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Common experiences and psychological difficulties during the pandemic: Insights from psychological support sessions¹

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Due to identified mental health difficulties among populations worldwide, evidence-based mental health and psychosocial support interventions are recognized as a priority for the health response to the COVID-19 pandemic. The main aim of this study was to provide in-depth understanding of the common experiences and psychological difficulties among the people affected by COVID-19. The study included 32 persons (28 females), with the average age of 38.5 (SD 13.2), those with a confirmed or suspected COVID-19 diagnosis or those whose family or friends were infected with COVID-19, receiving online psychological support from

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December 2020 to June 2021. Protocols of the support sessions were analysed by relying on the principles of thematic analysis. The study results showed that anxiety, somatization, sadness over the loss of close ones and guilt were the most prominent psychological difficulties among the people seeking psychological help during the pandemic. The main factors which made coping with psychological difficulties more challenging include previous life circumstances, uncertainty and the lack of social support. The study enabled greater understanding of the common experiences and most prominent psychological difficulties, and provided evidence which can be used as a foundation for the creation of more focused psychological programs that could support people during the pandemic.

Keywords: psychological experiences, psychological difficulties, COVID-19 pandemic, psychological support, qualitative study

1. Introduction

1.1. Mental health during the pandemic

The COVID-19 global pandemic was declared on March 2020, and by mid-2022 more than 509 million people worldwide were infected, leading to over 6.2 million deaths (World Health Organization, n.d.). Apart from causing health-related difficulties, the pandemic introduced measures for preventing the spreading of COVID-19 that brought many changes to people's everyday lives, including restricting their social, educational and occupational activities. Furthermore, broader economic challenges emerged, leading to increased unemployment – estimations from early 2020 indicated an expected loss of over 25 million jobs worldwide (International Labour Organization, 2020). While it seems that most pandemic-related restrictions have ceased after two years since its outbreak, long-term effects on the economy, society and public and individual mental health are yet to be examined and seen.

Numerous quantitative and qualitative studies assessing the effects of the pandemic on mental health and psychological difficulties among the general population and medical workers were conducted worldwide. Thus, it was shown that, in addition to fear of infection, worry for one's health and health of the close ones (Wang et al., 2020), the pandemic brought increased levels of uncertainty (Rettie & Daniels, 2021), as well as post-traumatic stress symptoms, confusion and anger due to introduced quarantine measures (Brooks et al., 2020). A study from early 2020, conducted in China, indicated that over half of the respondents reported experiencing moderate or severe psychological difficulties – 16.5% reported moderate to severe depression and 28.8% moderate to severe anxiety (Wang et al., 2020). Results from Serbia from the same period show comparable results – 28.9% and 36.9% of participants showed moderate to severe symptoms of depression and anxiety, respectively (Vujčić et al., 2021). Multinational research conducted in the first half of 2020 in nine developed countries showed that the levels of mental

health difficulties varied from 10% in Norway to 33% in the USA (Williams et al., 2020). Moreover, a longitudinal study examining the prevalence of depression and anxiety in seven countries showed that around a quarter of respondents experienced such symptoms in November 2020 when the crisis was at its peak, while there was a slight decrease in symptoms severity, around 3% each, when measured six months later (Hajek et al., 2022). Bearing in mind the abrupt and harsh changes the pandemic has brought to the everyday lives of people, the reported increased levels of psychological difficulties throughout the crisis do not come as a surprise.

Due to identified and expected mental health difficulties among the general population worldwide, the development and implementation of mental health and psychosocial support (MHPSS) interventions, including assessment, support and treatment, was recognized as a priority for the health response to the COVID-19 pandemic immediately after the pandemic had started (Xiang et al., 2020). In addition to mitigating current acute distress, it could prevent the risk of long-term negative impact on the population's well-being and capacity to cope with adversity (Inter-Agency Standing Committee Reference Group for Mental Health and Psychosocial Support in Emergency Settings, 2020). However, previous studies testing the effectiveness of MHPSS interventions in the context of the pandemic showed not only lack of effectiveness, but also harm some interventions may cause if not adapted to the context of the pandemic (Vukčević Marković et al., 2020). These studies highlighted the need for data-driven interventions tailored to the existing needs for people with a confirmed or suspected COVID-19 diagnosis and their friends and families, and specifics of the broader COVID-19 context. Therefore, it is crucial to understand common experiences and psychological difficulties among persons seeking psychological support due to mental health problems during the pandemic.

1.2. Psychological experiences during the pandemic

Previous qualitative studies providing more in-depth insights into psychological experiences during the pandemic mainly involved nurses (Ahmadidarrehshima et al., 2022; Chegini et al., 2021; Fan et al., 2020; Galehdar et al., 2020, 2021; Kackin et al., 2021; Sun et al., 2020) and other healthcare workers, including frontline doctors, physicians, midwives and clinical pharmacists (Alizadeh et al., 2020; Billings et al., 2021; Kotera et al., 2022; Wang et al., 2022). A recent meta-synthesis focused on qualitative studies that explored healthcare workers' experiences found eight key themes across 46 studies (Billings et al., 2021). These included concern about one's own and others' physical safety, struggle with high workloads and long shifts, desired rest and recovery, and stigma-related experience, while healthcare workers' social relationships with families were experienced as both a source

of support and sources of stress (Billings et al., 2021). Fewer studies were focused on in-depth assessment of psychological experiences of the general population during the pandemic. A study examining the experiences of youth during the pandemic showed increased levels of depression, anxiety and loneliness among youth, as well as social difficulties related to family conflicts and losing important life moments (Branquinho et al., 2020). Other studies assessing experiences of persons hospitalized with COVID-19 indicated the presence of negative emotional experiences such as fear, anxiety, denial and high levels of stress (Jamili et al., 2022; Pei et al., 2021; Sun et al., 2021), while research focused on COVID-19 post-discharge experiences identified psychological distress, feelings of fear and social stigma (Guo et al., 2022; Moradi et al., 2020). Although predominantly identifying negative reactions towards the pandemic, some authors highlighted that it also brought positive psychological experiences, including acknowledgement and appreciation of supportive factors and psychological growth that were present despite actively undergoing COVID-19 adversities (Akbarbegloo et al., 2022; Branquinho et al., 2020; Guo et al., 2022; Jamili et al., 2022; Sun et al., 2021). This conclusion is in line with the findings of a qualitative study on psychological experiences during the pandemic conducted in Serbia, involving both young (Vuletić et al., 2021) and older people (Džamonja et al., 2020). However, this study did not include any of the participants directly affected by COVID-19 in its sample, thus offering only a limited and possibly overly positive insight into the psychological reactions to the pandemic, with questionable implications for clinical practice.

1.3. Present study

Even though many MHPSS programs were introduced during the pandemic and numerous MHPSS practitioners joined in the pro bono provision of psychological support to those in need, to our knowledge, no previous studies provided insights into the specifics of the psychological experiences and psychological difficulties in persons seeking psychological support due to mental health problems specifically.

Therefore, the aim of this study was to provide in-depth understanding of the common experiences and main psychological difficulties faced by the people with a confirmed or suspected COVID-19 diagnosis and their families and friends during the pandemic. The study aimed to provide information on the main issues, the way in which they were conceptualized, and what was perceived as the main source of psychological distress. Furthermore, we aimed at examining the role of the broader COVID-19 context in shaping psychological experiences and needs. Thus, the study results strived to provide a body of evidence allowing for the development of data-driven MHPSS interventions.

2. Method

The study was conducted from December 2020 to June 2021 and included 32 persons (28 females), with the average age of 38.53 (SD 13.24). The inclusion criteria for participating in the study were the following: a confirmed or suspected COVID-19 diagnosis, or having family members with a confirmed or suspected COVID-19 diagnosis, and the person's willingness to receive online psychological support sessions via audio calls or textual correspondence. As part of the project, four trained psychologists provided free online psychological support sessions including psychological first aid and counselling to the persons infected with COVID-19, their family members and friends. Psychological support sessions were promoted through dedicated profiles on social media networks, Facebook and Instagram, and conducted online, via audio calls or textual correspondence. Immediately after the end of each session, psychologists drafted a protocol consisting of a coherent narrative of the session, involving elaborate paraphrasing of psychological experiences that were shared during the session. Topics involving events or facts (i.e. prescribed medication for treating COVID-19 symptoms), but not involving psychological responses to these events or facts, were not included in the protocols since they were beyond the scope of this study. The decision not to record the session was made due to ethical reasons, in order to avoid chances of compromising the psychological support process by instigating distrust and turning the participants away from seeking support. The sample used for this study consisted of 20 audio call sessions, with the approximate duration between 30 and 60 minutes, and 12 written correspondence sessions. All sessions' protocols and textual correspondence used in the study were anonymized by omitting any pieces of information that could lead to revealing the person's identity. The study was ethically approved by the Institutional Review Board (IRB) of the Department of Psychology, Faculty of Philosophy, University of Belgrade (protocol number #2020-069).

The material was processed and coded in MAXQDA Analytics Pro 2020 software. It was further analysed by relying on the principles of thematic analysis (Braun & Clarke, 2006). The themes were developed in an inductive and iterative manner, bearing in mind the objectives of the study. The third author was responsible for developing of the preliminary coding scheme, based on careful rereading and detailed line-by-line coding of the material. The coding scheme and all emerging dilemmas were thoroughly discussed with the first two authors throughout the analysis process. Based on this, the preliminary coding scheme was further developed and modified. All protocols were first analysed as case studies, so as to preserve the contextual specificities, before performing a cross-case analysis. Resolving all dilemmas collaboratively through a discussion and consensus, as well as the iterative process of qualitative data analysis facilitated by the use of the QDA

software, contributed to the rigour of the analysis and credibility of findings. Representative quotes are included in the paper to substantiate and illustrate the analysis. Since they were originally in Serbian, they were translated into English by an experienced translator.

3. Results

In the accounts of persons seeking support we found intertwined various negative experiences and difficulties in functioning and problems with adaptation to significantly changed life circumstances as a result of the pandemic. Although these are usually closely related, we will treat them as two separate topics within the results. First, we will analyse in detail the most common psychological difficulties reported, and proceed with the aggravating circumstances that served as triggers or risk factors when it comes to the inability of people to adequately cope.

3.1. *The most common psychological difficulties*

3.1.1. Anxiety, fear and panic attacks

By far the most common difficulties reported by the participants, present in almost all sessions, concerned the symptoms of anxiety – feelings of agitation, free-floating fear, nervousness and overwhelming uncertainty. For some, especially older participants who lived alone, these feelings were present almost all the time. In other, younger participants, who led a more active life with work and family obligations, anxiety was especially prominent in mornings or evenings, the periods that were not as filled with activities and obligations.

“I don’t know now how to calm this psychosis I have, this anxiety, agora[phobia] that keeps me from functioning. The feeling of complete helplessness and shivers in my body and anxiety, major anxiety, which I can’t keep down. I’ve been having terrible nightmares for the last two nights.” (Client 10, f, 82)

The participants most often described the fear of infection, or re-infection if they had already contracted the disease, as well as the fear of symptoms worsening and permanent consequences of the disease, if they were infected at the time.

“I’m fighting the fear, my anxiety kicked in. I am prone to it, so I have to go through it once again. I haven’t had panic attacks for quite some time now. I’m having trouble sleeping since I had COVID-19 and that’s when my fear started, I keep envisioning myself hooked to a ventilator, having pneumonia, the whole deal. But I have no actual symptoms.” (Client 14, f, 43)

The fear of infection was typically combined with the concern and fear of infecting family members – both the younger ones, i.e. children, as well as the elderly, i.e. participants' parents who belonged to the risk group. This was sometimes associated with the fear of hospitalization, which would imply separation from the children and family and uncertainty as to who would take care of them, because the children, as potentially contagious, would be a risk for the grandparents who, under normal circumstances, could take over that role.

“Mornings were ok, but fear started growing towards the afternoon. Especially because my 8-month-old baby had a fever and because my parents are old and I could do nothing to help them because I was quarantined.” (Client 19, f, 35)

The situation is further aggravated when it comes to persons who, due to previous illnesses, would be exposed to an increased risk if they became infected, especially if they were unable to isolate themselves due to life circumstances.

“Who knows, maybe my husband tests positive now, he can't isolate from me, this is a small house. He's now putting me in danger, he just doesn't realize what could happen, he is acting so irresponsibly. This is a big struggle, big problem and big fear for all of us who got sick. My husband went to see his mother who tested positive, he visited her every day to help her, there was no one else who could do that, I understood that. It's his mother. He says he wears a facemask, that he is being careful, but I still think that is very dangerous for me.” (Client 11, f, 44)

The fear and worry that clients felt was often overwhelming, as it was directed at a whole range of people and negative outcomes. They were preoccupied with problems in all spheres – from personal health and well-being, health of their family members, to problems at work and in the society in general.

“Well, I just can't stop thinking about things. It's either my work or children, household members, mom. My brain is going 300 kilometres an hour. As soon as a symptom appears, I notice something similar.” (Client 22, f, 35)

“When I turn on the TV my heart starts pounding again, I start feeling the fear that something will happen to me, my close ones, if my father is on a business trip, I'm afraid that something will happen to him, dark thoughts. I get upset like all those things are happening to me.” (Client 24, f, 34)

In some participants, anxiety symptoms were so intense that they resulted in panic attacks. Persons who had not had similar difficulties before were especially unprepared for the symptoms of a panic attack, so it was difficult for them to believe that these were not the result of their physical condition (especially if they were infected at the time).

“I’ve never had mental health issues. But now, I’m worried about myself and my mental health. I’ve been COVID-19 positive for ten days now. (...) But I have frequent panic attacks, my breath becomes short, my heart starts beating very hard. And that scares me a lot.” (Client 22, f, 35)

Panic attacks brought a lot of uncertainty into the participants’ daily functioning – they interfered with their work or their ability to stay alone, especially if they were taking care of children.

“Like I’m going to drown, to fall, who will help at times like this, what should I do with the baby? (...) I’m afraid something will happen. I’m afraid of going out for a ride. I feel worst when I wake up. I’m only thinking about what’s the next thing that’s going to hurt, I keep asking myself. (...) I’m sad because I live in fear, because I can’t relax, I’m constantly tense.” (Client 32, f, 33)

3.1.2. Somatization and increased focus on one’s own body

Anxiety and panic attacks were closely related to somatization. Relatively often, participants complained about somatic problems that were closely linked to deterioration of mood, negative emotions and psychological difficulties. Pains, breathing difficulties, nausea and dizziness were reported most often.

