subtle, submissive discourses in families and communities. Metaphors of family members are important for understanding individual behaviors and contemporary social actions and reveal potentials and directions for introduction of change.

Keywords: metaphor, family, world view, children, self, sentence completion, family counseling

Introduction

Bulgarians used to define the location of the country as being "in the cross-road", implying the position between East countries and cultures and Western Europe. Experience of almost endless transition from traditional to modern and even postmodern society, values and mentality is a pervasive feature in self-description of Bulgarian people. Demographic trends follow the main characteristic of European population in terms of aging population and high divorce rates, and lead in statistics

for negative natural increase and migration (National Statistic Institute). At the same time traditional values of family, industriousness, children, education etc. are expressed in formal documents of institutions and political parties and shared in informal every-day talks. Discrepancy in behavior (represented in demographic statistics) and verbalized goals and strivings need further research and explanation.

Main aim of the presented study is to reveal how the strivings towards postmodern, individualistic society co-exists with traditional values of patriarchal model in individuals' and families' metaphors chosen for the *world, family, children* and *self*.

Metaphors in language and mind

Drawn from etiology of "Metaphor" (which means transferring, bringing beyond) and as Ricoeur (in Rosenblatt, 1994) points out psychological consequences of the use of metaphors are to open a new imaginative and emotional dimension. The process of evoking vivid imagery is used to bring abstractions closer to human senses and perceptual reality, making them if not more comprehensible at least more memorable.

It is hardly ever possible to address an abstract sphere of experience and resist the temptation of using metaphors. Before definition in terms an example would be given: To paraphrase the famous Freudian quotation: "Dreams are the royal way to the unconscious", the author would state that: "Metaphors are a picturesque path along the coastline of theories". It might not be clear what exactly a metaphor is but associations triggered by well-known psychoanalytic quotation set a certain frame of reference, and emotions evoked by the image of a coastline path keep imagination awaken.

How could "metaphor" be defined with the use of metaphorical act? Is it not confusing and evoking logistic contradiction? The contradiction has an easy solution by defining "metaphor" as a word for both a concept and a result of the process of transferring and finding correspondence between two systems. As word-concept, metaphors could be explicitly or implicitly stating that one thing is (in certain aspects) another e.g Dream is a way, Metaphor is a path. "Way" and "path" are metaphors for respectively dream and metaphor. Conceptual Metaphor Theory (CMT) defines the first two concepts as "source concepts". They are often experientially concrete and possess some kind of 'bodily basis' (Johnson, 1987). The last two concepts are called "target concepts" and because of their abstract nature and impossibility or improbability to be directly experienced or perceived they are metaphorically conveyed to another sphere oh knowledge or experience. That kind of usage is well known in poetic language; in fact it is considered the very core of poetry. But metaphors are not only poetic figures and epiphenomena of language. Lakoff (1993) formulates the position that metaphors have to do equally if not more with thought. Human knowledge is conceptualized with the help of generalizations and correspondence between domains. As a process, metaphor is actively drawing two

systems together to find the spheres of overlapping. The process is called mapping and Lakoff describes it as a finding systemic set of correspondence between so called source domain and target domain.

The definition of "metaphor" in contemporary cognitive linguistics and as it is applied in humanities is "a cross-domain mapping in the conceptual system" (Lakoff, 1993). A conceptual domain is any coherent organization of human experience. Every theory as a high level of abstraction presupposes a hierarchical organization of concepts. Lakoff & Johnson (1980) state that conceptual metaphors shape not only meaning but the way people think and act.

Cognitive Linguists claim that language in its structure reflects the organization of cognition. The influence has to be traced in both directions: 1) human cognition provides insights on language phenomena, and 2) language structures, semantics and pragmatics reveal constructions in perception and thinking. A constant process of reflection and interaction between language and real-life experiences is encoded in conceptual metaphors. They are shaped by experience (sensor-motor body experience) and shape perception of surrounding environment and could be used as a foundation for understanding of socio-cultural constructions of knowledge.

Different languages have at least the potential to construct different conceptual ecological epistemologies (Bateson, 1972). Linguist had researched extensively the lexical diversities in languages reflecting the ecological, historical and socio-cultural surroundings. Well known examples are many words and expressions for "rain" in British English, different words for "wind" in African languages and the highly elaborated system for nomination of kinship in Balkan languages. It is not only at the level of lexeme it is also the construction of expressions and even clichés of certain historical époque or social movements that are exemplary for the way of perceiving the world and explanations given for the moving forces behind it.

Familyas a metaphor

Presumption that family is an embodied experience of every human being makes it a suitable metaphor for other spheres of social life, e.g politics, education, science, etc. No matter what social or cultural circumstances might be, every baby has a family background of his/her two biological parents. The attitudes and dynamics of acceptance or rejection are not changing the fact that one is a part of a family since the moment of birth (Carter & McGoldrick, 1999). Family is a common ground experience and lived history for everyone. Being in a family is a first-hand experience which makes it (deceivingly) easy to turn "family" into source concept in metaphorical structures. For example: inventors and scientist are claimed to be "fathers" of their theories and creations; many communities in school work or informal settings are presenting or advertising themselves as "one happy family"; authorities and leading figures are called "fathers", "mothers" or respectively "step-mothers". These clichés convey a powerful emotional message even though the specific information is not quite clear. George Lakoff (often presented as "The father"

of CMT) is warning against the "poignant effects" that some Family metaphor might have when used in politics (Lakoff, 1996; Lakoff 2008). The power of metaphors, Lakoff is referring to, (namely "The Strict Father" and "The Nurturing parents") is a consequence of the unconscious process connecting them to wider systems of world views and corresponding moral standards implied in these views. Suggested critical stance for escaping effects of political propaganda devises includes further exploration that makes explicit connections between Family metaphors and hidden moral statements (Lakoff, 1996).

Metaphors for Family in Family Therapy

The Family in Research Focus

Family as an overexploited metaphor when put in a position of an object of research is subjected to metaphorical acts in an attempt to grasp the almost infinite variations in its nature.

Contemporary textbooks of systemic family therapy (Carr, 2006; Barns, 2004; Dallos, & Drape, 2010) are following the tradition established by Bateson in structuring the knowledge and practices in three main epistemological frames called positivism (presupposing that perceptions are a true reflection of reality), constructivism (constructed version of reality is a result of perceptions and belief system) and social constructionism (knowledge of the world is constructed within a social community through language). Family researchers are keeping in mind Korsybski's dictum, 'A map is not the territory it represents, but, if correct, it has a similar structure to the territory, which accounts for its usefulness' (1933) and for more than half a century agree to work without definition of the family. Some theorists claim that the field would only benefit if there is no definition at all (Dallos, 1997). Every definition is a frame, including and excluding at the same time certain phenomena. Contradiction of researching and working with an undefined entity is resolved with the help of the abovementioned metaphor of map and territory. Family therapists are using "maps" to guide their actions. These maps of family realities are grouped around three main metaphors. Families are seen either as mechanisms – with the implication of organized around certain effective goal process; or as living organism – implying stages of development, beginning and end; or as a text – giving infinite possibilities of reading and constructing meaning. The three leading metaphors for family are referred as mechanistic, biological and narrative.

Metaphors in Family Therapy

Therapy as an abstract field of knowledge with concrete consequences is utilizing the use of metaphors ever since Freud. Systemic therapy from the very beginning in the mid-twentieth century is using metaphors as descriptive or prescriptive tool in counseling work with families. The symptoms in family members are seen as a metaphorical expression of the difficulties or conflicts (Onnis et. al., 2007). Whereas

there is no doubt in beneficial use of metaphors in adult therapy the use of specially designed techniques is advisable when children of different ages are included. The use of metaphors is considered an intervention of choice with preschool children only when vivid imagery of therapeutic metaphor is believed to address successfully and reconcile difference in cognitive level (Trad, 1992).

Method

The research was conducted with a specially designed method following the ideology of The Sentence Completion Task. Participants were asked "to complete the sentences giving a metaphor, an image or a symbol". The paper/pencil version included four sentences: The world is…; The family is…; Children are…; I am….. The aim of the research was to reveal the implicit "theories" for family and to compare them with metaphors guiding theoretical approaches in Family therapy. Analyses of answers within one family unit were supposed to give ideas about shared believes and eventually processes of common construction of the world view.

Participants

The sample includes 271 participants (110 males, 161 females), age 3 to 91 years (N=76, 18-30 years), (N=54, 31-45 years), (N=84, 46-65 years), (N=37, 65+ years). Respondents from different generations in one family completed the test. The total number of family units is 65 and 51 of them with 3 to 10 members included fulfilling the condition of at least one representative from three different generations. The rest 9 units were couples, forming one generation. Participants under the age of 18 (N=8) were excluded from the analyses for the reasons of being theoretically at a different stage of abstract concepts' development.