“I have pain in the evening and that is catching up with me... I’m a light sleeper, I wake up frequently.” (Client 2, f, 40)

“I’ve had some chest pain since yesterday, but it’s nothing that scary, just an occasional pain.” (Client 13, f, 43)

Sleeping difficulties were also commonly present. These led to exhaustion, so participants had a hard time struggling with everyday functioning and coping with the fear and uncertainty that the disease had brought.

“Over the last year I became too obsessed with diseases. I had a mild form of coronavirus in November. I feel very bad mentally, I started waking up during the night and I couldn’t sleep, the fear started creeping in.” (Client 24, f, 34)

What further worsened the experience of physical symptoms and accompanying psychological disturbances (fear, worry and health anxiety) was heightened self-monitoring. The intense focus on one’s own body and vigilant supervising of all bodily changes and symptoms can significantly interfere with daily functioning.

“I am focused on my body 24/7, sometimes I think I have pneumonia, then I think I have some other disease, there is always something. I started neglecting my everyday chores, cooking, cleaning, children. I lost myself and my life.” (Client 14, f, 43)

This process of intense symptom monitoring was further complicated by the fact that it was not easy for people to distinguish between what was a consequence of the disease, and thus a “real” physical symptom, and what was a consequence of their heightened worry, fear, and anxiety.

“I keep listening to my body, it’s hard to make a distinction between what’s real and what’s not, maybe I suffer from some kind of complex pneumonia.” (Client 4, f, 40)

“Panic attacks are not that frequent anymore, but I still feel tension, chest pain and light-headedness about which I’m not sure whether those are the result of the corona or my current mental state.” (Client 8, m, 31)

3.1.3. Grief over the loss of a loved one

A number of clients sought support due to the overwhelming sadness of losing a loved one due to COVID-19. In some cases, the situation was further complicated by the fact that they had potentially infected their loved ones so the mourning process was burdened by a sense of guilt, which will be discussed in detail in the next section.

“Everything keeps reminding me of him so much. The feeling that I cannot escape, waking up knowing that it is actually true and real, that he’s gone. That feeling of emptiness when I wake up and when I go to sleep.” (Client 2, f, 40)

What was recognized as particularly difficult was the suddenness of the loss, as the illness was usually short and did not provide the opportunity for the family to prepare and say goodbye to a close person. Furthermore, variable and unpredictable course of the disease left room for optimism, followed by enormous disappointment and disbelief due to the tragic outcome.

“While father was in the hospital, he sometimes felt bad, then he felt better, so you just get your hopes up, but in the end – nothing, he left us so suddenly. That completely threw me off balance.” (Client 13, m, 30)

“I kept asking myself if we had done everything we could, whether she had a chance to survive.” (Client 16, f, 40)

The quote above indicates the feeling of helplessness that occurs when encountering the medical system, which was overloaded and under a lot of restrictive measures during the pandemic. Contact with hospitalized patients was not possible, and getting any news and updates on their condition was difficult and uncertain. This raised doubts about the quality of care they received and left participants wondering whether anything else could have been done.

“We had no news about her condition, we had to pull all the strings we had to get information. And in the hospital in [name of a small town]

we didn't have a chance to come close to her, to see her. I am very disappointed in the system. (...) When she died, it was like we were struck by lightning. I cannot describe how we felt. We didn't even know how she became infected. But we were trying to transfer her to a better hospital in [bigger city], but had no luck with that, they just said that it was not possible." (Client 16, f, 40)

Additionally distressing for the family was the burial ceremony under specific circumstances and precautionary measures that did not leave them the opportunity to say goodbye to the deceased in an adequate way and in accordance with the cultural and religious customs. Participants experienced this as "inhumane" and "undignified". Some of them even expressed doubt that their close one was in the coffin at all, which significantly complicated the grieving process.

"The reason I called you was that I kept seeing that funeral before my eyes, we didn't see the deceased, her body did not stay in the cemetery chapel overnight. And that's in our genes, these customs. (...) Inhumane. During the funeral, the body was kept in a bag, you could not identify it. We wondered how we would even know that it was actually her. She didn't get the farewell she deserved." (Client 16, f, 40)

The loss of the loved ones imposed great practical challenges on some participants and significantly changed their daily life, so they sometimes had substantial problems adapting to the altered circumstances and felt that they did not have the capacity for that.

"My mother passed away from coronavirus three months ago and my life has changed drastically. I had to enrol my kid into the kindergarten and started taking care of my old and sick father and his household, while spending 10 hours a day at work." (Client 5, f, 40)

Some participants who were unable to cope with the losses they suffered during the pandemic (or even before it started) developed symptoms of depression, accompanied by suicidal thoughts.

"Everything seems so dark these days. Everything is hopeless, darkness surrounds me. I occasionally think about suicide, but I'm not that serious about it, I would never actually do it. This is because I'm overwhelmed, I even fall asleep thinking about the ways I could blow my brains out." (Client 13, m, 30)

3.1.4. Feeling of guilt

The feeling of guilt in the participants' accounts was primarily related to the fact that they had potentially infected family members or close people, and was especially intense if this had led to a fatal outcome. They felt

responsible, even though they typically adhered to COVID-19 measures, and they wondered if somehow they could have prevented this from happening.

“My biggest fear is that I will infect my mother or that I have already infected her, I cannot bear this feeling of guilt that I am actually the one that could possibly pass the virus to my mom. (...) I don’t know why I kept going to see her although the numbers of infected people were high and how I failed to protect myself from the virus, because in that way I have put her in danger as well, and that’s what I’m worried about the most.” (Client 7, f, 27)

In addition to the circumstances mentioned above, the feeling of guilt also developed because some participants felt that they were a burden to their family members, who cared for and supported them.

“I’m not coping with this well, I don’t know what to do. I have a daughter, I’m divorced. (...) I feel guilty that I, being as I am, am a burden to her. (...) I just thwart her. I broke a leg, an arm. I feel depressed, I’m having issues with my back again. I’m going from one hospital to another and she just keeps taking care of me. And it makes me feel so selfish and terrible. I don’t know what to do with myself.” (Client 12, f, 70)

In the cases of mothers with young children, guilt was often related to the feeling that they did not protect them enough in the situation of crisis. Sometimes, they felt like this even when they were being overprotective – because keeping children safe from the infection did not necessarily imply maintaining their emotional and social well-being. For example, one participant thought she deprived her children of important childhood experiences (going to school or hanging out with friends) by trying to isolate them and thus protect them from the infection (“*I literally feel like a donkey in the eyes of others, not many children have switched to online classes.*”, Client 6, f, 40). Others believed that they failed to protect their children from the stress caused by the pandemic situation because they could not hide their own mood, anxiety and negative emotions when being around children.

What was emphasized, especially by those participants who had not previously had mental health problems, was the difficulty of accepting they were a kind of person who could not manage to cope with problems on their own and who faced psychological difficulties despite having various resources and favourable life circumstances. As a result, they felt guilty “for being like this” and for not being grateful for what they had, as well as for unnecessarily burdening the family members with their problems, although the objective situation might not be so dreadful.

“Everyone keeps telling me that it’s nothing, everyone looks at me strangely, like this is something I want. (...) I used to be the strongest one in the family, someone who was not afraid of anything, who could do everything and was up for everything. How did I end up as the one with constant

headache, racing heart as if I was going to faint and my grandfather saying “Come on, just shake it off!?” (...) I can’t believe that this is happening to me... Who would say that I would be the one using sedatives. Is it possible that I’m this weak, that I’m afraid of some measly virus?” (Client 8, m, 31)

3.2. *Aggravating circumstances and risk factors*

3.2.1. COVID-19-unrelated life circumstances

In order to adequately understand the experience of the participants and the challenges they faced, we need to have at least some insight into their life contexts, i.e. personal circumstances, independent of the pandemic, which most often make it difficult for them to adapt successfully. The pandemic, as a global crisis, does not affect all individuals equally – those who had previous difficulties or already experience crisis are affected more severely, since they have fewer external and internal resources to deal with the new challenges. Accordingly, more than half of the participants from our sample were already faced with unfavourable life circumstances. This made it much more difficult for them to cope with the pandemic and led to a significant deterioration of their mental health.

Some of them have already used psychiatric care services and have been struggling with mental health problems for years (most often anxiety and depression). Others faced the loss of the loved ones immediately before the start of the pandemic or during it and did not adequately go through the process of mourning and coping with the loss. Hence, contracting COVID-19 and being isolated made them additionally vulnerable. The same is true for people facing other life events and crises (pregnancy, premature birth, serious illness of a family member), aggravated by the situation imposed by the pandemic.

“Since my mother died two years ago, there has been this void, depressed mood, and it just got worse because of corona. That is a huge void. (...) Because I’m alone, and now when I’m staying inside all the time, well, I’m completely alone.” (Client 9, f, 64)

“Besides COVID, there’s another thing I consider to contribute equally to these panic attacks I’ve been having and that is another major stress I’ve been exposed to. We found out that my mother has cancer. That’s another thing that keeps bothering me.” (Client 22, f, 35)

The persons who suffered from serious health problems before the pandemic (stroke, tumour, spinal injury) faced a particular risk for deterioration of mental health. For them, the possibility of getting infected carried a special burden. They were often already exhausted by the long process of coping with the primary illness, more focused on their physical symptoms,

and believed that they were burdening their loved ones, so contracting the disease was overwhelming for them and they failed to cope adequately with the situation.

“My condition is also driven by the stress I’m exposed to; I didn’t know if the tumour was benign or malignant. (...) What’s been putting me down most is the fact that I wake up every morning thinking what is going to hurt today. If it’s not a headache, then it’s my incision, if it’s not the incision, then it’s my arm. If I cannot breathe properly, I will have a headache all day.” (Client 24, f, 34)

3.2.2. Uncertainty and loss of control during the pandemic

The pandemic has brought numerous uncertainties, on a global, local and individual level. Many people experienced this uncertainty as overwhelming and did not find an adequate way to deal with it. Uncertainty concerns many aspects, but the fact that it is impossible to reliably predict the duration of the pandemic was perceived as particularly problematic and contributed to the fact that the pandemic was experienced as a vague and floating threat.

“It felt like it would never end. (...) Before, whenever I had a problem, I knew what I was dealing with, but this now is in the air that surrounds us...” (Client 3, f, 33)

“I can’t feel any more of this sadness, worry and anxiety. And the uncertainty of when this is all going to end.” (Client 9, f, 64)

The same applies to the situation of contracting the disease, because it has a variable course, the symptoms may vary, and their termination is uncertain since different accompanying and long-term effects of the disease were also recognized.

“Above all, fear, fear of the unknown, what will happen to my husband, whether I will develop any severe symptoms, whether I will have to stay in the hospital, God forbid. The worst of all was that I did not know what to expect, everyone had it different in here. Fear of the unknown, that I would stop breathing during the night.” (Client 31, f, 31)

“And then I start thinking. What if anything bad actually happens? How will I eventually get out of it? What if I start feeling even worse and all the symptoms return? I felt good yesterday, but today it’s all the same. Will all of this ever end?” (Client 8, m, 31)

In the quote above, there are a number of questions that the participant repeated to himself because there was no possibility of getting an adequate and reliable answer. The fact is that humanity had been faced with a relatively unknown disease, and, as a result, had a lack of evidence-based scientific

knowledge and a lot of contradictory information and opinions about the virus. There was confusion regarding the course of the disease, its outcomes, as well as the measures of treatment and prevention. Exposure to unreliable and contradictory information thus led to a loss of trust in medical authorities and institutions.

“The most difficult thing is that you don’t know what to do anymore, you listen to one doctor’s advice, then you listen to another one’s and no one can tell you for certain how long you are going to be infectious and how the virus spreads. You go to get tested – one day you test positive, the other day you’re negative. No one speaks to you, it’s all just rushed, imagine my mother having to go through all of this on her own, because I’m in quarantine and she would have to go to get examined. I’m young and I was confused – where to get tested, what the procedure was, just imagine how old people are feeling! There is constant talk about staying safe, the news outlets keep filling your head how all the hospitals are full, but then they say that everything is under control. How can you not be frightened and concerned?” (Client 7, f, 27)

Information seeking was a common coping strategy that people used to try to reduce uncertainty when they found themselves in a potentially risky and insufficiently familiar situation. Due to a lot of conflicting information, their anxiety and fear were only deepened.

“I was upset just like most people were, you hear this, then you hear that, and now this feeling got much worse. We’re never returning back to the normal way of living... it will be very hard to recover from this. Today I read a disturbing article about how Johnson’s vaccine causes thrombosis on day 6 and day 13 after vaccination.” (Client 10, f, 82)

The loss of control and the feeling of helplessness were especially prominent among the participants who committedly adhered to the protective measures, but got infected nevertheless and infected their family members. Such an outcome made it impossible for them to rely on important practical coping strategies – adhering to protective measures, reducing social contacts and taking care of their health.

“I’m disappointed in preventive measures. (...) I’m not afraid of the virus, I never was. I’m 40 years old, I have no other illnesses. We adhered to all the measures from the very beginning and for one reason only – my mother-in-law who was ill. We avoided visiting her, and even when we did, we wore gloves and facemasks. That whole ordeal left me disappointed, the measures that never kept anyone safe.” (Client 16, f, 40)

Finally, it should be kept in mind that all these uncertainties regarding personal and family health situations took place in a social context that itself

was highly uncertain as a result of the pandemic, especially when it came to people's jobs and finances. This emphasized a lack of control and a sense of helplessness in some participants seeking support.

"My business keeps getting worse, not better, maybe it all adds up to my stress. (...) Everything has completely changed for me, the business stopped, they keep changing the measures day after day and no one cares if we are able to handle this. I've never lost hope before the way I did now, I am responsible for a number of people and I don't have the slightest idea how to fix this." (Client 8, m, 31)

3.2.3. Reduced social contacts and the lack of social support

More than half of the participants reported insufficient or inadequate support from the environment, which often justified the need to seek psychosocial support from experts. Elderly people who lived alone and who, due to protective measures, were often completely socially isolated and struggled with loneliness, were especially at risk. But the same applied to those of the younger generation who started working from home, due to the changed work conditions, so their social contacts were significantly reduced.

"I'm pretty lonely, because I live alone in the apartment, my son's children live nearby, they visit me every time I need anything, they bring it over, it's not like I'm neglected... but I have no one to talk to when I'm lonely, I have recently started living here, I don't know many people and everyone is so scared, everyone keeps distancing themselves, people are alienated and it is very hard." (Client 10, f, 82)

"Having to work from home makes the situation even harder, I'm trapped within four walls, I have contact with people only by phone. I'm otherwise very social, I like to grab a cup of coffee and hang out with my colleagues." (Client 24, f, 34)

Even the people who were surrounded by family members with whom they had close relationships did not share their feelings and preoccupations, because they recognized that others were also struggling with challenges in the current situation, so they did not want to burden them. Because of this, the participants often felt that they did not get enough support from their environment, and it meant a lot to them to be able to talk to someone who could offer them full attention.

"I have no support at all, I have no one to talk to about how I feel over the phone. Not even my daughter, I pretend to be brave when I talk to her, then she just keeps praising me for how strong and courageous I am, how I'm handling this pretty well. I'm making an effort to make sure that she knows just a bare minimum about how I'm feeling. (...) Now I feel like some weight has been lifted off my shoulders. I can't remember the last

time someone listened to me like this. (...) It is very important to me to have someone to talk to.” (Client 12, f, 70)

Support was especially important for the persons who had potentially traumatic experiences during their illness and hospitalization, but, due to protective measures and the health system overload, it was completely absent.

“You are left alone, there is no one you love near you, no one who means a lot to you. (...) There were a lot of patients with me who didn’t survive, people who were screaming during the night... it was scary.” (Client 1, f, 55)

However, the understanding and support from the environment were recognized as central even after the illness and return from isolation, but were often absent because the pandemic had imposed challenges on the entire community, so everyone was occupied with their own problems and experiences.

“I’ve had an unpleasant situation at work (the client works in a hospital)... There is one female co-worker that I have a good relationship with... She said to me that she was going through some rough times... I felt very disappointed in her, it’s not like I went on a holiday to Hawaii and left her behind, struggling... I’m disappointed... Everyone who kept working felt as if they were punished, and as for us who got infected and lost someone close to us, they didn’t even know how mentally challenging all of this was for us.” (Client 2, f, 40)

At the same time, the persons who faced psychological difficulties recognized that they had no capacity for other people’s problems at the time. They felt that the exchanges with others were not enough – they needed someone to listen to them and provide support, without the immediate expectation of reciprocity.

“Well, it’s always an exchange, first I speak about my problems, then they start talking about theirs, and it ends with us switching the roles back. And I lack capacity for that. (...) And when someone says “It could get a lot worse”, oh, that is by far the worst thing someone could say!” (Client 5, f, 40)

That is why professional help was important for them, but was also sometimes inadequate. Participants felt that they had not received enough attention and understanding from professionals, so instead of listening and support, they were only prescribed medication.

“I went to see a psychologist, a psychiatrist which I absolutely don’t like, he only hands out drugs. I have nothing against drugs, but I would like to talk to someone. I’ve already been able to cope with things once on my own, but it seems that I will not be able to do it this time around.” (Client 32, f, 33)

4. Discussion

The main aim of this study was to provide in-depth understanding of the common experiences and psychological difficulties people with the COVID-19 diagnosis and their families and friends face during the pandemic, thus supporting the development of data-driven MHPSS interventions, tailored to the recognized needs and specifics of the broader COVID-19 context.

The study results showed anxiety, somatization, and symptoms of depression, in particular, sadness over the loss of the close ones and guilt, to be the most common psychological difficulties among the people who sought professional help during the pandemic. Similar to previous studies exploring the main psychological difficulties among youth and persons with experience of hospitalization due to COVID-19 (Branquinho et al., 2020; Guo et al., 2022; Jamili et al., 2022; Moradi et al., 2020; Pei et al., 2021; Sun et al., 2021), anxiety and the feeling of fear seem to be the most frequent disturbances people were facing during the pandemic. These results are similar to the findings on experiences and psychological difficulties during the severe acute respiratory syndrome (SARS) epidemic, showing high rates of emotional distress, fear for survival and fear of infecting others to be prevalent among survivors (Gardner & Moallem, 2015). However, unlike previous studies (Jamili et al., 2022; Pei et al., 2021; Sun et al., 2021), denial was not identified among the involved participants, which could be due to specificities of the study sample. Namely, our study included the persons seeking psychological support, which implies that, at least to some extent, the participants had already acknowledged stressful or traumatic experiences they were exposed to, as well as psychological difficulties they were facing and the need for support in these processes. Interestingly, in addition to denial, the topic of stigmatization was not introduced during sessions either, although this topic has been widely identified in previous studies assessing psychological experiences among the people exposed to COVID-19 (Billings et al., 2021; Callan et al., 2022; Guo et al., 2022; Moradi et al., 2020; Pei et al., 2021; Sun et al., 2021), as well as during the previous crises, such as the SARS epidemic (Gardner & Moallem, 2015; Maunder, 2004). It seems that, during the psychological sessions, the participants were not focused on social repercussions of the disease, but rather on its impact on health and life in general. In addition to the already mentioned characteristics of the sample, the reasons for this could be found in the introduced measures for prevention of the spread of COVID-19 that were moderate at the time of the study, i.e. there was no curfew and movement was not restricted. Furthermore, this phenomenon could be tied to the ambiguous public narrative regarding the pandemic in the Republic of Serbia, which was not unison and contained many mixed messages on the coronavirus and the reality of the threats

it brings (Damjanović et al., 2020). The implications of the inconsistent narrative and moderately strict measures could have blurred expectations on socially desirable behaviour, alleviated social pressure and, consequently, fear of stigmatization.

The main identified factors which made coping with psychological difficulties more challenging were previous life circumstances (e.g. previous COVID-19-unrelated health conditions, family problems, and available resources), uncertainty and the lack of social support, which is partly in line with previous studies. Namely, many studies have shown that social support is perceived as an important coping resource among the persons experiencing COVID-19 (Alizadeh et al., 2020; Guo et al., 2022; Jamili et al., 2022; Sun et al., 2021), while a study involving nurses working with COVID-19 patients highlighted the emerged need for psychosocial support during the time of crisis (Kackin et al., 2021). Only one study mentioned the theme of uncertainty among COVID-19 survivors in the sense of participants' experience of "living in limbo" (Moradi et al., 2020), which is in line with the perspective of perceiving uncertainty as an external circumstance during the pandemic that affects the person's life, rather than as a part of anxious symptomatology. Furthermore, even though there was not much evidence of the effects of previous life circumstances in shaping COVID-19 experiences, previous studies have indicated that financial stress was an important theme and stressor that COVID-19 survivors faced (Akbarbegloo et al., 2022; Guo et al., 2022; Jamili et al., 2022), which is a topic rarely mentioned by the participants in this study. The reasons for this could be found in acute overwhelming stress related to participants' or their close ones' life-threatening health conditions, acute losses of the loved ones and other psychological experiences, which participants needed to work through first during the psychological sessions. However, future studies are needed to provide further explanations.

Finally, the study results did not reveal any positive experiences as a result of the pandemic (e.g. strengthening hope, feeling gratitude for the social support, cherishing life and family), identified by some of the previous studies, both assessing the effects of the COVID-19 pandemic (Akbarbegloo et al., 2022; Branquinho et al., 2020; Džamonja et al., 2020; Guo et al., 2022; Jamili et al., 2022; Sun et al., 2021; Vuletić et al., 2021), and the SARS epidemic (Bergeron et al., 2006; Chua et al., 2004). Even though this was beyond the scope of this work, we do believe it could be of particular importance for providing valuable insights for psychological support programs, which could rely on existing strengths and positive aspects of psychological functioning identified among people during the pandemic, and use it as a foundation for psychological empowerment. Furthermore, when discussing the practical implications of our study, the psychological paradox of the current crisis, experienced by the study's participants, should be highlighted. On the one hand, the crisis itself is perceived as a common experience of people

worldwide who, at least to a certain extent, have shared the burden and distress it brought. On the other hand, unlike various previous crises around the world (earthquakes, floods, etc.), the coronavirus pandemic led to social isolation, thus disabling one of the crucial coping mechanisms people rely on during difficult times. Our study, similar to previous research exploring psychological difficulties and stressors among different groups during the pandemic, identified themes centred on the lack of social support, isolation, loneliness and reduction of social networks as prominent (Akbarbegloo et al., 2022; Branquinho et al., 2020; Guo et al., 2022; Jamili et al., 2022; Kackin et al., 2021; Moradi et al., 2020; Pei et al., 2021; Sun et al., 2021). In the circumstances of limited social networks, resulting in the lack of regular lay, peer and community-based support, psychological support provided by experts became even more important, creating a rarely approachable safe space for people in highly stressful circumstances to be heard and supported.

There are a few study limitations worth noting. One limitation refers to an unbalanced gender structure where the vast majority of participants were female. However, this occurrence adequately represents differences in gender tendencies towards seeking professional support due to mental health problems (Kessler et al., 1981; Weissman & Klerman, 1977; Živanović et al., 2022). Furthermore, the conducted analysis relied on psychologists' protocols instead of recorded sessions and verbatim transcripts, which would allow for a more valid and detailed insight into the experiences and psychological difficulties of the persons seeking support. However, the decision not to record the sessions was made due to ethical reasons, so as to avoid any chances of instigating distrust and turning the participants away from seeking support. Finally, although we do not have a precise look into our participant's socio-economic backgrounds, it is clear that the experiences of seriously underprivileged or marginalized individuals with very limited access to information (extremely poor, migrants, rural elders, etc.) are not represented in the study.

Finally, study results offer recommendations for providing psychological support to the persons affected by COVID-19 in time of crisis. Namely, due to various psychological difficulties and challenges people face in the time of the COVID-19 crisis, there is a need for making free psychological support to persons in crisis widely available. The support should be comprehensive, and include brief interventions focused on psychological first aid and crisis intervention, as well as in-depth psychological counselling and support in order to address the individual needs of persons facing different challenges and psychological experiences. Therefore, mental health experts can use brief and directive interventions, e.g. those focused on altering cognitions and emotions related to the crisis such as Socratic questioning, decatastrophizing, reframing and normalization (Vukosavljević-Gvozden, 2009). In addition, continuous and more in-depth psychological support is needed for persons

who have experienced the pandemic as a trigger for retraumatization, relapse or onset of painful psychological processes that need to be worked through, those who have experienced loss or struggled with feelings of guilt. Furthermore, since somatization and increased focus on one's own body was identified as a common theme among the people affected by the COVID-19 crisis, tackling difficulties related to somatization could be done through techniques including the body, such as progressive muscle relaxation exercises, which have been proven to reduce anxiety and improve the quality of sleep for COVID-19 patients (Özlü et al., 2021). Finally, in order to address the lack of social support and contact as one of the challenges in daily life of persons in the time of crisis, group online therapy sessions could be applied, even though additional research concerning the effectiveness of such interventions is needed (Weinberg, 2020).

5. Conclusion

This study provided information on the common experiences and psychological difficulties among the people seeking psychological help during the coronavirus pandemic, and highlighted the main factors which made coping with psychological difficulties more challenging. The results add to the body of evidence enabling understanding of the most prominent difficulties and needs that should be addressed during this stressful period. It provides evidence which can be used as a foundation for the creation of much needed psychological programs and interventions that could support people during the pandemic. Furthermore, since this is the first study providing insights into experiences and psychological difficulties from psychological support sessions, it can be a valuable guidance for practitioners providing psychological support and crisis interventions during the pandemic. Even though it seems that the peak of the pandemic has passed, it is not possible to predict the duration of the crisis, nor its long-term or delayed negative effects on mental health and wellbeing, which may be prevented or mitigated by ensuring proper and timely support.

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Uobičajena iskustva i psihičke teškoće tokom pandemije: uvidi iz seansi psihološke podrške

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Usled prisustva psihičkih teškoća među populacijama širom sveta, intervencije posvećene zaštiti mentalnog zdravlja i psihosocijalnoj podršci koje su zasnovane na dokazima prepoznate su kao prioritet u odgovoru na zdravstvene potrebe tokom pandemije Kovida-19. Glavni cilj ovog istraživanja bio je da pruži dubinski uvid u uobičajena iskustva i psihičke teškoće kod osoba koje su bile neposredno pogođene Kovidom. Studija je uključila 32 osobe (28 žena), prosečne starosti 38.5 godina (SD 13.2) sa potvrđenom ili sumnjom na dijagnozu Kovida, ili čiji su članovi porodice ili prijatelji bili zaraženi Kovidom, a koji su bili korisnici online psihološke podrške u periodu od decembra 2020. do juna 2021. godine. Protokoli seansi podrške analizirani su uz oslanjanje na principe tematske analize. Istraživanje je ukazalo na to da su anksioznost, somatizacija, tuga usled gubitka bliske osobe i osećaj krivice najistaknutije psihičke teškoće kod osoba koje su tražile psihološku podršku tokom pandemije. Glavni faktori koji su otežavali prevladavanje psihičkih teškoća ticali su se prethodnih životnih okolnosti, neizvesnosti i nedostatka socijalne podrške. Istraživanje je omogućilo bolje razumevanje uobičajenih iskustava i najistaknutijih psihičkih teškoća i pružilo nalaze koji se mogu koristiti kao osnova za kreiranje fokusiranih psiholoških programa podrške tokom pandemije.

Ključne reči: psihička iskustva, psihičke teškoće, pandemija Kovida-19, psihološka podrška, kvalitativno istraživanje

The COVID-19 pandemic and mental health of healthcare workers in Serbia^{1, 2, 3}

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The COVID-19 pandemic was a challenging experience for many professionals worldwide. Healthcare workers in particular had to invest a lot of efforts to cope with the stressors related to professional challenges, which can adversely affect their mental health and cause burnout syndrome. However, it is important to explore mental health outcomes of the pandemic among healthcare workers in the context of a specific country. This study examined the effects of increased professional and personal demands on the health workers' mental health after almost two years of dealing with the pandemic. A cross-sectional online anonymous survey was conducted during October 2021. The sample consisted of 286 healthcare workers (76.7% male) from all regions of Serbia. The questionnaire included socio-demographic data, professional and personal experiences during the pandemic, mental health difficulties, and burnout. The results indicate that more than half of the participants experienced a high or moderate level of depressive symptoms, anxiety and stress. Emotional exhaustion as a symptom of burnout was reported by almost all participants (91.9%), followed by moderate compassion fatigue (60.8%) and lower level of self-efficiency (23.8%). The most significant predictors of burnout and mental health difficulties referred to impaired working conditions and insufficient instructions from superiors, a high level of personal concern about the infection, and maladaptive coping strategies. The results point to the importance of providing psychosocial support to healthcare workers in order to

1 This study is a part of the project “Human and Society in Time of Crisis“ funded by the Faculty of Philosophy, University of Belgrade.