Procedure

Respondents were approached in family units. The completion of the sentences was individual with a help of the researcher in two conditions: 1) elderly respondents (N=12) who claim to be literate but experiencing difficulties in reading small letters and/or handwriting; 2) children under 7 (N=2). In the abovementioned conditions the researcher was reading sentences and transcribing answers. Data were collected for the period October 2013 – February 2016 as part of the research tasks in Master Course of Family Counseling (Psychology, Sofia University).

Answers given in four domains (world, family, self, and children) were divided in different categories independently by the author and by a philologist (M. Mitzkova, PhD). Categories were compared and discussed. After the agreement a code (label/name) was ascribed.

Results

The comparison between intuitive concepts in four domains (*world, family, self, and children*) as given by the respondents and conceptual frames for family used in Family therapy revealed some overlapping as well as new ideas. It was explicitly given in the instruction that words like "big, small, important, good, bad etc." should be avoided but nevertheless almost a quarter of all responses were not coded for not meeting the condition of being metaphors, or images, or symbolic expressions of any kind.

There were no salient tendencies of sex differences in distribution of answers in categories. Analyses based on age/generational differences were not performed because of the small size of the samples. Answers were followed on a family level for ascertaining of shared views and discrepancies.

Metaphors for Family

Metaphors reveal "deep emotional cement" which is often implicit pre-verbal and pre-conscious (Onnis et. al., 2007). Surprise reactions of the respondents after completing the sentences proved the unexpectedness of answers even for themselves.

First three categories (conceptual metaphors) for *family* are coinciding with theoretical approaches.

1. Family is a living organism/organization.

Examples: a tree, root system, a cell, a garden, birds, an orchestra

The notion of a changing, evolving process is developed in the theoretical concept of 'family life cycle'. Some of the major changes and transitions in family life and the implicit ideas of beginning and ending are captured there. Family seen as a cell has 2 meanings in both the original language of the study and in English. Cell as a biological entity is part of organismic metaphor, cell as a "prisoner's cell" is evoking different line of associations. Over interpretations in any direction are to be prevented bearing in mind that the ideological definition of "family as the smallest cell of the society" is a part of the memory code of Bulgarians over the age of 35.

2. Family is a mechanism.

Examples: a pyramid, a machine, a construction, a lamp,

Mechanistic metaphors in Family therapy have been used to underline the importance of organizational principles and norms. The implicit idea of "one answer", "one right way of functioning" is making these metaphors rare.

3. Family is a narrative.

Examples: a fairy-tale, a photograph

A small number of respondents is giving metaphors in narrative approach but consistency of this metaphor in all four domains is pointing at a strong influence of some contemporary theories. It is interesting to compare the influence of educational and/or vocational sphere on the choice of metaphors, but these data were not collected in the presented study.

4. Family is a container.

Examples: a castle, a cave, a lake, a shelter, a port, a home

Lakoff and Johnson (1980) state that classical categories are understood metaphorically in terms of bounded regions, or "containers". More than half of the coded answers are in this category which might be an argument in favor of the idea that family is still experienced as an important and central, "classical" part of life. There were however few answers stating explicitly the opposite: "Family is an anachronism" or "Family is out of fashion". The contradictory views about place and space of/for family in contemporary life are expressed but not elaborated. The design of research including people in family units prevents further exploration but gives an idea for comparison group of individuals living out of family units to be approached.

5. Family is possession.

Examples: a treasure, gold,

The category of possession has no counterpart in theoretical field of Family therapy but it reveals an important philosophical and ethical contradiction. Expression "having a family" is fixed in many languages and clearly indicates a possession. The same category appears and is even more numerous in metaphors for *children*. The duality of "having" and "being" needs to be addressed again in the context of world view and self-definitions.

6. Family is a meaning.

The last category is not exactly a metaphor. It was extracted from answers as an example of reflexive loop. A paradox of trying to find individual "meaning" of certain concept and receiving the answer "the meaning" needs further exploration.

Metaphors for the world

The idea of "ecosystemic epistemology" (Bateson, 1972) is widely used to describe the process of consolidating intuitive knowledge of the world within a family or any other group of people. Shared understanding of the surrounding environment is functioning as a basic unifying principle for identification with larger groups. When it is applied to the family, disregarding of differences, people are participating in a common struggle to achieve a meaningful explanation about events and phenomena, especially those, having direct implications in their lives.

1. World is a War.

Examples: a jungle, a game, a computer simulation.

Metaphors for the *world* confirm or contradict implicit idea given in family metaphor. The main premise is that family metaphor is positioning the entity called family into a broader framework – society, world, and universe. For example: if a family is a part of political, ethnic, religious, etc. minority it is highly probable a war-like view of the world to be developed.

2. World is a container

 Examples: an ocean, a village, a world web, a hive, a pot.

Classical container metaphor is again given for the world. Often family and world metaphors are coordinated in a hierarchical fashion.

3. World is an organization

Examples: cosmos, chaos, circulation, boundary-less

Concept of organization chaos – cosmos both reveal the underlying idea that structure or organizational principle is presupposed to exist. On a deeper level consequences of choosing cosmos are connected to more optimistic world view, whereas the other side is linked to a pessimistic view and apocalyptic expectations. In several family units prevailing pessimistic view and disappointment were common features for answers of the people from all three generations.

4. World as a narrative

Example: a book

5. World is a potential

Examples: a challenge, an adventure, an opportunity, a dream

6. World is a stage

Examples: theater, playground, circus,

The last three concepts could be integrated respectively "potential" into "organization" or "narrative" and "stage" into "container". The choice to be listed as separate categories is due to their specific aspect that needs further elaboration.

Metaphors for children

Children were the only domain where tendencies of generational differences in answers were observed. Generation of grandparents used more often Time metaphor (Examples: future, masters of time) or Emotions metaphor (Examples: hope, joy, pride). Kövecses (2005) proposed that cultural aspects of emotions, metaphorical language about the emotions, and human physiology are all part of an integrated system. When emotions are used as a metaphor for children it reveals the most intimate experience of connectedness and continuity, and at the same time differentiation but without alienation. Emotions bring color, energy and vitality which describe the way some respondents perceive the children.

Generation of parents were using Possession metaphor (Examples: treasure, present, precious materials) and Meaning metaphor. Emotion metaphors were occasionally given and definition of children as responsibility and obligation made more obvious the inner conflicts of desires and norms and imposed expectations. Common for all three generations was the organismic metaphor and presentation of children as small animals / plants.

Younger generation, being in a position of children themselves which is doubling to a certain extent the metaphor for Self were giving more descriptive

definitions expressing ambivalence (Examples: death and happiness, teachers and students, mirrors, doubles, projections of parents, problems). In another context (counseling or therapeutic) controversies and ambiguities in metaphors for *children* could be a starting point for enriching mutual understanding, revealing fears and giving voice to submerged discourses.

Metaphor for Self

Metaphors for *self* were the most banal – social roles, living nature – birds, animals, human being…; or the most poetic ones: sand particle in the universe, volcano, hurricane, a wrinkle of wisdom, a kite.

Self-definitions given with humor and acceptance are characteristics of a matured mind, others – implying irony and bitterness are poetic expressions of suffering. Potential power of validating or altering self-experiences should be taken into consideration before introducing metaphors from this domain into family space.

Discussion

People and family groups are sensitive to ideologies and discourses "fashionable" in society (Dallos & Draper, 2010). Influences are never direct but absorbed and modified into the "family culture" as a compromise between conservative traditions and current dynamics. Implicit world views are rarely expressed but powerfully guiding actions and filtering perceptions. The modified method of sentence completion is active but nonintrusive approach to belief system of individuals and families. Applied in research procedures it is granting a chance to different voices and contradictory views in the family to become more salient. Potential benefits of its application for the counseling and therapeutic process are to be further explored (Rosenblatt, & Xiaohui, 2011).

Quest and attentive listening for metaphors is an open door (to use another metaphor), inviting new meanings to come into the conversation and co-construction of reality.

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Original scientific paper

RELATIONS BETWEEN SELF-ESTEEM, ACCEPTANCE OF TRADITIONAL GENDER ROLES, QUALITY OF ROLES AND WORK FAMILY CONFLICT AMONG EMPLOYED PARENTS FROM SERBIA[2]

Abstract

This study examined the structure of relations between self-esteem, acceptance of traditional gender roles, parent-role quality, partner-role quality, job-role quality and work- family conflict among employed parents from Serbia. The appropriate scale of PORPOS (battery, constructed for the needs of the project 179002, whose goal was to examine the diversity of relationships at work and in the family in Serbia in 2011) was given to the sample, which consisted of 887 employed parents (average age: 44.3). The results were analyzed for work-to-family conflict and family-to-work conflict separately. Self-esteem, acceptance of traditional female role, parent-role quality, partner-role quality and job-role quality had an effect on work-to-family conflict, where effects of self-esteem, acceptance of traditional female role and job-role quality were direct; parent-role quality and partner-role quality were completely achieved through job-role quality, while effect of self-esteem was partially mediated by it. Regarding family-to-work conflict, only self-esteem and parent-role quality had independent contribution predicting it.