2 The study was carried out at the initiative of the association for Sustainable Future- Koraci

3 The authors presented a part of this study results under the title “*Who cares about mental health of health workers during Covid-19 pandemic – new data from Serbia*”, at the 28th scientific conference Empirical studies in psychology, 31 March – 3 April, 2022; Faculty of Philosophy, University of Belgrade, p. 36-37.

prevent further mental health impairments. Still, interventions should be focused on the external organizational factors instead of addressing solely individual vulnerability.

Keywords: healthcare workers, COVID-19, mental health, stress, burnout

Introduction

The pandemic of SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) has emerged as a global public health crisis, with more than 594 million confirmed cases worldwide and more than 6.45 million deaths between January 2020 and August 2022 (Our world in data, 2022). Infectious disease outbreaks of that scale are known to have psychological impact on the general population, at the same time putting particular professionals all around the world in extremely challenging circumstances. The WHO interim guidance from March 2020 (WHO, 2022) pointed that the COVID-19 pandemic represented an inevitable risk for healthcare workers. They invested enormous efforts to cope with an unknown virus, unpredictable health complications of their patients, and high death ratio among them. Still, there was also a threat to their personal health. Additionally, healthcare workers faced a greater risk of exposure to extreme workloads with limited medical resources, which differed greatly from what they were familiar with. Those who were on the front line of the response to the COVID-19 pandemic were likely to become 'secondary victims', not just because they were exposed to the virus and may have been infected and quarantined, but also because they worked in extremely demanding circumstances, under pressure to make quick medical and ethical decisions. Therefore, they were and still are at risk of suffering from different symptoms of anxiety, depression, and stress (Zhang et al, 2020; Kisely et al, 2020). Due to intensive and prolonged professional stressors, healthcare workers were prone to develop the burnout syndrome that includes emotional exhaustion, depersonalization and a lack of personal accomplishment (Mazi & Ferlin, 2004). Burnout is particularly common among the helping professions (Maslach et al., 1996; Jovanović et al., 2019). Hence, it is not surprising that it was particularly widespread among healthcare workers during the pandemic.

Many research findings have pointed out that professional stress causes emotional difficulties and mental health problems (Maunder, 2004; McAlonan et al., 2007; Wu et al., 2009; Su et al., 2007; Lin et al., 2007; Bah et al., 2020). Numerous studies conducted during the COVID-19 pandemic supported this finding as well (Xiang et al., 2020; Azoulay et al., 2020a; Azoulay et al., 2020b; Lai et al., 2019; Lay et al., 2020; Hu et al., 2020; Muller et al., 2020; Bennett et al., 2020; Agren, 2020). The study conducted among 780 hospital workers in France after the first wave of the pandemic confirmed the presence of significant mental health problems (d'Ussel et al., 2022). Participants reported symptoms of anxiety (41%), depression (21%), and PTSD (14%). Those who had a personal experience of the COVID-19 infection, who had an anxiety reaction at the beginning of pandemic or a previous experience of burnout or depression, had a greater risk for mental health disturbance, but job satisfaction appeared to be a protective

factor. The meta-analysis of 13 studies (33,062 participants) evaluating the mental health effect of the COVID-19 pandemic on healthcare workers showed that the prevalence rate of anxiety and depression symptoms was 22 to 23% (Pappa et al., 2022). Another systematic review on 44 studies with a total of 69,499 subjects revealed prevalence of depression in range of 13.5%-44.7%; anxiety 12.3%-35.6%; acute stress reaction 5.2%-32.9%; post-traumatic stress disorder 7.4%-37.4%; insomnia 33.8%-36.1%; and occupational burnout 3.1%-43.0%. Frontline healthcare workers, particularly those with low social support and less working experience, reported more mental health difficulties (Sanghera et al., 2020). For those reasons, there is an urgent need for studies in different countries that will inform effective regulations for work organization, reduce workload, as well as improve safety and support for health professionals (Erquicia et al., 2020).

The situation in Serbia

Between the beginning of the pandemic and August 19 2022, Serbia recorded 2,236,301 cases of infection and 16,509 COVID-19-related deaths (www.covid19.rs). The health system response to pandemic cases was massive, offering high access to healthcare, including the ICU and specific medicines. However, the outcomes of treatments need to be evaluated yet. Also, the organization *United against COVID-19* (Ujedinjeni protiv kovida, 2022) reported total excess mortality in the same period of close to 57,000. The fluctuation of the number of hospitalized COVID-19 patients is presented in Figure 1⁴.

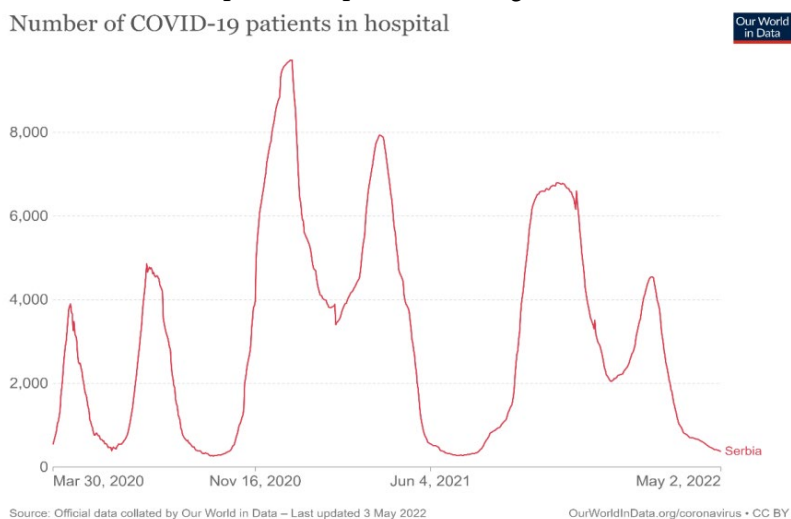


Figure 1. Fluctuation of the number of hospitalized COVID-19 patients

4 Hospital & ICU data were collected from official sources and collated by Our World in Data. The complete list of country-by-country sources is available on GitHub. <https://our-worldindata.org/covid-hospitalizations>

According to official statistical data, mortality excess was 13,991 in 2020 and 34,988 in 2021, which yields a total of 48,979 during those calendar years of the pandemic. The official government's announcements report that the total number of deaths caused by the COVID-19 pandemic in the years 2020 and 2021 was 16,074. Evidently, there is an excess of 32,905 death cases, which brings serious doubts regarding the official data on death cases. The trust in government was shown to be an important predictor of preventive and responsible health behaviour in a pandemic (Han et al., 2021). Unreliable pieces of information during the actual crisis contributed to an increase in uncertainty among citizens, but also heightened a sense of injustice in health workers, who felt that their efforts had not been recognized and appreciated.

The studies also revealed that the physicians engaged at the front line of defence against the COVID19 pandemic were younger clinicians with less work experience, who were reassigned to new positions from the public sector. Those who were reassigned and not properly prepared to accommodate to change had more problems in the new role (Dinic et al., 2021).

The publication *Rights of Health Workers During the COVID-19 Pandemic – Heroes or Neglected Victims* (Belgrade Centre for Human Rights, 2022) reported on frequent violation of labour rights of health workers, the fact that personal protective equipment was not available at all times, that there was no psychosocial support and the schedule of work shifts was not adhered to. Approximately 62% of health workers were transferred to the COVID-19 units only based on verbal instructions from supervisors, 81% did not know for how long and 26% received explicit verbal threats of job loss from supervisors if they refused it. A recent review article reported worsening of the mental health of health professionals involved in treatment of COVID-19 patients in Serbia (Latas et al., 2021). In accordance with the results of studies from other counties, healthcare workers displayed a higher level of stress, anxiety, insomnia and depression compared to their colleagues from other hospitals.

Aims and objectives

The aim of the study is to examine the effects of the COVID-19 induced changes in working demands and health-related concerns on the mental health of healthcare workers in the specific context of Serbia after almost two years of dealing with the pandemic. Additionally, we want to specify the risk and protective factors associated with burnout and mental health difficulties in this specific group of professionals. The obtained findings could be informative for mental health policies and decision-making in some future global health crisis.

The specific objectives of the study are to explore:

- the presence of burnout syndrome, which includes emotional exhaustion, compassion fatigue, and self-efficiency;
- the experiences of mental health problems, such as symptoms of anxiety, depression, and stress;
- the presence of professional and personal stressors among the health workers and
- the way in which different professional and personal stressors and the use of different coping strategies predict the levels of burnout and mental health problems.

Method

The cross-sectional study was conducted among health workers via an online anonymous survey during October 2021.

Sample

The sample consisted of 286 participants working in the so-called COVID-19-units (76.7% male). The age range was from 20 to 74 years ($M=42.9$, $SD=10.5$). There were 78.5% of doctors and 21.5% of nurses and technicians from all regions of Serbia. The most represented region is Belgrade, which included 47.2% of participants; 29.7% of participants came from Vojvodina and an equal percentage of health workers (11.5%) from Western Serbia and Šumadija and Eastern and Southern Serbia. Their years of working experience ranged from a few months to 48 years ($M=16.6$, $SD=11.0$).

Data collection

We applied the online survey to collect basic socio-demographic data, as well as to assess professional and personal experiences during the pandemic, mental health difficulties (anxiety, depression, and stress) and different aspects of burnout and coping strategies.

Socio-demographic data included age, gender, workplace region in Serbia, profession (medical doctor, specialist, nurse or technician) and years of working experience.

Professional and personal experiences during the pandemic were measured by a questionnaire created for the purposes of this study. *Professional experiences* reflect participants' satisfaction with different aspects of work: *reorganization* (institutional efficiency in providing healthcare in new context), *working conditions* (equipment, medication, security measures, work overload, availability of professional and psychological support, etc.), adaptation to fast

shift rotations within health institutions (quality of teamwork, distribution of workload, etc.) and satisfaction with the *instructions* given by the Ministry of Health and the National Institute of Public Health Batut. The items were assessed on a 5-point Likert scale (ranging from 1 – *completely unsatisfied* to 5 – *completely satisfied*). Cronbach's Alpha coefficients for subscales were: reorganization (.74), working conditions (.71), adaptation (.73) and instructions (.95).

Personal experiences included questions about whether healthcare workers or their family members or colleagues had been infected with the virus, their experience of hospitalization, fatal consequences of infection among their family or colleagues etc. Those items represented categorical variables (yes or no answers). The *health concern* (for personal health or for family members' health) and the level of *social support* (from family, friends and colleagues) were measured on a 5-point Likert scale (ranging from 1 – *not at all*, to 5 – *very much*). Cronbach's Alpha coefficients for health concern (.74) and social support (.71) were acceptable.

DASS-21 (Lovibond & Lovibond, 1995) is a self-reporting questionnaire with 21 items based on a 4-point rating scale. It is designed to measure emotional distress in three subscales by seven items for each: depression (e.g. loss of self-esteem, depressed mood), anxiety (e.g. anticipation of negative events), and stress (e.g. persistent over arousal, low frustration tolerance). We applied the cultural adaptation of the scale for Serbia (Jovanović et al., 2014). Participants were asked to rate how each of the statements applied to them over the past week, in range from 0 to 3 (0 – *did not apply to me at all* to 3 – *applied to me very much, or most of the time*). The higher the score, the more severe the emotional distress (Oei et al, 2013). The reliability of the DASS-21 was high: Cronbach's Alpha coefficient for total score (.95), for Depression (.88), Anxiety (.89) and Stress (.92).

Maslach Burnout Inventory – Human Services Survey (MBI-HSS) (Maslach, Jackson, & Leiter, 1996). The MBI consists of 22 items rated on a 7-point scale ranging from “*never in the past year*” (0) to “*every day*” (6). The items are classified into three subscales: Emotional Exhaustion (9 items), Depersonalization (Compassion fatigue)⁵ (5 items), and Personal Accomplishment (Self-efficacy) (8 items). Emotional exhaustion is body's reaction to stress, characterized by a dysphonic mood due to the continuous ‘wearing off’ of effective individual resources to cope with professional stressors. Depersonalization is described as an insensitive and indifferent attitude towards the patients, who are treated as an object (in a de-personalized manner). Personal accomplishments refer to experience of

5 Since depersonalization also refers to the symptom of schizophrenia, we rather use the phrase *compassion fatigue* to point out a lack of empathy, which is, in our opinion, more adequate for this phenomenon.

professional self-efficacy. Negative personal assessment of competences and reduced performance and sense of personal inefficacy characterized burnout as well (Maslach et al., 2001). Cronbach's Alpha coefficient for total score was (.76), for Emotional Exhaustion (.91), for Depersonalization (.78), and Personal Accomplishment (.74). The authors recommend assessing each subscale separately (Richardson & Martinussen, 2004).

The Brief COPE scale was designed to assess a broad range of coping responses that include active coping, planning, seeking social support, positive reinterpretation, acceptance, turning to religion, focusing on the venting emotion, denial, disengagement, use of alcohol-drug, etc. (Lyne & Rodger, 2000). The Brief COPE scale contains 28 items rated by the four-point Likert scale, ranging from "I haven't been doing this at all" (score 1) to "I have been doing this a lot" (score 4) (Meyer, 2001). In this study, we used a modified version of the scale, with 17 items. The higher score represents greater usage of a specific coping strategy. The reliability measured by Cronbach's Alpha coefficient was .70, due to the variety of different coping strategies.

The survey was conducted online, using the Google drive platform. The link for questionnaire was shared via social networks using the "snowball" method. It took the respondents approximately 20 minutes to provide answers to questions.

Data analysis

Pearson's coefficient of correlation was used to examine the relations between the examined variables. We conducted the analysis of variance (ANOVA) to examine the differences between the groups based on specific experiences with the COVID-19 infection. Finally, hierarchical multiple regressions were conducted for the Burnout scales and DASS-21 as the dependent variables and specific professional and personal experiences during the COVID-19 pandemic and coping strategies as predictors. Statistical analyses were performed by the IBM SPSS Statistics 21.0.