Key words: self-esteem, acceptance of traditional gender roles, quality of roles, work-to-family conflict, family-to-work conflict

Introduction

Each person, as a member of certain society, simultaneously has different positions, according to which he takes on certain roles (Rot, 2008). Roles and expected behavior from persons at certain positions are not always mutually

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consistent in a person. By employing of family females, conditions for new type of conflict, work-family conflict were created (Hedrih, 2013). Now, both partners are engaged, both in work and in family, so they have to coordinate requirements. Representatives of conflict theory consider requirements from work and family to be mutually incompatible (Zadeck, 1987, according to Hedrih, 2013). According to it, work– family conflict is defined as "a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus & Beutell, 1985, p. 77). These authors claim that conflict can be a consequence of shortage of time to perform responsibilities in both domains, or a consequence of tension experienced in one area which can jeopardize answering to demands in other area. Sometimes work demands different type of behavior, e.g. aggressive, then one that is required by family needs. We can differentiate family-to-work conflict and work-to-family conflict, where, in first case, family responsibilities are set before work responsibilities, while the other type of conflict happens when work responsibilities have higher priority, due to which family suffers.

The question is which factors could be significant for experiencing these conflicts. Byron (2005) discovered that work variables are related more to work-to-family conflict, while non-work related variables had a greater impact on family-to-work conflict. One of the results is that job stress, family stress and family conflict had the strongest associations with both work-to-family conflict and family-to-work conflict.

This study, along variables regarding work and family, like quality of perfuming the role, examined effects of some personal variables like person's self-esteem of and their attitude towards the distribution of the gender role.

So, one of the questions was: does high self-esteem makes a person more ready to deal and respond adequately to demands of work and family?

Baumeister (1988, p. 694) considers self-esteem to be evaluative component of self-notion, and defines it as "the positivity of the person's evaluation of self". Studies have shown that self-esteem has positive correlation with job satisfaction and achievement (Judge & Bono, 2001), life satisfaction, and negative correlation with loneliness, anxiety, bitterness, irritability and depression (Rosenberg, 1985, according to Chubb, Fertman, & Ross, 1997). According to Heatherton and Wyland (2003), persons with high self-esteem handle challenges and negative feedback better, confident that they are respected and considered valuable by others, which enables them to have full and happy life. In contrast, persons with low self-esteem often have negative view of the world, and low self-esteem is correlated with depression, loneliness, shyness and alienation. According to self-affirmation theory of Steele (1988, according to Baumeister, 1998), positive view of self can be important affective resource in dealing with stress. In contrast, persons with low self-esteem are not efficient in dealing with these situations, because they don't think that they have positive traits they could direct their attention to and have some comfort, so failure and negative feedback discourage them easily (Spencer, Josephs, & Steele, 1993, according to Baumeister, 1998). It can be expected that persons with higher self-esteem will deal with challenges of coordination of demands of work and family more easy.

Next imposing question is what are those demands imposed by family and weather will person experience more intensive conflict if he/she does not consider those demands a part of his/her role. According to traditional values, male gender-role is to be a provider, while traditional female-role implies child and home care (Amato & Booth, 1995). In contrast to strictly differentiated roles, contemporary attitudes imply fading and erasing of these boundaries, and expanding of functions which are done in family by male and female, which is reflected in redistribution of house works and managing of family resources.

If person kept traditional views, which are not in concordance with division of labor in modern society, which implies employment of females, he/she will certainly cross this imaginary boundary, and act in disharmony with his/her attitude, by engaging in work for which he/she does not consider a part of his/her role, which can amplify experienced conflict between work and family. For example, if married employed females has positive attitude toward strict gender role distribution, and accepts traditional role of mother and home-maker, and besides that she has partner-role in marriage and job-role, will she evaluate the conflict between family-role and job-role as more intense? Will the experience of this conflict be changed with accepting of traditional male role, now when he isn't the only one who is providing and is also included in home-making and child care?

Results from Thornton's study (Thornton, 1989, according to Amato & Booth, 1995) showed that, between 1960s and 1980s, views about gender-role distribution became less traditional, but, other studies have shown that views about education and employment of females softened more than views about her family-role (Spence, Deaux & Helmreich, 1985). Results of studies on Serbian sample have shown that male respondents are more accepting of traditional female role compared to female respondents, although there were some females agreeing with said job distribution (Belić & Jovanović, 2013). If we exclude attitudes, and look at real engagement of males and females in Serbia, data from National institute for statistics (2012) show that females spend two hours in average doing paid work, and around five hours doing house works, while males work four hours a day doing paid work, and two hours doing home, unpaid work. Although share of males and females doing house and job (paid) work is different and in concordance with traditional gender-role distribution, results have shown that both males and females are engaged in both fields, which is leaving room for conflict.

This study tried to answer one more question: will conflict be different depending on how person evaluates its satisfaction and stress in performing in parent-role, partner-role and job-role?

According to scarcity theory (Goode, 1960, according to Meleis, Norbeck, & Laffrey, 1989), a person who has more roles will not have enough resources for performing in all those roles, so he/she will feel overwhelmed and experience the conflict between those roles, and his/her well-being will be decreased. Quality of performing a certain role is defined as difference between experienced satisfaction and stress created by performing said role (Meleis et al., 1989). On of widely used theories for explaining this conflict, which takes in consideration the quality of performance in

roles, is conservation of resources theory (Gradney & Cropanzano, 1999). According to this theory, people tend to form and protect their resources, which can also refer to quality of performance in certain roles. Work-family conflict occurs because of "resources being lost in the process of juggling both work and family roles" (Grandey & Cropanzano, 1999, p. 352). In the model given by Frone, Russell, & Cooper (1992), when we talk about work-to-family conflict, we take in consideration work-related factors, like job-role quality, while in case of family-to-work conflict family-related factors are emphasized, family-role quality among others.

According to results of one study implemented on 180 employed couples with children, experience in performing family and work role was important for their experience of work-family relation (Marshall & Barnett, 1993). Respondents evaluated their multiple roles as benefit when they had less expressed traditional views about gender-role distribution, they evaluated job-role and family-role quality as better, while evaluated partner-role quality wasn't significant predictor of work-family gains. In contrast, when it was about work-family strains, respondents experienced them more intensive if they were less satisfied with parent-role quality, and more satisfied with job-role quality. Other studies have shown that job-role quality (Barnett, Marshall, Raudenbush, & Brennan, 1993) and satisfaction in parental and marital roles (Greenberger & O'Neil, 1993) are predictors of decreased psychological distress for both males and females.

Results from one study ((Biernat & Wortman, 1991) have shown that evaluation of quality of mother-role decreased with increase of husband's involvement in child care. One of possible interpretations is that asking for help increases stress in females because they experience it like sign of weakness and failure in performing in their role.

Main problem of this study is examining relations between self-esteem, acceptance of traditional gender roles, quality of roles and work-family conflict among employed parents from Serbia. Hypotesis is that this conflict will be experienced as less intensive with increase in self-esteem and evaluated quality of performance in parent-role, partner-role and job-role, and it will be experienced as more intensive with accepting traditional gender-role distribution.

Method

Sample

Sample used in this study was a subsample of a geographical cluster sample of 2023 residents of Serbia who participated in the Study of diversity of work and family relations in Serbia (Hedrih, Todorović, & Ristić, 2013). The sample was collected in 32 rural and urban settlements, distributed across administrative districts of Serbia. Subsample used for the current study consisted of 887 employed parents. Of that sample, 39.3% were male, 60.7% female. Average age of the sample was 44.3 years (SD= 9.7).

Instruments

Participants completed the PORPOS battery, i.e. a compilation of short scales and marker questions, created for the purpose of assessing a number of psychological constructs, conative psychological dispositions; family and partner relations and roles; functioning in workplace and functioning related to workplace; work and family relations (conflict and permeation); sociodemographic variables; one's job characteristics (Hedrih, Todorović, & Ristić, 2013). For the purposes of this research, the data were obtained by the following scales: Scale of global self-esteem which contains two items from The Rosenberg Self-Esteem Scale (Rosenberg, 1965); Scale for testing of expression of attitude about traditional gender-role distribution; Scale of quality of roles, adapted on base of Role Quality Scale (Tsai, 2008), which contains two subscales which examine role satisfaction and role stress; Work-to-family conflict scale, consisted of 6 items; Family-to-work conflict scale, consisted of 4 items. Items in all of them used a five-point Likert type scale for registering participants' responses.

Results

Correlations between self-esteem, acceptance of traditional male role, acceptance of traditional female role, job-role quality, parent-role quality and partner-role quality, work-to-family conflict and family-to-work conflict are presented in Table 1.

Table 1. *Correlations between self-esteem, acceptance of traditional gender roles, quality of roles and work family conflict*

	f-w conflict	w-f conflict	partner-role Q	parent-role Q	job-role Q	female role	male role
self-esteem	-0.26**	-0.22**	0.31**	0.27**	0.32**	-0.15**	-0.03
male role	0.08*	0.05	-0.03	-0.01	-0.04	0.17**	
female role	0.11**	0.12**	0.00	-0.07	-0.08*		
job-role Q	-0.20**	-0.38**	0.47**	0.49**			
parent-role Q	-0.25**	-0.26**	0.53**				
partner-role Q	-0.22**	-0.24**					
w-f conflict	0.30**						

*p < 0.05
**p<0.01

Abbreviations: f-w conflict – family-to-work conflict; w-f conflict – work-to-family conflict; partner-role Q – partner-role quality; parent-role Q – parent-role quality; job-role Q – job-role quality; female role – acceptance of traditional female role; male role – acceptance of traditional male role.

Results given in Table 1 show that work-to-family conflict and family-to-work conflict were negatively correlated to self-esteem, job-role quality, parent-role quality and partner-role quality, and positively to acceptance of traditional female role. These two types of conflict had positive correlation between them. Examined evaluations of quality of performing certain roles also had positive correlation. Besides, as self-esteem increased, job-role quality, parent-role quality and partner-role quality also increased, and acceptance of traditional female role decreased. Acceptance of traditional female role was positively correlated to acceptance of traditional male role, which was negatively correlated to job-role quality.

After that, hierarchical linear regression was conducted in which work-to-family conflict was set as criterion, and other variables were set as predictors, excluding acceptance of traditional male role, which was not correlated with presupposed criterion.

Table 2. *Hierarchical Linear Regression: self-esteem, acceptance of traditional female role and quality of roles as the predictors of work-to-family conflict*

		Beta	p-value	Model summary	p-value
				Work-to-family conflict	
1. step	self-esteem	-0.21	0.00	$R=0.21$ $R^2=0.04$	0.00
2. step	self-esteem	-0.20	0.00	$R=0.23$	0.00
	traditional female role	0.09	0.01	$R^2=0.05$ R^2 Change=0.01	0.01
3. step	self-esteem	-0.14	0.00	$R=0.31$	0.00
	traditional female role	0.09	0.01	$R^2=0.09$	
	parent-role quality	-0.21	0.00	R^2 Change=0.04	0.00
4. step	self-esteem	-0.12	0.00	$R=0.32$	0.00
	traditional female role	0.09	0.01		
	parent-role quality	-0.16	0.00	$R^2=0.10$	
	partner-role quality	-0.12	0.00	R^2 Change=0.01	0.00
5. step	self-esteem	-0.08	0.03	$R=0.40$	
	traditional female role	0.08	0.02		0.00
	parent-role quality	-0.07	0.07	$R^2=0.16$	
	partner-role quality	-0.04	0.37		0.00
	job-role quality	-0.29	0.00	R^2 Change=0.06	

The results shown in Table 2 indicate that self-esteem, acceptance of traditional female role and quality of roles, that is, the combination of presupposed predictors, explained 16% of the score variance on the Work-to-family conflict scale, and that the independent contribution is accomplished by all predictors, until we included job-

role quality in model, which explained 6% of the Work-to-family conflict variance by itself.

According to those results, model is adopted, and results obtained by testing that model are shown in Figure 1 and Table 3.

Figure 1. *Relations between self-esteem, acceptance of traditional female role, parent-role quality, partner-role quality and job-role quality and work-to-family conflict among employed parents from Serbia*
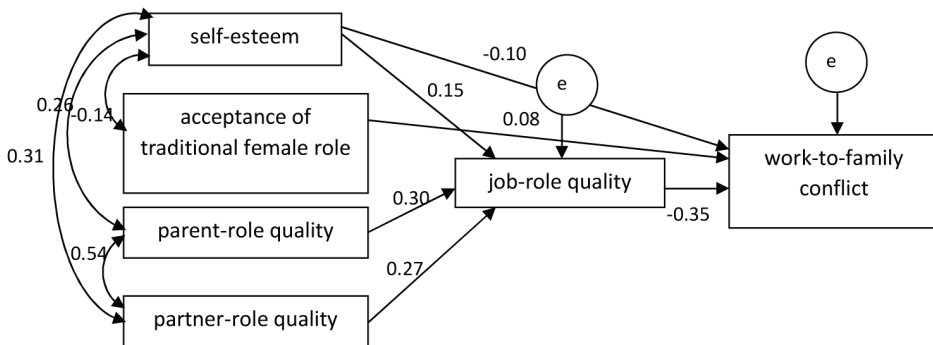

Table 3. *Model Fit Summary*

χ^2 (5)	RMSEA	NFI	CFI
12,703	0.042	0.985	0.991
p=0.03			

Based on values of fit index, shown in Table 3, it can be concluded that model (Figure 1) is fit with empirical data.

Data shown of Figure 1 indicate that self-esteem, acceptance of traditional female role, parent-role quality, partner-role quality and job-role quality have effect on work-to-family conflict. The effect of self-esteem to work-to-family conflict is partially direct and partially mediated through job-role quality. Beside this, acceptance of traditional female role and job-role quality have direct effect on work-to-family conflict, acceptance of traditional female role and job-role quality, while parent-role quality and partner-role quality completely achieve their effect by job-role quality. With the increase of self-esteem, there is an increase in evaluation of job-role quality and decrease in intensity of experienced work-to-family conflict. Persons who are more accepting of traditional female role feel more work-to-family conflict. Regarding parent-role quality and partner-role quality, if a person evaluates them as better, evaluated job-role quality is higher, so work-to-family conflict is less expressed.

Same analysis was done for determining predictors of work-to-family conflict (Table 4).

Table 4. *Hierarchical Linear Regression: self-esteem, acceptance of traditional female role and quality of roles as the predictors of family-to-work conflict*

| | | Family-to-work conflict | | | |
		Beta	p-value	Model summary	p-value
1. step	self-esteem	-0.26	0.00	R=0.26 R²=0.07	0.00
2. step	self-esteem	-0.26	0.00	R=0.27	0.00
	traditional male role	0.05	0.16	R²=0.07 R² Change=0.00	0.16
3. step	self-esteem	-0.25	0.00	R=0.27	0.00
	traditional male role	0.04	0.22	R²=0.07	
	traditional female role	0.04	0.27	R² Change=0.00	0.27
4. step	self-esteem	-0.19	0.00	R=0.35	0.00
	traditional male role	0.05	0.19	R²=0.12	
	traditional female role	0.03	0.34		0.00
	parent-role quality	-0.23	0.00	R² Change=0.05	
5. step	self-esteem	-0.18	0.00	R=0.35	0.00
	traditional male role	0.04	0.21		
	traditional female role	0.04	0.30	R²=0.12	
	parent-role quality	-0.21	0.00		0.29
	partner-role quality	-0.04	0.29	R² Change=0.00	
6. step	self-esteem	-0.18	0.00		0.00
	traditional male role	0.04	0.21	R=0.35	
	traditional female role	0.03	0.32		
	parent-role quality	-0.20	0.00	R²=0.12	
	partner-role quality	-0.03	0.42		0.43
	job-role quality	-0.03	0.43	R² Change=0.00	

Results shown in Table 4 show that combination of these predictors is explaining 12% of the score variance on Family-to-work conflict scale. Only self respect and parent-role quality have independent contribution. By increasing self-esteem and evaluated parent-role quality there is a decrease in experienced family-to-work conflict.

Discussion

Main goal of this study was discovering factors which could be significant for subjective experience of work-family conflict in employed parents. Results

have shown that factors are not the same when we are talking about family-to-work conflict and work-to-family conflict.

Self-esteem has separated as protection factor in both cases. If self-esteem was evaluated as higher, family-to-work conflict and work-to-family conflict are evaluated as less expressed. This kind of relationship is consistent with the assumption of self-affirmation theory (Steele, 1988, according to Baumeister, 1998), according to which self-esteem makes the person more resistant to stress. Likewise, Heatherton and Wyland (2003) consider that persons with high self-esteem are better in facing chalenges, and achieving balance between job and family field is one of the chalanges.