Results

Professional experiences

The exploration of professional experiences among healthcare workers indicated dissatisfaction (the average score below 3 on a 5-point scale) with the majority of aspects of work (Table 1). They recognized the poor reorganization of the working process as one of the factors that aggravated professional work during the pandemic ($M=2.4$, $SD=1.2$). More than half of the participants expressed dissatisfaction with the general reorganization

of work conditions (55%). Working conditions, such as a limited amount of equipment or lack of employees, were also perceived as aggravating ($M=1.7$, $SD=0.8$). Dissatisfaction with working conditions was present among 81.5% of participants. For example, more than 75% of health workers pointed out that a lack of psychological support additionally burdened their professional functioning. Participants also expressed less satisfaction with adaptation (team work, management support, etc.) to the new situation ($M=3.0$, $SD=1.4$). The adaptation to new circumstances was recognized as unsatisfactory by 38.4% of health workers. Participants expressed general dissatisfaction with the instructions provided by government institutions ($M=2.8$, $SD=1.2$). Over 40% of health workers were dissatisfied with those instructions.

Table 1

Descriptive statistics for the scale Professional experiences (N=286)

Professional experiences	Min	Max		Frequency	Percentage	Mean	SD
Reorganization	1	5	1	72	25.2	1.70	0.77
			2	85	29.7		
			3	76	26.6		
			4	36	12.6		
			5	17	5.9		
Working conditions	1	5	1	130	45.5	2.98	1.39
			2	104	36.4		
			3	40	14.0		
			4	11	3.8		
			5	1	0.3		
Adaptation	1	5	1	61	21.3	2.81	1.17
			2	49	17.1		
			3	59	20.6		
			4	70	24.5		
			5	47	16.4		
Instructions	1	5	1	43	15.0	2.81	1.17
			2	69	24.1		
			3	89	31.1		
			4	55	19.2		
			5	30	10.5		

Personal experiences with coronavirus

Personal experiences related to the COVID-19 pandemic included the infection of participants, their family members or their colleagues, experiences with hospitalization, as well as the death of family members or colleagues due to this virus. Almost all health workers reported that they had colleagues who had been infected (99.3%) or hospitalized (72%), while 43.4% said they had colleagues who had died as a consequence of the infection. Further, 67.8% of participants had an infected family member.

The results show that there was a moderate level of concern in health workers about getting infected or their family members or colleagues getting infected ($M=3.74$, $SD=1.0$; Table 2). Around 26% of health workers were very worried, 42% of them were mostly worried and around 22% moderately worried. At the same time, they experienced a higher level of social support from their family, friends and colleagues ($M= 4.56$, $SD= 0.66$).

Table 2
Descriptive statistics for the scale Personal experiences

Personal experiences	Min	Max	Mean	SD	Frequency	Percentage	
Social support	1	5	4.56	0.66	1	0	0
					2	4	1.4
					3	9	3.1
					4	65	22.7
					5	208	72.7
Concern about infection	1	5	3.74	1.00	1	7	2.4
					2	18	6.3
					3	63	22.0
					4	106	37.1
					5	92	32.2

Burnout syndrome

The most prominent problem was burnout. The majority of health workers (91.9%) reported high or moderate levels of emotional exhaustion. The mean score is high compared to the norms (Table 3). High or moderate levels of compassion fatigue were experienced by 60.8% of participants, with mean score in the range of moderate level. Finally, 23.8% felt lower levels of self-efficiency and mean score is moderate as well.

Table 3
Descriptive statistics for the Burnout scale

Burnout	Category	Percentage	Min.	Max.	M(SD)	Norms*
Emotional Exhaustion	High	79.7	0	54	35.81 (11.73)	27–54 high
	Moderate	12.2				
	Mild	8				
Depersonalization/ compassion fatigue	High	28.3	0	26	8.98 (6.36)	7–12 moderate
	Moderate	32.2				
	Mild	39.5				
Self-efficiency	High	39.2	17	48	36.21 (6.47)	32–38 moderate
	Moderate	37.1				
	Mild	23.8				

*The category where Mean scores of the sample fit based on the norms.

Mental health difficulties

The results on the DASS-21 showed that 46.8% participants had a high or moderate level of depressive symptoms (Table 4). High or moderate levels of anxiety were reported by as many as 60.6% of health workers, while a high or moderate level of stress was experienced by 62.2% of them. Average scores are in the range of the moderate level of anxiety, which is close to severe, moderate level of stress and slightly under the moderate level of depression.

Table 4

Descriptive statistics for the presence of depression, anxiety and stress symptoms

DASS-21	Category	Percentage	Min.	Max.	M(SD)	Norms*
Depression	High	25.5				
	Moderate	21.3	0	21	13.77 (10.27)	14–20 moderate
	Mild	53.1				
Anxiety	High	40.6				
	Moderate	19.9	0	21	13.44 (10.30)	10–14 moderate
	Mild	39.5				
Stress	High	44.4				
	Moderate	17.8	0	21	22.70 (11.36)	19–25 moderate
	Mild	37.8				

*The category where Mean scores of the sample fit based on the norms.

Coping strategies

We were interested in exploring which type of coping strategies was used among health workers in dealing with stress. Table 5 shows the prevalence of using a specific coping strategy. The percentage of answers 3 (from time to time) and 4 (often) on the COPE scale was presented together. Almost half of the participants sometimes felt that giving up was the only thing they could do (47.6%). Other maladaptive coping strategies, such as self-blame and using alcohol, were present in 20–25% cases. On the other hand, adaptive coping strategies were used more frequently. More than 90% of health workers tried to maintain a positive attitude and optimism or relied on support from family and friends, while over 80% used a proactive approach to do their best to solve the problems and cope with challenging situations. However, only half of them made a good organization strategy with their colleagues.

Table 5
Frequency of using specific coping strategies

Coping strategies	Percent
I turn to work or other activities to take my mind off.	74.5
I had a feeling this was not going to happen to me.	52.4
I asked for support and understanding from colleagues.	44.4
I admit to myself that I can't deal with it and stopped trying.	47.6
I take additional action to try to solve the problem.	85.7
Alcohol or medicines helped me to get through difficult situations.	19.9
Together with my colleagues, I made a good organization of work and devised a strategy on what to do in these circumstances.	57.0
I openly expressed my dissatisfaction and feelings of fear, sadness, helplessness, or else.	48.3
I found meaning and comfort in faith.	31.8
I asked for help or advice from colleagues and superiors on what to do.	38.5
I accepted the situation as it was and found a way to live with it.	76.9
I criticized and blamed myself for some of the things that had happened.	24.5
I often made jokes about the situation.	55.2
We managed and improvised on the go, in a makeshift manner.	85.7
I tried to keep a positive attitude.	93.0
I received emotional support and understanding from friends and family.	92.3
I kept hoping that all this would pass one day.	94.4

For further analyses, we selected the coping strategies that clearly represented adaptive or maladaptive ones and divided them into these two groups. The maladaptive strategies included items such as: *Alcohol or medicines helped me to get through difficult situations; I criticized and blamed myself for some of the things that had happened; I admit to myself that I can't deal with it and stopped trying.* The average score for maladaptive coping strategies on a 4-point scale was lower comparing to the adaptive ones ($M=2.0$, $SD=0.6$). Adaptive coping strategies included items such as: *I take additional action to try to solve the problem; Together with my colleagues, I made a good organization of work and devised a strategy on what to do in these circumstances; I received emotional support and understanding from friends and family; I tried to keep a positive attitude.* The average score for the adaptive coping strategies was moderate, but higher compared to the maladaptive ones ($M=3.3$, $SD=0.5$).

Relation of Burnout and DASS-21 with professional and personal experiences

All subscales of burnout and mental health difficulties moderately negatively correlate with satisfaction with different organizational aspects, working conditions, instructions from superiors, level of adaptation and efficiency of health institutions. Expectedly, the level of self-efficiency had positive, but lower correlations with professional experiences. Generally speaking, professional experiences are strongly related to different aspects of burnout syndrome, as well as with the level of stress. Particularly, working conditions had the highest correlation with all the aspects of burnout scales, but also with all measures of mental health difficulties (Table 6).

Table 6

Correlations of Burnout and DASS-21 with professional and personal experiences

	<i>Reorganization</i>	<i>Working conditions</i>	<i>Adaptation</i>	<i>Instructions</i>	<i>Efficiency</i>	<i>Social support</i>	<i>Concern about infection</i>
Emotional exhaustion	-.34**	-.49**	-.26**	-.37**	-.33**	-.12*	.31**
Compassion fatigue	-.18**	-.33**	-.17**	-.25**	-.27**	-.17**	.15*
Self-efficiency	.23**	.27**	.19**	.27**	-.29**	.17**	-.12*
Anxiety	-.09	-.37**	.01	-.17**	-.15**	-.17**	.39**
Depression	-.20**	-.44**	-.09	-.19**	-.23**	.23**	.32**
Stress	-.25**	-.53**	-.16**	-.24**	-.27**	-.20**	.33**

**p<.01 level (2-tailed). *p<.05 level (2-tailed).

All scales correlate in range from low to moderate with concern about personal or family member's infection. Correlations were higher with mental health difficulties than with burnout scales. It seems that professional experiences are more strongly correlated with burnout, while the tendency to worry about the COVID-19-related outcomes could impair mental health in challenging circumstances. On the other hand, social support from friends and family had a negative, but low correlation with burnout aspects (except self-efficacy), as well as with anxiety and stress levels, suggesting their protective, but not sufficient role for mental health protection in stressful situations at work.

We were also interested in exploring how personal experiences of infection, death or hospitalization of colleagues or family members, caused by the COVID-19, influenced burnout and mental health difficulties. Therefore, we applied one-factor analysis of variance to examine the differences at the DASS-21 and Burnout scales between groups of participants based on those specific pandemic consequences. Table 7 presents only significant results

of ANOVA. There is a significant difference in anxiety scores between the participants who were not infected by COVID-19 and the ones that were infected ($F(1,284) = 5.93$; $p = .016$, $\eta^2 = 0.02$), with the higher level of anxiety present among those who suffered from the infection.

Table 7

Differences between groups based on the experiences of infection, hospitalization and death of colleagues at DASS-21 and Burnout scales

	F	p	η^2		N	M	SD
Anxiety * Personal infection	5.93	.016	.020	Yes	150	14.83	10.93
				No	136	11.89	9.36
Depression * Death of colleague	4.87	.028	.017	Yes	124	15.30	10.59
				No	162	12.60	9.89
Depersonalization * Death of colleague	4.84	.029	.017	Yes	124	9.92	7.02
				No	162	8.26	5.73
Emotional Exhaustion * Infected colleague	8.25	.004	.028	Without hospitalization	78	32.56	13.11
				With hospitalization	206	37.00	11.00

Significant differences were also found in depression ($F(1,284) = 4.87$; $p = .028$, $\eta^2 = 0.02$) and depersonalization/compassion fatigue ($F(1,284) = 4.84$, $p = .029$, $\eta^2 = 0.02$) scores between the group of workers who experienced the death of a colleague due to COVID-19 and the group of those who did not. Higher levels on depression and depersonalization were reported among health workers whose colleagues had died.

Finally, the results confirmed that there were significant differences in emotional exhaustion among the groups based on the experience of infection of colleagues (with an infection and with a complicated infection when hospitalization was needed), ($F(2,282) = 8.25$, $p = .004$, $\eta^2 = 0.03$). Since there were only two participants without the experience of their colleagues' infection, they were not taken into account. The group of subjects whose colleague was hospitalized due to the COVID-19 infection had significantly higher scores of emotional exhaustion compared to the group of those whose colleague had been infected, but not hospitalized.

Relation of Burnout and DASS-21 with coping strategies

All scales (except Self-efficacy) had a moderate positive correlation with maladaptive coping strategies (using alcohol, self-blaming, withdrawal, etc.), while adaptive strategies (proactive actions, positive attitudes, optimism) had negative, but lower correlations with burnout and mental health difficulties. Self-efficacy had the highest correlations with adaptive strategies, while mental health difficulties were more connected with maladaptive coping. These correlations are shown in Table 8.

Table 8
Correlation of Burnout and DASS-21 with coping strategies

	<i>Adaptive</i>	<i>Maladaptive</i>
Emotional exhaustion	-.15**	.39**
Compassion fatigue	-.21**	.29**
Self-efficiency	.40**	-.29**
Anxiety	-.21**	.46**
Depression	-.29**	.53**
Stress	-.27**	.57**

** $p < .01$ level (2-tailed). * $p < .05$ level (2-tailed).

Hierarchical regression models

Hierarchical multiple regressions were conducted for the Emotional Exhaustion scale of Burnout scale and total score of DASS-21 as the dependent variables and specific experiences and coping strategies during COVID-19 as predictors. Socio-demographic variables, such as sex, age and education, were entered at first step, professional and personal experience variables at second, and adaptive and maladaptive strategies at third step of the regression. The authors of the Burnout scale recommend analysing the subscales separately, not as a total score. Hence, we opted to use only the Emotional Exhaustion variable for regression because our results confirmed that it was the most important indicator of burnout and had the highest correlation with different experiences. Specific personal experiences of direct consequences of COVID-19, such as infection or death of colleagues, are obviously very important for personal and professional wellbeing, but they were present in most cases, and therefore were not included as predictors due to their low variability. Regression statistics for Emotional Exhaustion are shown in Table 9.

Table 9
Regression statistics for Emotional Exhaustion

Variable	B	T	SE	R	R^2 adj	ΔR^2	<i>p-value</i>
Step 1				.18	.02	.03	.09
Gender (1=F, 2=M)	.138*	2.311	1.648				
Age	.240	1.537	.174				
Working experience	-.171	-1.123	.162				
Region	.015	.254	.744				
Educational profile	.010	.152	.272				

Variable	B	T	SE	R	R ² adj	ΔR ²	p-value
Step 2				.60	.33	.32	.00
Reorganization	-.037	-.559	.662				
Working conditions	-.337**	-5.706	.903				
Instructions from superiors	-.224*	-3.975	.564				
Adaptation	.005	.077	.506				
Efficacy	-.050	-.823	.998				
Concern about infection	.196**	3.879	.590				
Social support	-.048	-.979	.874				
Step 3				.62	.35	.02	.01
Adaptive coping	.039	-.674	1.327				
Maladaptive coping	.165**	3.008	.982				

Note. $N = 286$; * $p < .05$, ** $p < .01$

In the first step of hierarchical multiple regression, socio-demographic variables explained only 2% variance, ($R^2_{adj}=.02$; $F(5,280)= 1.89$; $p=.09$); only gender had a significant, but small contribution to prediction ($\beta=.138$, $p<.05$). In the second step, when experience variables were included, the model explained 33% of the variance of emotional exhaustion ($R^2_{adj}=.33$; $F(12,273)= 12.61$; $p<.001$). The most significant negative predictors were working conditions ($\beta=-.337$, $p<.01$), instruction for superiors, and concern about infection ($\beta=.196$, $p<.01$). In the third step of the regression model, coping strategies explained only 2% additional variance of emotional exhaustion ($\Delta R^2=.02$; $F(14,271)= 11.75$; $p<.01$), where only maladaptive strategies contributed significantly to the model ($\beta=.165$, $p<.01$). Together, all independent variables accounted for 38% variance of Emotional exhaustion.