Positive attitude towrad traditional female role increased work-to-family conflict, but not family-to-work conflict. There is partial concordance betwen these results and data obtained by Tsai (2008), who discovered that employed mothers who were less accepting of traditional male and female roles have more positive emotions regarding coordination between work and family. Working with factors of work-family gains, Marshall and Barnett (1993) discovered that employed parents observed their multiple roles as benefit when they had less expressed traditional views about gender-role distribution. According to Tsai (2008), by creating positive attitude toward gender-role equality, employed mothers are decreasing cognitive disonance, so they have more positive emotions regarding this relation. Contrary to it, it can be expected that persons which kept traditional views in modern society, where females are paid to work, outside the house, so males are included in house activities (although not equaly by National Institute of Statistics of Serbia, 2012), will experience more intense work-family conflict. Results of some studies show that work-family conflict occurs more often with females which get more instrumental support from their husbands (Tsai, 2008), and that their evaluation of mother-role quality performance is decreased with their husbands joining in child care (Biernat & Wortman, 1991). This could be explained with experiencing of personal inadequacy in responding to the demands of the role, which could be even more intense, with bigger acceptance of the traditional gender-role distribution.

Results of this study also show that accepting of traditional female role is predictor of work-to-family conflict, but not family-to-work conflict. This is in concordance with gender role definition – female is the one who takes care about children and home, by working, female percieves work demands as interfering with the role she accepted. Males with traditional views put work ahead of family, so they invest a lot of time and energy in it, lacking time and energy for their family. It is possible that males find it difficult to handle family responsibilities which are imposed on them, so they have more difficulties in coordination of their roles, than those which do not have that type of views, which make those responsibilities easy for them.

Although negative correlation between self-esteem and accepting traditional female role does not allow concluding the direction of relationship, it is possible to make certain assumptions. According to Heatherton and Wyland (2003), persons with high self-esteem are better facing challanges, probably including challenges of

modern society, which are also percieved in equal work distribution. They probably form egalitarian views more easy than persons with low self-esteem, which get anxious because of challenges, so they are less ready to accept new roles.

This study has also shown that parent-role quality, partner-role quality and job-role quality had an effect on work-to-family conflict. Only job-role quality had direct effect, while parent-role quality and partner-role quality achieved their effect via job-role quality. So, if a person percieves parent-role and partner-role quality as better, the higher is evaluated job-role quality, which decreases work-to-family conflict. These results are in concordance with hypotesis from resources theory (Grandey & Cropanzano, 1999), according to which loosing of resoruces such as quality of one's roles, in the process of juggling both work and family roles, creates conflict between these areas. These results are in concordance with results of study done by Tsai (2008), where employed mothers who had lower job-role quality and lower family-role quality experienced higher work-to-family conflict. Family-role quality in that study included numerous roles, which is partially complicates comparation of these results. In study done by Marshall & Barnett (1993), predictors of the work-family gains were job-role quality and parent-role quality, if respondents evaluated them as higher, work-family gains were higher, while if the parent-role quality was less satisfying, and evaluted job-role quality was higher, work-family strains were higher.

Considering that factors of work-to-family conflict were examined, it's not strange that job-related factor (job-role quality) had direct effect. Evaluation of partner-role quality and parent-role quality turned out to be important for experience of job-role quality, which could be explained by significance of family in this environment, with predominantly colectivistic values (Hofstede, Hofstede, & Minkov, 2010). Persons who are more satisfied with quality of their response to work-place demands have more time and energy to deal with family needs. In contrast, with decrease in experienced parent-role quality and partner-role quality, there is decrease in evaluated job-role quality, which contributes to more intense experience of interference between work and family.

When we are speaking about family-to-work conflict and quality of roles, only parent-role quality was singled out as important factor, which is partially in concordance with results of study done by Tsai (2008), in which family-role quality alone made the only significant contribution to family-to-work conflict, also with results from Byron's study (2005). The more person considers to be successful in parent-role, the less he considers that family responsibilities disrupt his achievement at work. Person who is satisfied with his parent-role and doesn't perceive it as stressful has more energy to deal with work responsibilities, than person who considers that he doesn't manage his parent-role well and then carries that tension to work.

Models we've presented here are just partially in concordance with model from Frone et al. (1992). In order to complete the picture about work-to-family and family-to-work conflicts factors, it is neccessary to conducts additional studies, and this study had for its goal to disocover at least a part of it.

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Original scientific paper

Hexaco Traits and Career Adaptability as Predictors of Perceived Person – Organization Fit

Abstract

The goal of this study was to investigate if HEXACO traits and career adaptability can predict different dimensions of person - organization fit. Also, the second goal were to analyze if career - adaptability mediates relations between basic traits and P-O fit. The sample consisted of 390 employees from public and private sector in Serbia, including 164 men and 226 women. Results of hierarchical regression analysis showed that HEXACO traits and four dimensions of career adaptability explain 15% variance of P-O fit. In the first step Extraversion and Agreeableness were shown as significant positive predictors. In the second step, confidence was revealed as only incrementally valid predictor from career adaptability domain. HEXACO traits, particularly Extraversion and Agreeableness, significantly predict N-S fit, explaining only 9% of its variance. The variance that career adaptability dimensions share with N-S fit is already completely explained by personality traits. HEXACO traits and career adaptability dimensions together explain about 15% of D-A fit variance. Control and confidence have been shown as positive predictors, Conscientiousness lost its significance in the second step and Extraversion beta coefficient was decreased but remained significant. Control mediatedrelationship between HEXACO traits (Extraversion, Conscientiousness and Openness) and D-A fit and P-O.

Keywords: HEXACO traits, career adaptability, person – organization fit

Introduction

In information age one of the biggest challenges for corporations is to retain employees who contribute the most in achieving organizational goals. Contemporary organizations have recognized that their own success does not depend only on employees' knowledge and skills nor only on characteristics of work environment, but also on congruence between person and organization (Chatman, 1989; Kristof, 1996; Kristoff - Brown & Billsberry, 2013).It is not unusual that competent employee who has quite good work conditions decides to leave the organization because his own values differ or confront to those which the company promotes

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(Kristof-Brown, Zimmerman & Jonson, 2005). Therefore, it is very important to research different aspects of person - organization fit.Hence, there are a lot of studies aiming to identify diverse consequences of person - organization fit on a company performance, individual success and satisfaction (Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Liu, Liu & Hu, 2010). Also, researchers are interested in revealing antecedents and factors, mostly from a domain of an organizational ambient, that contribute to a better fit between person and organization (Asthakova, 2012; Cable & Parsons, 2001; Kim, Cable & Kim, 2005). However, only a few studies that have investigated individual factors as predictors of fit can be found (Gardner, Reithel, Cogliser, Walumbwa & Foley, 2012;Ehrhart & Makransky, 2007; Resnick, Baltes & Shantz, 2007), in which they are considered only as antecedents of fit in congruent organizational environments. Nevertheless, it is important to notice that in the numerous studies, the person - organization fit has been assessed subjectively by employees in a way that they have been asked to rate a level of their congruence with organization (Cable & DeRue, 2002;Edwards, Cable, Williamson, Lambert & Shipp, 2006; Kristof-Brown et al., 2005).Still, we should be aware that personal characteristics undoubtedly in some way can influence the individual's perception (Allport, 1961; Funder, 2001; Terborg, 1981; McCrae & Costa, 2003). Because of that, it is important to explore if some employees, with certain traits and characteristics, are predisposed to assess themselves as more or less fit in any organization in general. Basic personality traits are one group of factors that can influence the way individual is perceiving world around and inside himself. For example, extroverts tend to fit easier in social environment and to perceive it more friendly than the intorverts (Ashton & Lee, 2007; Zimmerman, 2008). Also, high neuroticism can predispose a person to believe less in his own abilities to effically accomplish work tasks and organizational goals (McCrae & Costa, 2003). Besides basic traits there are more narrow characteristics of individual which can be important factors of perceived person - organization fit, such as locus of control (Spector, 1988), narcissism (Raskin & Hall, 1979) etc. Career adaptability (Savickas, 1997) is also one of the characteristics that can be significant predictor of P-O fit (Jiang, 2016) and it is related to basic personality traits at the same time (Teixeira, Bardagi, Lassance, de Oliveira Magalhães & Duarte, 2012). More precisely, the career adaptability might be partially affected by personality traits. For example more conscientious individuals are prone to plan and organize their own career paths more and better (van Vianen, Klehe, Koen & Dries, 2012). Accordingly, our aim is to investigate if HEXACO traits and career-adaptability can predict different dimensions of person - organization fit. Also, we want to analyze if career - adaptability mediates relations between basic traits and P-O fit.

HEXACO model of personality

The HEXACO model (Ashton & Lee, 2007) represents a viable alternative to the dominant Five-Factor solutions, known as Big Five (Fiske, 1949; Goldberg, 1990; Saucier & Goldberg, 1998). HEXACO has been emerged from lexical studies,

which are based on assumptions that traits and characteristics that are important for describing a personality have been coded in the language. Although Big Five (BF) traits have been at first abstracted also from the personality lexicons, the popularity of model has been gained by Costa and McCrae (2003) Five- Factor theory (FFT) which has not been conceptualized based on the results of lexical studies. However, in several studies which have been undertaken in a variety of languages other than English, Ashton and Lee (Ashton, Lee, & de Vries, 2005; Ashton et al., 2004; Ashton Lee, Perugini et al., 2004) have obtained six – factor solutions, which have been shown as replicable as five factors (Lee & Ashton, 2008; Saucier, 2008). A relatively same set of six factors has emerged across more than 10 languages (Lee, Perugini, et al., 2004), which has been confirmed afterwards in the personality lexicon of the English language (Ashton et al., 2004).

The sixth factor has included descriptions as pretentious, sneaky, fair-minded, undevious, tricky etc. thus it has been named Honesty/Humility (Ashton & Lee, 2007; Ashton et al., 2004). These descriptions have been corresponded, at some extent but not completely, with Agreeableness from the Big Five. Besides Honesty/Humility, the other five HEXACO traits are: Emotionality, Extraversion, Agreeableness, Conscientiousness and Openness to experience, so HEXACO represents the acronym of traits names. Extraversion, Conscientiousness and Openness are in general the same as their pairs in Big Five solutions, but there are slight differences when it comes to Emotionality and Agreeableness (Ashton & Lee, 2007). Big Five Agreeableness is broader than same HEXACO trait (Ashton & Lee, 2007; Ashton, Lee & de Vries, 2014), because it envelops the part of Honesty/Humility domain. HEXACO Agreeableness and Honesty both subsumed a kind of cooperation, but in different ways. First represents a cooperation with others in a way that person allows to be mistreated or manipulated by someone else. On the other hand, Honesty/Humility refers to the situation in which individual has a chance to deceive someone and chooses not to (Ashton & Lee, 2007). HEXACO Emotionality lacks anger, which is not the case in Big Five solutions, especially when it comes to FFT where the anger is one of the main components of Neuroticism. In HEXACO model, lack of anger is subsumed in Agreeableness (Ashton & Lee, 2007; Ashton et al., 2014). Even if it is not as explored as BF/FFT in organizational context, HEXACO has been shown to be useful in prediction of job performances (Johanson, Rowatt & Perrini, 2011; Oh, Le, Whitman, Kim, Yoo, Hwang & Kim, 2014), different productive (Jonason & O' Connor, 2017) and counterproductive organizational behaviors (Marcus, Ashton & Lee, 2013; Zettler & Hilbig, 2010).

Career adaptability

Career adaptability is a psychosocial construct that denotes an individual's resources for coping with current and anticipated tasks, transitions, traumas in their own occupational roles (Savickas, 1997). Career-adaptability resources are the self-regulation strengths or capacities that a person may draw upon to solve the unfamiliar, complex, and ill-defined problems presented by developmental vocational tasks,

occupational transitions, and work traumas. These resources are not at the core of the individual, they rather reside as the intersection of person-in-environment (Savickas & Porfeli, 2012). Adaptability as psychosocial resources or transactional competencies is more changeable than traits (Savickas & Porfeli, 2012).

Career adaptability constitutes a self-regulatory construct consisting of four dimensions (concern, control, confidence and curiosity) that aid in current and anticipated work-related transitions (Savickas, 2013). Concern refers to future time orientation and recognition that present actions are linked to career aspirations. Control indicates self-discipline and taking responsibility for one's career. Curiosity pertains to being open to new experiences, self and environmental exploration, and subsequent identification of career opportunities. Confidence refers to one's belief in the capacity to overcome challenges and obstacles that may be encountered while pursuing career aspirations (Tabera & Blankemeyerb, 2015).

Researches indicated that career adaptability is related to many work and life outcomes including turnover, career satisfaction, success, job performance evaluations, promotability, work engagement, career commitment, self-esteem and well-being (e.g., Chan & Mai, 2015; Guan et al., 2013; Porfeli & Savickas, 2012; Vianen et al., 2012). And as Guan et al. (2013) argued, the roles of these self-regulatory resources that are incorporated within the constuct of career-adaptability can also promote employees to perceive person-environment congruence. For example, career concern directs employees to spend time and energy in planning how to fit into the characteristics of work settings; career control assists them with work matters based on careful decisions and conscientious behaviors; career curiosity facilitates them in exploring the self and the environment; and career confidence ensures that employees will sustain their efforts and persistence should difficulties emerge when they blend into their jobs and organizations.

As Guan et al. (2013) argued, the roles of these self-regulatory resources finally promote employees to perceive person-environment congruence. For example, career concern directs employees to spend time and energy in planning how to fit into the characteristics of work settings; career control assists them with work matters based on careful decisions and conscientious behaviors; career curiosity facilitates them in exploring the self and the environment; and career confidence ensures that employees will sustain their efforts and persistence should difficulties emerge when they blend into their jobs and organizations. For example, the positive correlation between career-adaptability and P-O fit is also empirically confirmed in Jiang's (2016) study.

When it comes to relations with personality traits, previous researches have shown that the career adaptability correlated positively with extraversion, openness to experience, conscientiousness and agreeableness (Teixeira et al., 2012; van Vianen et al., 2012) and negatively with neuroticism (Li et al. 2015).

Person – organization fit

P-O fit is based on the concept of person – environment fit (PE fit) and Kristof (1996, p. 4 - 5) defines it as the "compatibility between people and organizations that occurs when at least one entity provides what the other needs or they share similar fundamental characteristics, or both".At the beginning, person-organization fit has been considered in situation of personnal selection process where it is very important for potential employee to perceive a company as congruent to himself (Vivien Chen, Lee & Yeh, 2008). However, it has been recognised that the perceived fit in a selection situation can be changed when individual actually starts to work in organization (Cable & Judge, 1996). Accordingly, person-organization fit of employees has begun to be studied. The relationships linking the perceived person and environment/organization to perceived P-E fit can be understood by discriminating three approaches to the study of P-E fit. In some studies, perceived person and environment are measured separately and combined so they represent the concept of P-E fit (Cable & Judge, 1996). This approach is known as the atomistic. The molecular approach refers to studies that directly assess the perceived discrepancy between the person and environment (Rizzo, House, & Lirtzman, 1970). The molar approach is based on the direct measure of the perceived fit or similarity between the person and environment, where respondents are asked to rate the fit between themselves and their organization (Cable & DeRue, 2002; Judge & Cable, 1997; Saks & Ashforth, 1997). However, some authors sugest (Kristof – Brown, 2013;Leung & Chaturvedi, 2011) that P-E fit when operationalised through molar approach is better predictor of positive outcomes in organizational behavior context that through atomistic and molecular approach. Cable and DeRue (Cable & DeRue, 2002) recognize three levels of perceived fit: person – organization fit, person – job fit and needs – supplies fit. Person – organization fit perceptions have most often referred to congruence estimations between employee's personal values and organization's culture, whereas person–job fit perceptions have referred primarily to congruence estimations between employee's skills and the demands of a job (e.g., Cable & Judge, 1996; Kristof-Brown, 2000; Cable & DeRue, 2002). Needs–supplies fit perceptions are congruence estimations between employees' needs and the rewards they receive in return for their service and contributions on a job (Cable & DeRue, 2002).

When it comes to the studies about antecedents of perceived PO fit it has been revealed that certain job and organizational characteristics, such as socialization tactics, sallary increase, past promotions, perceived organizational support and organizational values can predict a higher score on perceived P-O fit scales (Asthakova, 2012; Cable & de Rue, 2002). However, there could not be found any study in which individual characteristics have been considered as universal antecedents of P-O fit, regardless of organizational features and expected congruence between the two.

Methods

Procedure and Participants

The data were collected in 2016 year by a number of interviewers who visited organizations and asked employees to participate. The sample consisted of 390 employees from public and private sector in Serbia, including 164 men (42.1%) and 226 women (57.9%). Mean age of participants was 40 years with the oldest participant being 64 and the youngest 21 years old. In terms of education, 42,8% of participants had high school education, 14,9% had an associate degree, 34,1% had a bachelor's degree, 6,9% had a master's degree and 1,3% had a doctorate degree. 12,4% of participants had been employed in their current organization for less than one year, 36,1% had been in the same organization for more than 10 years.

Instrument

Career adaptability

Career adaptability was measured with the Career Adapt-Abilities Scale (CAAS; Savickas & Porfeli, 2012). This scale contains 24 items and uses a Likert response format ranging from 1 (Not strong) to 5 (Strongest). The CAAS consists of four scales with 6 items each that measure concern ("Thinking about what my future will be like"), control ("Taking responsibility for my actions"), curiosity ("Investigating options before making a choice"), and confidence ("Working up to my ability") as psychosocial resources for individuals' career development. The Cronbach's alpha for overall career adaptability was .92, and Cronbach's alphas for subscales were very good: concern (.82), control (.82), curiosity (.85), confidence (.85).