Hierarchical multiple regression was conducted for the total score of the DASS scale as the dependent variable. The integration of three subscales seemed plausible since these three scales highly correlated, with the range from .70 to .79. The same predictors, socio-demographic variables, professional and individual experiences and coping strategies were included in three steps of regression. Regression statistics for the DASS scale are presented in Table 11.

Table 10
Hierarchical regression for the DASS scale

Variable	B	T	SE	R	R ² adj	ΔR ²	p-value
Step 1				.28	.06	.08	.00
Gender (1=F, 2=M)	.268**	4.614	1.322				
Age	.073	.480	.140				
Working experience	-.082	-.549	.130				
Region	.024	.406	.597				
Educational profile	.070	1.150	.218				
Step 2				.64	.38	.33	.00
Reorganization	.032	.499	.524				
Working conditions	-.395**	-6.959	.715				
Instructions from superiors	-.133*	-2.456	.447				
Adaptation	.113	1.957	.401				
Efficacy	-.009	-.155	.790				
Concern about infection	.279**	5.743	.467				
Social support	-.176**	-3.698	.692				
Step 3				.72	.49	.11	.00
Adaptive coping	-.098	-1.922	.965				
Maladaptive coping	.359**	7.408	.714				

Note. N = 286; * $p < .05$, ** $p < .01$

The results of hierarchical multiple regression showed that demographic variables contributed significantly to the regression model and explained 6% variance of the DASS score, ($R^2_{adj}=.06$; $F(5,280)= 4.58$; $p<.001$), where gender was the only significant predictor ($\beta=.266$, $p<.01$) of mental health difficulties. Introducing different professional and personal experiences, predictors together explained 38% of the total DASS score ($R^2_{adj}=.38$; $F(12,273)= 12.61$; $p<.001$). Variables that contributed significantly to the regression model were working conditions ($\beta=-.395$, $p <.001$), concern about infection ($\beta=.279$, $p <.001$), and instructions from superiors ($\beta=-.133$, $p <.001$). Finally, when coping strategies were introduced in the third step of the regression model, they explained an additional 11% of DASS ($\Delta R^2=.11$; $F(14,271)= 20.43$; $p<.001$). Together, all independent variables accounted for 49% of the variance of mental health difficulties.

Discussion

The study examined the effects of the COVID-19 induced changes in working demands and health-related concerns on the mental health of healthcare workers in COVID-19 units after two years of the pandemic in Serbia. Further, we wanted to specify some risk and protective factors associated with burnout and mental health difficulties.

The results confirmed the presence of a large number of stressful professional experiences among the health workers. They reported dissatisfaction with most aspects of work, such as reorganization and adaptation to a new, challenging situation, institutional efficiency and instructions given by government institutions. Health workers were especially dissatisfied with working conditions, such as limited equipment, lack of employees, work overload, safety risks, etc. Specific experiences with COVID-19 consequences showed that almost all health workers had colleagues who had been infected, among whom many had been hospitalized. Despite the official statements in media that there was no evidence about fatal outcomes among health workers caused by COVID-19, almost half of the participants reported that they had colleagues who had died as a consequence of the infection. The perceived discrepancy between public information in the media and personal experiences was an additional source of stress and disappointment.⁶ In addition, most of them had to cope in some period with personal infection or/and infected family members. Concerns about personal health or health of family members or colleagues increased the level of stress, which has been confirmed by other studies as well. One of them, a cross-cultural study conducted in Italy, Serbia, and Romania on the sample of 1,100 participants, showed that the level of distress during the COVID-19 pandemic was higher for people who were prone to worry and those who had higher levels of fear of COVID-19 (Kosić & Džamonja, 2021a).

The results concerning burnout indicate that over 90% of participants reported high or moderate levels of emotional exhaustion, while over half of them experienced a high or moderate level of compassion fatigue, a high or moderate level of anxiety or stress; slightly less than half experienced the same level of depressive symptoms.

An exploration of coping strategies indicated that health workers relied more often on the adaptive strategies than on the maladaptive ones. Burnout and mental health difficulties had a moderate positive correlation with maladaptive coping strategies (using alcohol, self-blaming, withdrawal, etc.) and negative, but lower correlations with the adaptive strategies (proactive actions, positive attitudes, optimism). Self-efficiency had the highest correlations with the adaptive strategies. We can speculate that there is a mutual influence of those constructs. Use of the adaptive strategies improves the feeling of self-efficiency; additionally, self-efficient persons are more prone to using adaptive strategies.

The findings about the impact of COVID-19 on mental health indicate that a higher level of anxiety was present among those who experienced the

6 The initiative of the association for Sustainable Future – *Koraci* to conduct this survey was based on unofficial reports of colleagues from Medical Services, who warned about problems of burnout in COVID19-units in Serbia.

infection. Health workers whose colleagues had died had higher scores on Depression and Depersonalization scales. While the experience of loss leads to mourning or even depression, we can speculate that Depersonalization could be associated with the perception that high rate of death among them was not recognized in public. Probably reduced receiving empathy can also lead to questionable giving of empathy for others, which was reflected in compassion fatigue. Similarly, the level of Emotional Exhaustion was higher among the participants whose colleague was hospitalized due to the COVID-19 complications, compared to those whose colleagues were just infected but not hospitalized. In fact, there were almost none of them without the experience of the COVID-19 infection.

However, the majority of healthcare workers received a high level of social support from their family and friends, which has been confirmed as a strong protective factor in stressful circumstances (Džamonja et al., 2020; Džamonja et al., 2021; Kosic et al., 2021b). Social support from friends and family negatively correlated with the Burnout and DASS scales, suggesting their protective role, but low correlations also imply that relying only on social support just reduces the risk, but cannot prevent the effect of many other sources of stress. Still, the absence of support could be an additional risk factor for mental health.

We were also interested in exploring how professional and personal sources of stress, as well as the use of different coping strategies, predict the levels of burnout and mental health problems. The results showed that the most prominent predictors of those difficulties were impaired working conditions and insufficient instructions from superiors, as well as a high level of personal concern about infection and maladaptive coping strategies, while social support diminished mental health risk. Differences in the levels of the predictors' contribution to criteria variables indicate that burnout is better predicted by negative professional experiences, as well as by concerns about the infection and maladaptive coping strategies, but those two personal factors played a more important role in the prediction of mental health problems.

Conclusions

The main results confirm the findings of other studies that health workers have been working under the extremely challenging conditions that had an impact on the high level of burnout and mental health difficulties. The most important risk factors for burnout were poor working conditions and insufficient instructions from superiors, which made an already challenging situation even harder. If it is accompanied with concerns about the infection and relying on maladaptive coping strategies, this increases the possibility for mental health problems.

There are some limitations of the present study. First of all, the sample was not representative. Nevertheless, the number of respondents was considerable, having in mind that the questionnaire was distributed to those healthcare workers assigned to the COVID/ICU Hospital Units in Serbia. A relatively small and selected sample limits the generalization of the results. In addition, a small, mixed sample of doctors with different levels of qualifications and nurses and technicians also prevents us from comparing the experiences of those groups. Certain open-ended questions at the end of the questionnaire make it possible to conclude that our participants were motivated to express their problems (*"Nobody has asked us what we think or how we feel. Finally, we have an opportunity to do so"*). There may also be chance that the most vulnerable health workers were not included, those who had no motivation to fill in the questionnaire or those who were even afraid that the study was not really anonymous (although they were informed about it and were not asked for any identification data), which reflects other pressures to which they were exposed.

* * *

All in all, healthcare workers made a maximum effort to do their best, mostly relying on their adaptive coping strategies, teamwork with colleagues and support from their family and friends. Based on the fact that professional factors have an important role in the prevention of burnout, plenty of consequences could have been avoided with appropriate instructions and improved working conditions. Healthcare managers acknowledge the challenges for mental health of medical staff and minimize the psychological risk based on the evidence of similar studies across the world (Greenberg et al., 2020a; Greenberg et al., 2020b). Other studies pointed that supportive managers contribute to better mental health of their staff (Sanghera et al, 2020).

The fact that healthcare workers experienced significant mental health difficulties also points out to the importance of providing psychosocial support to vulnerable staff in order to prevent further impairment of their mental health. The access to the rapid-response mobile teams of psychologists and psychiatrists should be provided. Since the problems were experienced by the majority of health workers, it is necessary to focus intervention on the systemic and organizational problems instead of addressing them solely to individual responsibility.

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Pandemija Kovid-19 i mentalno zdravlje zdravstvenih radnika u Srbiji

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Pandemija COVID-19 dovela je mnoge profesionalce širom sveta u veoma izazovne okolnosti. Zdravstveni radnici su posebno uložili ogromne napore da se izbore sa brojnim izazovima. Brojna istraživanja pokazuju da ovi stresorii utiču na probleme mentalnog zdravlja i dovode do sindroma sagorevanja. Od važnosti je istražiti različite posledice po mentalno zdravlje zdravstvenih radnika u kontekstu odgovora određene zemlje na pandemiju. Ova studija je ispitala uticaj povećanih zahteva na mentalno zdravlje zdravstvenih radnika nakon skoro dve godine bavljenja pandemije. Sprovedena je onlajn anonimna studija tokom oktobru 2021. Uzorak je činilo 286 zdravstvenih radnika (76.7% muškaraca) iz svih regiona Srbije. Upitnik je obuhvatio socio-demografske podatke, profesionalna i lična iskustva tokom pandemije, poteškoće sa mentalnim zdravljem i sagorevanje. Rezultati su pokazali da je skoro polovina učesnika imala povišen nivo depresivnosti i preko 60% njih viši nivo anksioznosti i stresa. Emocionalnu iscrpljenost, kao simptom sagorevanja, doživeli su skoro svi učesnici (91,9%), praćenu umerenim zamorom saosećanja i nižom samoefikasnošću. Najznačajniji prediktori sagorevanja i teškoća mentalnog zdravlja bili su otežani uslovi rada i nedovoljna uputstva nadređenih, visok nivo lične zabrinutosti od zaražavanja i neprilagođene strategije prevladavanja. Rezultati ukazuju na važnost pružanja psihosocijalne podrške za sprečavanje daljeg narušavanja mentalnog zdravlja, ali i da je neophodno intervencije usmeriti na spoljašnje organizacione faktore, umesto fokusiranja isključivo na individualnu vulnerabilnost.

Ključne reči: zdravstvenii radnici, Kovid-19, mentalno zdravlje, stres, sindrom sagorevanja

Relacija između stilova afektivne vezanosti, psihopatoloških simptoma i kvaliteta socijalnih odnosa: istraživanje na kliničkom uzorku

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Cilj ovog istraživanja bio je da se na kliničkom uzorku ispituju razlike između četiri stila afektivne vezanosti u odnosu na psihopatološke simptome i kvalitet socijalne razmene, te da se utvrdi uloga afektivne vezanosti i različitih psihopatoloških ispoljavanja u predikciji pozitivne i negativne socijalne interakcije. U istraživanju je učestvovalo 57 pacijenata neuropsihijatrijskog odeljenja Službe za specijalističko-konsultativnu zdravstvenu delatnost Doma zdravlja u Novom Sadu. Više od polovine ispitanika bilo je ženskog pola (61%), a uzrast se kretao od 17 do 68 godina ($M = 40.13$, $SD = 12.35$). Za procenu stila afektivne vezanosti primenjen je upitnik Relationships Questionnaire (RQ), psihopatološki simptomi mereni su pomoću Cornell Index-a (CI-N4), dok je kvalitet socijalnih odnosa procenjen pomoću instrumenta Network of Relationship Inventory (NRI). Najviše psihopatološke simptomatologije registruje se kod ispitanika sa preokupiranim stilom, a potom slede ispitanici čiji stil je identifikovan kao bojažljiv. Ista dva stila pokazuju i najmanje pozitivne socijalne razmene. Statistički značajne razlike na većini psihopatoloških skala CI-N4 registrovane su pretežno između sigurno i preokupirano vezanih ispitanika, dok između ispitanika sa sigurnim i izbegavajućim obrascem nisu registrovane značajne razlike na indikatorima psihopatologije i socijalnog funkcionisanja. Sigurna afektivna vezanost i nizak agresivno-asocijalni sklop (impulsivnost, agresivnost i paranoidnost) bili su najznačajniji prediktori pozitivne socijalne razmene. Poznavanje psihopatoloških manifestacija karakterističnih za različite stilove nesigurne vezanosti može doprineti efikasnosti psihodijagnostičkog i psihoterapijskog procesa, a podatak o tome da nesigurna vezanost i agresivno-asocijalni sklop u najvećoj meri kompromituju pozitivnu socijalnu razmenu mogu olakšati postavljanje ciljeva i prioriteta tokom psihološkog tretmana osoba iz kliničkog spektra.

Ključne reči: stilovi afektivne vezanosti, interpersonalne relacije, kvalitet socijalnih odnosa, psihopatologija

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Uvod

Afektivna vezanost predstavlja veoma važan psihološki koncept koji već decenijama zaokuplja pažnju istraživača i kontinuirano pronalazi svoje mesto u naučnoj literaturi, usled relevantnosti koju ima za razumevanje brojnih aspekata ljudskog funkcionisanja – od organizacije ličnosti, preko partnerskih i prijateljskih relacija, kvaliteta interpersonalnih odnosa, pa sve do ispoljavanja psihopatoloških fenomena.