HEXACO-PI-(R) personality measure

Personality traits were measured using the 60-items HEXACO Personality Inventory - Revised (HEXACO-60; Ashton & Lee, 2009). This instrument measures six broad domains of personality: Honesty/Humility ("I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed"), Emotionality ("I sometimes can't help worrying about little things"), Extraversion ("I'm usually the one who makes the first move"), Agreeableness ("I rarely hold a grudge, even against people who have badly wronged me"), Conscientiousness ("I often push myself very hard when trying to achieve a goal") and Openness ("I would enjoy creating a work of art, such as a novel, a song, or a painting") . Each personality dimension is measured with 10 items. Participants were asked to rate their level of agreement for each item using scales that ranged from 1 (strongly disagree) to 5 (strongly agree). All dimension have satisfactory reliability (α>.60).

Person – organization fit

Participants' person – organization fit was measured by 9-items scale developed by Cable and DeRue (Cable & DeRue, 2002). This scale comprised of three dimensions: values congruence ("The things that I value in life are very similar to the things that my organization values"), needs–supplies fit ("The job that I currently hold gives me just about everything that I want from a job"), demands–abilities fit ("My personal abilities and education provide a good match with the demands that my job places on me"). In our study Cronbach's alphas for overall person – organization fit scale was .89 and Cronbach's alphas were .90, .88, .80 for values congruence (P-O fit), needs–supplies fit (N-S fit) and demands–abilities fit (D-A fit).

Results

As it can been seen in Table 1, P-O fit is negatively related to Emotionality (-.127) and positively to Extraversion (.223), Agreeableness (.224) and Conscientiousness (.121) when it comes to personality traits. Also, it is positively correlated with concern (.117), with control (.183) and with curiosity (.132). N-S fit is also correlated positively with Extraversion (.244), with Agreeableness (.113) and with Conscientiousness (.150), while D-A fit is not related to Agreeableness and to Extraversion and Conscientiousness is related (.244 and .186). With career adaptability N-S fit is also correlated positively: with Extraversion (.244), with Agreeableness (.113) and with Conscientiousness (.150), while D-A fit is not related to Agreeableness and to Extraversion and Conscientiousness is related (.244; .186). N-S fit and D-A fit are both positively correlated with all four career adaptability dimensions: with concern (.103; .180), control (.190; .304), with curiosity (.131; .181), as with confidence (.117; .285).

Table 1. *Means, Standard deviations,Intercorrelations Among Study Variables*

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Honesty/Humility	3.62	.68												
2. Emotionality	3.04	.61	.158**											
3. Extraversion	3.55	.52	-.021	-.100*										
4. Agreeableness	3.28	.54	.332**	-.002	.002									
5.Conscientiousness	3.80	.57	.115*	-.114*	.278**	-.058								
6. Openness	3.48	.71	.130*	-.063	.090	.053	.211**							
7. Concern	3.53	.76	-.119*	.022	.229**	-.073	.181**	.187**						
8. Control	3.98	.65	.059	-.077	.285**	.059	.240**	.178**	.492**					
9. Curiosity	3.68	.72	-.092	-.083	.273**	-.027	.323**	.247**	.508**	.575**				
10. Confidence	4.03	.66	-.031	-.102*	.314**	-.070	.349**	.199**	.491**	.599**	.683**			
11. P-O fit	3.31	1.06	.005	-.127*	.223**	.224**	.121*	-.017	.117*	.183**	.132**	.070		
12. N-S fit	3.42	1.03	.042	-.092	.244**	.131**	.150**	.003	.103*	.190**	.131**	.117*	.669**	
13. D-A fit	4.00	.78	.076	-.005	.244**	.073	.186**	.048	.180**	.304**	.187**	.285**	.352**	.537**

* p<.05 ** p<.01

When it comes to relations between HEXACO traits and four dimension of career adaptability, Honesty/Humility is negatively correlated with concern (r=-.119) and Emotionality with confidence (r=-.102). Extraversion,Conscientiousness and Openness are positively correlated with all four dimensions. Extraversion shares the most common variance with confidence (r=.314) and control (r=.285), Conscientiousness with confidence (r=.349) and curiosity (r=.323) as same as Openness (confidence: r=.247; curiosity: r=.199). Based on the results of bivariate correlation analysis, it can be said that three sets of variables are significantly related.

Table 2. *Regression coefficients, Zero – order correlations*

Model		P-O fit		N-S fit		D-A fit	
		β	r	β	r	β	R
1	Honesty/Humility	-.063	.005	.006	.042	.040	.076
	Emotionality	-.091	-.127*	-.062	-.092	.024	-.005
	Extraversion	.192**	.223**	.214**	.244**	.212**	.244**
	Agreeableness	.253**	.224**	.137*	.131**	.067	.073
	Conscientiousness	.093	.121*	.101	.150**	.130*	.186**
	Openness	-.065	-.017	-.049	.003	-.006	.048
	(Step 1) R^2	.123		.091		.083	
	F	8.974		6.395		5.804	
2	Honesty/Humility	-.052	.005	.007	.042	.033	.076
	Emotionality	-.098*	-.127*	-.062	-.092	.034	-.005
	Extraversion	.172*	.223**	.190**	.244**	.143*	.244**
	Agreeableness	.240**	.224**	.128*	.131**	.067	.073
	Conscientiousness	.087	.121*	.090	.150**	.080	.186**
	Openness	-.085	-.017	-.064	.003	-.035	.048
	Concern	.068	.117*	.024	.103*	.014	.180**
	Control	.126	.183**	.124	.190**	.227**	.304**
	Curiosity	.064	.132**	.023	.131**	-.090	.187**
	Confidence	-.145*	.070	-.060	.117*	.204*	.285**
	(Step 2) ΔR^2	.022		.013		.064	
	R^2	.146		.104		.148	
	F	6.459		4.418		6.564	

*p<.05 **p<.01; β – standardized Beta coefficient; r – zero-order correlation; ΔR^2 – R square change.

In order to investigate if the variance that HEXACO traits and career adaptability dimensions share with person - organization fit is the same or not, the hierarchical regression analysis was conducted. The criteria variables were three dimensions of person - organization fit while HEXACO traits were only predictors in the first step of regression. In the second step, four dimensions of career adaptability were also included as predictors.

Six HEXACO traits explain 12% of the P-O fit variance (R^2=.123, $F_{(6, 383)}$=8.947, p<.01) and Extraversion and Agreeableness were shown as significant positive predictors, as it can be seen in Table 2. With inclusion of four dimensions of career adaptability in the second step of the analysis, the coefficient of determination was significantly changed (ΔR^2=.022, $F_{(10, 379)}$=8.947, p<.01), so that two groups of predictors together explain 15% of criteria variance. In the second step, confidence was revealed as only incrementally valid predictor from career adaptability domain, even if it did not have significant zero-order correlation with P-O fit. It means that the variance which P-O fit shares with Extraversion and Agreeableness is the same as that which shares with concern, control and curiosity. However, it should be noted that beta coefficients of both traits were decreased in second step of analysis.

HEXACO traits, particularly Extraversion and Agreeableness, significantly predict N-S fit, explaining only 9% of its variance (R^2=.091, $F_{(6, 389)}$=6.395, p<.05). In the second step, there was not significant change in the determination coefficient. The variance that career adaptability dimensions share with N-S fit is already completely explained by personality traits.

In the first step, Extraversion and Conscientiousness significantly predict D-A fit, explaining only 8% of variance (R^2=.083, $F_{(6, 383)}$=5.804, p<.05). There was significant change in R square in the second step of analysis (ΔR^2=.022, $F_{(10, 379)}$=8.947, p<.01), and HEXACO traits and career adaptability dimensions together explain about 15% of D-A fit variance. Control and confidence have been shown as positive predictors, Conscientiousness lost its significance in the second step and Extraversion beta coefficient was decreased but remained significant.

For better understanding of these relations and to examine if career adaptability mediates effects that HEXACO traits have on the three dimensions of person - organization fit, a Structural Equation Model was tested. Because career adaptability is more narrow than basic traits and could be partially determined by them (Savickas, 2013), only HEXACO dimensions had the status of exogenous variables. The potentially mediating effect is supported by the results of the second step in regression analyses, where the inclusion of four career adaptability dimensions led to the decrease of certain HEXACO traits beta coefficients. The model is developed based on theoretical assumptions and the results of correlation and regression analyses. Accordingly, only confidence and control were included in model, because other two dimensions of career adaptability were not shown as significant in regression analyses. Consequently, the absence of curiosity and concern led to an exclusion of trait Honesty/Humility from the model, because it was not significantly related either to control and confidence or to dimensions of fit. The tested model provided a good fit ($\chi2(13) = 15.44$, p < .01, $\chi2/df = 1.19$, NFI = .98, CFI = .99, RMSEA = .02 [90% CI = .00, .06], p-closeness of fit = .89). As it can be seen in Figure 1, Openness and Conscientiousness do not have a direct effect on dimensions of fit, but the results suggest that they could be related to them indirectly, through control and confidence. On the other hand, Emotionality, Extraversion and Agreeableness have direct effect on P-O fit, N-S fit and D-A fit, but also may have an indirect one, through two dimensions of career adaptability.

To validate if aforementioned indirect effects are significant, the Andrew Hayes' PROCESS macro for SPSS was used. The simple mediation model no. 4 was used on 10000 bootstrap samplesand several indirect effects were shown as significant. When it comes to P-O fit, it was revealed that Extraversion (b=.031, BCa CI [.007, .014]), Conscientiousness (b=.073, BCa CI [.027, .141]) and Openness (b=.051, BCa CI [.018, .104]) achieve small, but significant indirect effects only through control. No indirect effect of HEXACO traits on N-S fit through control or confidence is significant. Extraversion (b=.055, BCa CI [.032, .086]), Conscientiousness (b=.129, BCa CI [.071, .199]), and Openness (b=.041, BCa CI [.011, .093]), have significant indirect effects through control on D-A fit, as same as on P-O fit. So, it can be said that control, as dimension of career adaptability, mediates relations of Extraversion, Conscientiousness and Openess to P-O fit and D-A fit. Of course, it should be mentioned that those indirect effects sizes are small, which is consistent with a lot of previous studies and researches about relations of basic personality traits with different outcomes in context of organizational behavior (Choi et al., 2015; Dostanić & Čizmić, 2017; Johnason et al., 2015; Judge & Bono, 2001; O' Boyle et al., 2015; Suvajdžić & Vujić, 2015).

Figure 1. *Strucutral Equation Modelof HEXACO traits, Career – adaptabiity and Person-organization fit* ($\chi2(13) = 15.44$, p < .01, $\chi2/df = 1.19$, NFI = .98, CFI = .99, RMSEA = .02 [90% CI = .00, .06], p-closeness of fit = .89
Note*:* Standardized estimates are shown

Discussion

The main goal of this study was to investigate if HEXACO personality traits and career adaptability predict different dimensions of subjective, perceived person-organization fit. Furthermore, we wanted to analyze interrelations between two sets of variables in that prediction. In other words, we tested a model in which we assumed that HEXACO traits could determine perceived

person-organizational fit through dimensions of career adaptability.Respectively, the results shown that both, personality traits and four dimension of career adaptability are significantly related with perception of person-organization fit. Those results represent maybe the most important contributions of the research, because in literature it cannot be found a lot of studies which hypothesized and tested such relations. Due to conceptualization of person-organization fit, it is not so surprising that researchers did not assume that individual characteristics could be important antecedents of it. Concept of P-O fit is based on beliefs that certain individual characteristics are important only in specific, congruent organizational environment (Anderson et al., 2008; Chatman, 1989; Gardner et al., 2012; Kristoff, 1996). For example, more agreeable and extroverted individuals perceived greater fit with the clan culture and more conscientious and less open persons perceived a better fit with a hierarchical organizational culture (Gardner et al., 2012). However, these results revealed that there are individual characteristics that predispose person to perceive oneself as more fit in whatever organizational environment. That is, in first place, in consent with definitions of a personality which state that our traits in certain amount influence the way we perceive the world around and inside us (Judge, Bono & Locke, 2000; McCrae & Costa, 2003; Olport, 1969; Terborg, 1981).

To be precise, more extroverted and conscientious individuals tend to perceive themselves in a way that they have better values congruence with organization, that their abilities are matched with job demands and that their needs are more satisfied. However, because of common variance that the two traits share, which could be the orientation to be active and persistent in achieving goals (Ashton et al., 2004;Zimmerman, 2008), only Extravertion is shown to be significant predictor of dimensions of fit, which has direct effect on them. Agreeableness is significant when it comes to dimensions of fit which include relations with others, as it is the case of values congruence and Need-Satisfaction fit. Therefore, cooperation, patience and flexibility can help an individual easier to incorporate values of organization, to be more tolerant and not to have so high demands and expectations from own environment (Ashton & Lee, 2007). Individuals who have higher scores on Emotionality show a slight tendency to perceive themselves as not as competent they should be in order to answer the job demands. This is not surprising due to insecurity, fearfullness and self-doubting which constitute Emotionality trait (Ashton & Lee, 2007; Ashton et al., 2004).

All four dimensions of career adaptability are correlated with three aspects of fit. Those effect sizes are small and career adaptability shares the most common variance with Demands - Abillity fit dimension. This result could be expected, because D-A fit might be more applicable than other two dimensions for a person's entire career, outside the concrete organization as well. Developing and strengthening competencies in particular organization is something that a person who is willing to plan and who anticipated tasks, transitions and traumas in their career span finds very usefull and important (Savickas, 1997). That is mainly

when it comes to the control and confidence as career adaptability dimensions. Still, as concern, control, curiosity and confidence are components of the same construct, that is career adaptability, they are moderately to highly correlated. Accordingly, only control and confidence are shown to be incrementally valid in explaining three aspects of fit, in presence of HEXACO traits as predictors as well. However, that four dimensions of career adaptability do not explain a new amount of Need-Satisfaction fit. The variance that career adaptability dimensions share with N-S fit is the same that they have common with personality traits.

Furthermore, this research has provided indications about interrelationship of basic personality traits and more narrow career adaptability in predicting the person-organization fit. It is revealed that extroverted, more conscientious and opened individuals are perceiving themselves to be more fit in organization because they are prone to be self-disciplined and to take responsibility for their own career. In other words, those three traits determine a person to take responsibility for their own actions in career planning and developing, which is consistent with the results of other studies (Teixeira et al., 2012; van Vianen et al., 2012), and because of that one has tendency to perceive himself as more Person-Organization and Demands-Abillities fit. It seems tenable that person who is outgoing, active, socially bold, opened to learn, organized, careful and disciplined is at the same time more ready to take responsibility for own career, which can lead to person's better fit in organization. However, when it comes to Conscientiousness the mediation is complete, but in case of Extraversion is only partial. Besides boldness, activity and achievement orientation that share with control, other aspects of Extraversion are shown to be important for person-organization fit as well. That aspect of Extraversion could be the positive affect and optimism. Several studies (Dostanić, 2017; Panaccio & Vandenberghe, 2012; Zimmerman, 2008) have shown that because of tendencies for positive affective state, extroverts are more likely to percieve and appraise their own environment, themselves and also the congruence between them as more positive and better. However, the fact that openess does not have significant zero-order correlation with dimensions of person-organization fit, but has significant indirect effect on it through control, it indicates that a relation between personality and important outcomes in context of organizational behavior is very complex and interfered by numerous mediator or moderator variables, which should be considered in future researches.

Limitations and Future Research

We should be aware that effect sizes and coefficients of analyses are mostly small or moderate. And if we consider that the sample size is around 400 respodents, there is a slight risk of making a Type I error. However, small efect sizes are usual and expected when it comes to relations between personality characteristics and more narrow, specific outcome in organizational behavior

context (Choi et al., 2015; Funder, 2000; Johnason et al., 2015; Judge & Bono, 2001; O' Boyle et al., 2015). Additionally, for example, the results of correlation between personality traits and career adaptability are similar to those that Teixeira et al., (2012) and van Vianen et al. (2012) have got.And besides that, the results are in consent with theoretical conceptualisation of significant traits (Ashton & Lee, 2007), career adaptability (Savickas, 1997) and Person-Organization Fit (Cable & DeRue, 2002; Kristof, 1996).

Since this study had a goal to examine paths between three sets of variables, it would be more appropriate to analyze causality directions through a longitudinal than through a transversal research. On the other hand, longitudinal researches are more expensive and more complex, especially in organizational context, where the one of the main problems could be the guarantee the anonymity. Hence, the transversal studies are more efficient and more realizable.

When it comes to the future directions, forthcoming studies should consider to investigate other individual characteristics as antecedents of perceived person-organization fit. For example, it would be interesting to include personal characteristics such as Self-Efficacy (Bandura, 1977), Locus of Control (Spector, 1988), the Dark Triad traits (Paulhus & Williams, 2002), Core self-evaluations (Judge, Locke & Durham, 1997) etc. Also, there is a certain amount of studies which have the goal to investigate job and organizational characteristics as antecedents of perceived P-O fit (Asthakova, 2012; Cable & Parsons, 2001; Kim, Cable & Kim, 2005), but it would be important to analize the relations between them and individual characteristics in predicting different aspects of person-organization fit. At last but not least, in future researches, personality traits and career adaptability should be considered as predictors of different operationalizations of fit (Edwards, Cable, Williamson, Lambert & Shipp, 2006) and as antecedents of congruence between person and some other targets, for example: person - job fit, person - group fit, etc. (Kristof-Brown, Zimmerman & Jonson, 2005).

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