U okviru svoje klasične teorije afektivne vezanosti Bowlby (Bowlby, 1973) je razvio pretpostavke o formiranju radnih modela o sebi i drugima, koji se kod deteta razvijaju u ranom detinjstvu, na osnovu njegove interakcije sa okruženjem. Model o sebi može da bude pozitivan (osoba sebe doživljava kao nekog ko je vredan pažnje i ljubavi) ili negativan (osoba smatra da ne zasluži pažnju i ljubav). Model o drugima takođe može biti pozitivan (drugi ljudi se percipiraju kao dostupni i brižni) ili negativan (drugi ljudi se doživljavaju kao nedostupni i odbacujući). Ovi radni modeli iz ranog detinjstva predstavljaju sržno svojstvo kasnijeg afektivnog vezivanja u odraslom dobu. Stilovi afektivne vezanosti kod odraslih zasnivaju se na ranim iskustvima u odnosu sa primarnim figurama i pretežno obuhvataju doživljaj sigurnosti i responsivnosti na potrebe deteta (Pedović, 2011). Preciznije rečeno, rani obrazac afektivne vezanosti uspostavljen sa majkom (ili drugim relevantnim figurama) prenosi se na kasnije socijalne relacije i boji zajedničkim tonom sve kasnije odnose, od adolescencije do zrelog doba (Bowlby, 1982; Shorey & Snyder, 2006). U detinjstvu, uglavnom su roditelji dominantni objekti afektivne vezanosti, dok tokom odraslog doba to pretežno postaju prijatelji i partneri, odnosno sve one osobe sa kojima se može stupiti u trajnije emocionalne relacije (Kamenov, 2007, prema Pedović, 2011). Iz svojih ranih iskustava, osobe uče šta mogu da očekuju od sebe i od drugih i kasnije ta očekivanja prenose na odnose koje formiraju u odraslom dobu.

Oslanjajući se na Bowlbyjeve teorijske postavke, Kim Bartholomew (1990) je formulisala novi četvorokategorijalni model (Bartholomew, 1990; Bartholomew & Horowitz, 1991) kako bi objasnila afektivnu vezanost kod adolescenata i odraslih osoba. U osnovi ovog modela, nalaze se dve dimenzije: dimenzija anksioznosti, kao model sebe i dimenzija odbacivanja, kao model drugog. Dimenzija anksioznosti na jednom polu ima nisku, a na drugom visoku anksioznost koja podrazumeva preokupiranost ljubavlju, strepnjom od napuštanja i intenzivnu potrebu za prevelikom bliskošću. Sa druge strane, dimenzija odbacivanja na jednom polu ima prihvatanje, a na drugom odbacivanje bliskosti koje se odnosi na nesposobnost za uspostavljanje bliskih relacija (Pedović, 2011). Kada se ove dimenzije međusobno ukrste, dobijaju se četiri stila afektivne vezanosti: siguran, preokupirani, izbegavajući i bojažljiv obrazac.

Siguran obrazac afektivne vezanosti podrazumeva pozitivan model sebe i drugih. Osobe koje manifestuju siguran obrazac afektivnog vezivanja imaju kapacitet da ostvare autentične odnose, uspostave doživljaj poverenja i bliskosti, a u situacijama stresa spremne su da otvoreno komuniciraju o svojim potrebama, te da od partnera traže utehu i zaštitu (Pedović, 2011; West & Sheldon-Keller, 1994).

U slučaju preokupiranog stila, osoba je formirala negativan model sebe i pozitivan model drugih, pa je za ovaj obrazac karakteristična visoka anksioznost i nisko izbegavanje. Osobe čije funkcionisanje odgovara preokupiranom stilu manifestuju izraženu zavisnost, intenzivan strah od napuštanja, odbacivanja i gubitka odnosa, sklone su dramatisaciji i ulasku u simbiotske relacije (Pedović, 2011; Stefanović-Stanojević, 2005).

Za izbegavajući obrazac karakteristično je prisustvo pozitivnog modela sebe i negativnog modela drugih, odnosno niska anksioznost i visoko izbegavanje. Ove osobe često smatraju da su superiornije od ostalih, sklone su da umanjuju značaj bliskih relacija, odbacuju potrebu za bliskošću i emocionalnom intimnošću, te negiraju svaku vrstu zavisnosti u odnosu na partnera (Cowan et al., 1996; Pedović, 2011; Stefanović-Stanojević, 2004).

Bojažljivi stil afektivne vezanosti odlikuje se negativnim modelom sebe i drugih, odnosno visokom anksioznošću i visokim izbegavanjem. Osobe koje manifestuju osobine bojažljivog obrasca pokazuju visok stepen zavisnosti od drugih, tragaju za potvrdom sopstvene vrednosti kroz socijalne relacije, ali istovremeno imaju i negativna očekivanja od drugih, te zbog toga nastoje da izbegnu bliskost, kako bi se zaštitile od mogućeg emocionalnog bola u slučaju napuštanja (Pedović, 2011; Stefanović-Stanojević, 2005).

Pošto je ovo istraživanje bilo usmereno na razumevanje pitanja kakav je odnos između obrazaca afektivne vezanosti u odraslom dobu kod ispitanika iz kliničke populacije i različitih klastera psihopatoloških simptoma, odnosno kvaliteta socijalne interakcije, u narednim redovima biće prikazani rezultati prethodnih studija koje su obrađivale date teme.

Odnos između tipova afektivne vezanosti i psihopatoloških simptoma

Uvidom u bogat korpus dosadašnje literature koja se bavila proučavanjem odnosa između stilova afektivne vezanosti i psihopatologije, može se jasno zaključiti da postoji dosledan konsenzus o pozitivnoj povezanosti između nesigurne afektivne vezanosti (koja se manifestuje kao preokupirani, izbegavajući ili bojažljivi obrazac) i širokog spektra različitih psihopatoloških simptoma i mentalnih poremećaja. U ranijim studijama pronađena je značajna povezanost između nesigurne afektivne vezanosti u odraslom dobu i psihopatologije. U odnosu na osobe sa sigurnom afektivnom vezanošću, individue sa nesigurnim obrascima ostvaruju povišene skorove na merama indikatora psi-

hotičnih poremećaja, somatizacije, distimije, PTSP-a, anksioznosti i depresije (Allen et al., 1998). Sa druge strane, ispitanici sa sigurnim stilom manifestuju značajno nižu sklonost ka opštoj anksioznosti, paničnim stanjima, socijalnoj i drugim vrstama fobija, PTSP-u, opsesivno-kompulzivnim tendencijama, paranooidnoj ideaciji, somatizacijama, maničnim stanjima, distimiji i depresiji (Cooper et al., 1998; Mickelson et al., 1997).

Kada su u pitanju simptomi depresije, pronađena je negativna povezanost sa indikatorima sigurnog stila i pozitivna korelacija sa odlikama preokupiranog i bojažljivog stila afektivne vezanosti (Roberts et al., 1996). Kod osoba sa sigurnim i izbegavajućim obrascem registrovani su znatno niži nivoi depresije i anksioznosti, u odnosu na osobe sa odlikama preokupiranog i bojažljivog stila (Gittleman et al., 1998; Murphy & Bates, 1997). Nalazi dosadašnjih studija ukazuju na to da je sigurna afektivna vezanost negativno povezana sa simptomima depresije i generalizovanog anksioznog poremećaja (Marganska et al., 2013). Osobe koje pokazuju odlike sigurne afektivne vezanosti takođe manifestuju bolju emocionalnu regulaciju i uspešniju kontrolu impulsa (Marganska et al., 2013). Sa druge strane, nesigurna afektivna vezanost generalno pozitivno korelira sa emocionalnom disregulacijom, te sa simptomima depresije i generalizovanog anksioznog poremećaja (Marganska et al., 2013). Bojažljivi, preokupirani i izbegavajući obrazac u najvećoj su meri povezani sa depresijom i simptomima generalizovanog anksioznog poremećaja (Hankin et al., 2005; Marganska et al., 2013; Simonelli et al., 2004). Specifičnije, pokazalo se da je izbegavajući stil bio povezan samo sa depresijom, dok je preokupirani stil bio povezan istovremeno i sa depresijom i sa anksioznošću (Hankin et al., 2005).

Teorijska razmatranja, ali i empirijski nalazi ukazuju na važnu ulogu nesigurne afektivne vezanosti na putu od štetnih iskustava u detinjstvu, do paranooidne ideacije u odraslom dobu (Bentall et al., 2014; MacBeth et al., 2011). Kada je u pitanju klinička populacija, pronađena je povezanost između nesigurnog stila afektivne vezanosti i paranooidne simptomatologije (Wickham et al., 2015). Berry i saradnici (2006) su u istraživanju koje je sprovedeno na nekliničkom uzorku pokazali da su preokupirani i izbegavajući stil značajno povezani sa paranooidnom ideacijom. Drugi istraživači takođe su demonstriali značajnu povezanost između nesigurne afektivne vezanosti i paranooidne ideacije na širem, nekliničkom uzorku (Mickelson et al., 1997; Pickering et al., 2008). U novijoj studiji koja je prikazala pregled literature fokusirane na relaciju između stilova afektivne vezanosti i paranooidnih sadržaja, u 11 od 12 studija koje su uključene u istraživanje (i sprovedene na uzorku ispitanika kojima je dijagnostikovana shizofrenija ili drugi psihotični poremećaj), pronađena je asocijacija između nesigurne afektivne vezanosti i paranoje, pri čemu je ova povezanost ostala značajna čak i kada su se kontrolisali komorbidni simptomi (Lavin et al., 2020). Najizraženija i najčešća povezanost detektovana je između preokupiranog obrasca afektivne vezanosti i paranoje (Lavin et al., 2020).

Kada je reč o relaciji između stilova afektivne vezanosti i psihopatskih odlika (sa kojima se, između ostalog, povezuju i impulsivno i antisocijalno ponašanje), Bowlby je smatrao da rano odvajanje od figure emocionalne vezanosti ili pak odsustvo takve figure može predisponirati individuu za razvoj emocionalno hladne i bezosećajne ličnosti (Flight & Forth, 2007). Kada se deca emocionalno ne povežu sa svojim negovateljima, ona u odraslom dobu mogu manifestovati sklonost ka nasilju i nedostatak empatije (Flight & Forth, 2007). Empirijska istraživanja utvrdila su pozitivnu povezanost između nesigurne afektivne vezanosti i psihopatskih tendencija (Alzeer et al., 2019). Preciznije, pokazalo se da osobe sa izbegavajućim i bojažljivim stilom ostvaruju više skorove na merama primarne i sekundarne psihopatije u poređenju sa ispitanicima koje karakteriše siguran stil afektivne vezanosti (Alzeer et al., 2019). Druge studije takođe ukazuju na to da izbegavajući obrazac afektivnog vezivanja predstavlja faktor rizika za manifestaciju osobina koje se povezuju sa psihopatijom, posebno sa njenom afektivnom dimenzijom (Kyranides et al., 2021; Walsh et al., 2019). Važno je, međutim, naglasiti da utvrđena korelacija između nesigurne afektivne vezanosti i psihopatskih tendencija svakako ne rasvetljava pitanje kauzalnosti. Sa jedne strane, može se pretpostaviti da psihopatske crte ličnosti mogu nastati kao rezultat neadekvatnih roditeljskih postupaka. Sa druge strane međutim, postoje i nalazi istraživanja koji ukazuju na to da različite karakteristike deteta, kao što su recimo bezosećajno, neosetljivo ili ravnodušno ponašanje, te izostanak adekvatnog odgovora na emocionalne signale figura afektivne vezanosti, vremenom mogu dovesti do promena u ponašanju roditelja, te narušiti zdrave vaspitne stilove (Dadds et al., 2011; Hawes et al., 2011).

Nalazi dosadašnjih studija ukazali su na to da stilovi afektivne vezanosti nisu značajni samo za psihološko, već i za fizičko blagostanje. Tako istraživanja pokazuju da se kod osoba koje su sklone somatizaciji u znatno većoj meri može registrovati tendencija ka nesigurnom obrascu afektivne vezanosti (Neumann et al., 2010; Waller et al., 2004). Pokazalo se da je izbegavajući stil povezan sa povišenim nivoom somatskih simptoma (Wayment & Vierthaler, 2002). Druga istraživanja demonstrirala su da je izražena anksioznost u kontekstu afektivne vezanosti, u smislu preokupiranog obrasca, povezana sa učestalijim somatskim simptomima (Wearden et al., 2003).

Tipovi afektivne vezanosti i kvalitet socijalnih odnosa

Poznato je da kvalitet afektivne vezanosti u detinjstvu nastavlja da utiče na socijalne odnose i tokom odraslog doba, a pozitivne relacije sa drugima već dugo se smatraju jednim od ključnih aspekata psihološkog blagostanja (Ryff, 1989) i važnom determinantom kako optimalnog psihološkog funkcionisanja, tako i životnog kvaliteta. U dosadašnjoj literaturi jasno je dokumentovano da osobe sa sigurnim stilom afektivne vezanosti u odraslom dobu

svoje odnose opisuju kao kvalitetnije, pokazuju veću otvorenost u interpersonalnim relacijama, otvorenije komuniciraju sa svojim partnerima, raspoložu konstruktivnijim načinima prevazilaženja konflikata, u većoj meri se oslanjaju na partnere i više se o njima staraju (Bierhoff & Grau, 1999; Levy & Davis, 1988). Ove osobe takođe manifestuju više samopouzdanja i manje anksioznosti u vezi sa partnerskim odnosima (Feeney & Noller, 1990), te izveštavaju o većem doživljaju ispunjenosti u socijalnim relacijama. Može se reći da kod osoba sa sigurnim obrascem afektivne vezanosti postoji balans između potrebe za vezivanjem sa jedne strane i potrebe za autonomijom, sa druge (Rakočević-Medojević, 2016). Individue sa nesigurnim obrascem afektivnog vezivanja izveštavaju o znatno manjem broju bliskih odnosa u koje su duboko investirane (Bierhoff & Grau, 1999). Specifičnije posmatrano, osobe sa izbegavajućim stilom manifestuju strah od bliskosti, poteškoće na planu emocionalnog vezivanja i uspostavljanja bliskosti, te imaju manje poverenja u svoje partnere (Knoke et al., 2010). Osobe sa preokupiranim stilom afektivne vezanosti pokazuju konstantnu zaokupljenost odnosom, strah od napuštanja i samoće, sklonije su ljubomori i imaju manje poverenja u svoje partnere (Bierhoff & Grau, 1999). Takođe, pokazalo se da preokupirani obrazac afektivne vezanosti korelira sa sniženim bračnim zadovoljstvom (Ben-Ari & Lavee, 2005; Knoke et al., 2010). Osobe koje odlikuje bojažljivi obrazac afektivnog vezivanja manifestuju istovremeno i nisko samopouzdanje i nedostatak poverenja, kako u sebe, tako i u partnera (Rakočević-Medojević, 2016). Kod njih je sa jedne strane prisutna snažna potreba za bliskošću, ali sa druge izbegavaju vezivanje usled straha od odbacivanja i doživljaja emocionalne povrednosti (Rakočević-Medojević, 2016). Teško se povezuju sa drugima, a kada to i čine, postaju pasivni i zavisni u odnosu na partnera. Iako je na osnovu pregleda dosadašnje literature jasno da nesigurni stilovi afektivne vezanosti sa sobom generalno nose znatno niži kvalitet socijalnih odnosa, i dalje je relativno nepoznato koji od specifičnih stilova nesigurne afektivne vezanosti pokazuju najizraženiji stepen disfunkcionalnosti na planu interpersonalnih relacija. U tom svetlu, jedna od namera ovog rada bila je upravo da se istraže razlike u zastupljenosti pozitivne i negativne socijalne razmene između obrazaca privrženosti kod odraslih ispitanika iz kliničke populacije.

Problem i cilj istraživanja

Rezultati dosadašnjih studija pokazuju saglasnost kada je u pitanju uvid da siguran stil afektivne vezanosti opisuju pozitivniji ishodi na planu mentalnog zdravlja i kvalitetnije, u većoj meri ispunjavajuće socijalne relacije, dok nesigurnu afektivnu vezanost prate brojni psihopatološki simptomi i problemi u interpersonalnom funkcionisanju. Prethodni nalazi su, međutim, manje dosledni kada je u pitanju odnos konkretnih kategorija stilova nesigurne

vezanosti sa različitim psihopatološkim korelatima i odrednicama kvaliteta socijalnih odnosa, posebno imajući u vidu činjenicu da je veliki broj studija realizovan na nekliničkom uzorku, pa je nejasno mogu li se dobijeni rezultati generalizovati i na ispitanike iz kliničke populacije. Jedan od osnovnih razloga ovakvog dispariteta u rezultatima, pored metodoloških, usled korišćenja različitih mernih instrumenata, razlika u uzorku i slično, jeste i činjenica da brojni drugi faktori moderiraju ove relacije. Naime, relacije između stilova afektivne vezanosti, psihopatoloških simptoma i kvaliteta socijalnih interakcija moderirane su brojnim biološkim, psihološkim i socio-kulturalnim faktorima, kao i činjenicom da problemi na planu mentalnog zdravlja i sami po sebi menjaju lični doživljaj sigurnosti emocionalne privrženosti kod pojedinca (Mikulincer & Shaver, 2012). Osim toga, koliko je autorima poznato, prisutan je manji broj realizovanih istraživanja koja ispituju relacije afektivne vezanosti, psihopatologije i kvaliteta socijalnih odnosa na kliničkoj populaciji, što je bila važna motivacija za autore. Takođe, na osnovu pregleda literature koja je autorima bila dostupna, još uvek je relativno nepoznato koje dimenzije psihopatoloških simptoma zapravo u najvećoj meri remete kvalitet socijalnih odnosa i kolika je uloga afektivne vezanosti u predikciji kvaliteta socijalnog funkcionisanja. Ovo pitanje je veoma važno jer se pozitivne relacije sa drugima smatraju jednim od ključnih aspekata psihološkog blagostanja, te kao takve često predstavljaju prioritet u psihoterapijskom radu koji se sprovodi u kliničkom kontekstu. Učestali interpersonalni konflikti i problemi na planu uspostavljanja ili održavanja zadovoljavajućih odnosa sa drugima ne samo da mogu biti uzrok različitih problema na planu mentalnog zdravlja, već mogu biti i njihova posledica. Takođe, resursi kvalitetne socijalne podrške i ispunjavajuće relacije sa važnim drugima imaju moćna lekovita svojstva, ali mogu biti i od velikog prognostičkog značaja kada je u pitanju uspešnost psihoterapijskog tretmana. Stoga je problem našeg istraživanja bio dvojak: sa jedne strane fokus je bio na tome da se na kliničkom uzorku utvrde svojevrsni profili psihopatoloških simptoma i kvaliteta socijalnog funkcionisanja za svaki od četiri stila afektivne vezanosti pojedinačno, a sa druge, da se ispita relativna uloga afektivne vezanosti i psihopatologije u predikciji kvaliteta socijalnih odnosa. Cilj istraživanja bio je da se provere razlike između četiri stila afektivne vezanosti na skalama koje mere širok spektar psihopatoloških simptoma i na dimenzijama pozitivne i negativne socijalne razmene, te da se potom utvrdi uloga afektivne vezanosti i različitih psihopatoloških simptoma u predikciji pozitivne i negativne socijalne interakcije na kliničkom uzorku. Autorima nije poznato da su prethodne studije ispitivale prediktore dimenzija pozitivne i negativne interpersonalne razmene u kontekstu afektivne vezanosti i različitih klastera psihopatoloških simptoma kod pripadnika kliničke (ali ni ošpšte) populacije, te nastojanje da se odgovori na dato pitanje predstavlja poseban doprinos ovog istraživanja.

Metod

Uzorak

Uzorak je sačinjavalo ukupno 57 ispitanika. S obzirom na činjenicu da su ispitanici ujedno bili i pacijenti neuropsihijatrijskog odeljenja Službe za specijalističko-konsultativnu zdravstvenu delatnost Doma zdravlja u Novom Sadu, uzorak se određuje kao prigodan. Od ukupno 57 ispitanika, više od polovine njih su pripadnici ženskog pola (61%). Uzrast ispitanika se kretao od 17 do 68 godina, sa prosečnom starošću od 40 godina ($M = 40.13$, $SD = 12.35$). Kada je u pitanju obrazovanje ispitanika, većina ispitanika ima završenu srednju školu (61%), zatim visoku (29%) i osnovnu školu (7%). Na pitanje o bračnom statusu, većina ispitanika izjavljuje da su samci (47%), dok ostali izjavljuju da su u braku (35%) i razvedeni (16%). Nakon psihijatrijske i psihološke eksploracije i evaluacije, najvećem broju ispitanika je dijagnostikovana anksiozni poremećaj (24 ispitanika), zatim depresivni poremećaj (14), psihotični poremećaj (8), poremećaj ličnosti (5) i reakcija na stres (6).

Varijable i instrumenti

Stil afektivne vezanosti. Pod stilom afektivne vezanosti podrazumevamo specifičnu organizaciju osećanja, kognicija i ponašanja osobe u onim odnosima koji obezbeđuju doživljaj sigurnosti i pripadanja (Žuvela, 2004). Radi procene stila afektivne vezanosti upotrebljen je upitnik RQ (Relationships Questionnaire) (Bartholomew & Horowitz, 1991). Upitnik sadrži 4 ajtema kojima se opisuje 4 stila afektivne vezanosti (siguran, preokupirani, bojažljivi i izbegavajući). Izborom jednog od 4 ajtema, ispitanici procenjuju na koji način doživljavaju bliske odnose, kako o njima razmišljaju i kako se ponašaju. Ukoliko osoba odabere opis koji odgovara preokupiranom, bojažljivom ili izbegavajućem tipu privrženosti, može se smatrati da je u pitanju jedna od različitih manifestacija nesigurne afektivne vezanosti. Korišćena je verzija upitnika koju su na domaćoj populaciji primenili Stefanović-Stanojević i Nedeljković (2012) sa nivoom pouzdanosti $\alpha = .67$. Generalno upitnik pokazuje srednju test-retest pouzdanost (Scharfe & Bartholomew, 1994) i visoku povezanost sa drugim samoispisnim merama stila afektivne vezanosti (Stein et al., 2010).

Psihopatološki simptomi. Psihopatološke manifestacije smo ispitali pomoću upitnika CI-N4 (Cornell Index), kao prilagođene i validirane verzije (Momić, 1971) originala iz 1945 godine (Wieder et al., 1997). Upitnik sadrži 110 tvrdnji, sa ponuđenim odgovorima „Tačno“ i „Netačno“, čijim zaokruživanjem ispitanik odgovara da li one opisuju ili ne njegovo tipično ponašanje i doživljavanje. Upitnik omogućava kvantitativnu obradu podataka i tumačenje putem 12 primarnih skala (anksioznost, fobičnost, hipersenzitivnost, depresivnost, kardiovaskularna, inhibitorna i gastrointestinalna konverzija, hipohondrič-

nost, opsesivno-kompulzivne tendencije, impulsivnost, agresivnost i paranoičnost), zatim 3 šira faktora drugog reda (Anksiozni sindrom – određen primarnim neurotskim reakcijama anksioznosti, fobičnosti, hipersenzitivnosti, depresivnosti i opsesivne kompulzivnosti; Konverzivni sindrom – integralna mera kardiovaskularnih, inhibitornih i gastrointestinalnih konverzivnih reakcija i hipohondrijskih simptoma i Agresivno-asocijalni sindrom – dobijen akumulacijom primarnih mera impulsivnosti, agresivnosti i paranoidnih reakcija) i faktora opšteg neuroticizma na nivou cele skale (Momirović, 1971). Pored toga, upitnik sadrži i kontrolni skup ajtema (F i L skale – 10 ajtema), vezanih za procenu razumevanja postupka testiranja i sklonosti simulaciji odgovora. Za potrebe našeg istraživanja korišćeno je 12 primarnih skala, kao i 3 faktora drugoga reda. Pouzdanost primarnih skala CI-N4, izražena Kronbahovim alfa koeficijentom se kreće od .70 do .90 (Kulenović i Buško, 1999).

Kvalitet socijalnih odnosa. Konstrukt kvaliteta socijalnih odnosa ukazuje na pozitivne i negativne karakteristike kojima se taj odnos opisuje (Berndt, 1996). Kvalitet socijalnih odnosa smo procenjivali putem upitnika Inventar mreže socijalnih odnosa (NRI – Network of Relationship Inventory) (Furman & Buhrmester, 1985). Primenjena je verzija originalnog upitnika koja je prevedena i korišćena na domaćem uzorku (Petrović, 2012) i dosegla nivo pouzdanost $\alpha = .89$. Upitnik je upotrebljen u modifikovanoj verziji. U originalnoj verziji ispitanici procenjuju 5 vrsta socijalnih odnosa (sa ocem, majkom, bratom/sestrom, prijateljem i partnerom). U izmenjenom obliku, zahtevali smo od ispitanika da procenjuju na koji način se ponašaju, osećaju i razmišljaju u bliskim odnosima. Dakle, procenjivana je uopštena tendencija ponašanja, razmišljanja i osećanja u bliskim odnosima, bez oslanjanja na konkretan odnos. Upitnik sadrži 9 skala (prijateljstvo, instrumentalna pomoć, intima, privrženost, poštovanje, briga, sigurnost u trajnost odnosa, konflikti i antagonizam). Ispitanici procenjuju kvalitet odnosa na petostepenoj skali Likertovog tipa. Pored integralne mere kvaliteta socijalnih odnosa (ukupan skor na upitniku kvaliteta socijalnih odnosa), omogućeno je izračunavanje skorova na 2 dimenzije, koje su korišćene i za potrebe ovog istraživanja: pozitivna socijalna razmena (prijateljstvo, instrumentalna pomoć, intima, privrženost, poštovanje, briga, sigurnost u trajnost odnosa) i negativna socijalna razmena (konflikti i antagonizam). Pouzdanost modifikovane verzije instrumenta izražena Kronbahovim alfa koeficijentom na uzorku ispitanika u ovom istraživanju je dobra i iznosi .89.

Procedura

Istraživanje je sprovedeno individualno tokom 2018. godine u Novom Sadu, u prostorijama Doma Zdravlja, Novi Sad, Službe za specijalističko-konsultativnu zdravstvenu delatnost. Pre ispitivanja, svakom ispitaniku je predložen cilj i svrha istraživanja, opisani su instrumenti, a sve radi dobijanja dobrovolj-

nog pristanka. Ispitanicima je posebno napomenuto da će rezultati u anonimnoj formi biti korišteni isključivo za potrebe realizacije naučnog istraživanja. Ispitanici su popunjavali upitnik stila afektivne vezanosti i kvaliteta socijalnih odnosa, nakon standardne psihološke obrade. Osim toga, odgovarali su i na nekoliko dodatnih pitanja koji se tiču obrazovanja i bračnog statusa. Podaci za svakog ispitanika vezani za upitnik CI-N4 dobijeni su od psihologa specijaliste.

Statistička obrada i analiza podataka

Statistička obrada podataka sprovedena je u softveru IBM SPSS Statistics 21.0 (IBM Corp., 2012). Prvobitno je izvršen uvid u deskriptivne statističke pokazatelje, ispitane su polne i starosne razlike s obzirom na obrasce afektivne vezanosti, a potom je pristupljeno testiranju razlika između četiri stila afektivne vezanosti prema izraženosti specifičnih psihopatoloških simptoma i dva različita aspekta kvaliteta socijalnih odnosa. Nakon toga sprovedene su dve multiple regresione analize sa ciljem utvrđivanja prediktivnog značaja afektivne vezanosti i psihopatoloških dimenzija za kvalitet socijalnih odnosa.

U prvom delu istraživanja, interesovalo nas je da li postoje statistički značajne razlike između četiri stila afektivne vezanosti prema izraženosti psihopatoloških simptoma merenih instrumentom CI-N4. Ispunjenost uslova normalnosti distribucije proveravana je pomoću Shapiro-Wilk testa normalnosti i Q-Q dijagrama. Zatim je uz pomoć Levenovog testa proverena pretpostavka o homogenosti varijansi između grupa. S obzirom na činjenicu da je istraživanje sprovedeno na relativno malom uzorku, da je uslov normalnosti često bio narušen, da su grupe ispitanika vidno heterogene veličine (siguran stil $N = 28$, preokupirani stil $N = 13$, izbegavajući stil $N = 5$ i bojažljivi stil $N = 11$), te da uslov homogenosti varijanse na pojedinim skalama nije bio ispunjen, opredelili smo se za primenu neparametrijskih statističkih tehnika za obradu i analizu podataka. Kao neparametrijska alternativa primenjen je Kruskal-Wallis H test. Dunn neparametrijski post-hoc test sa Bonferroni korekcijom korišćen je za testiranje pojedinačnih razlika između grupa.

U drugom delu istraživanja cilj je bio da se proveri da li između četiri stila afektivne vezanosti postoje značajne razlike prema prisustvu pozitivne i negativne socijalne razmene – dimenzijama merenim upitnikom NRI. Usled ponovne narušenosti uslova normalnosti i jednakosti varijanse između nezavisnih grupa, za testiranje razlika primenjen je neparametrijski Kruskal-Wallis H test sa Dunn neparametrijskim post-hoc testom uz Bonferroni korekciju.

Na kraju, sprovedene su dve multiple regresione analize kako bi se odgovorilo na pitanje koliki je prediktivni značaj afektivne vezanosti i psihopatoloških dimenzija za kvalitet socijalnih odnosa. Kriterijumske varijable su bile pozitivna i negativna socijalna razmena, dimenzije sa upitnika NRI, dok su prediktori u obe analize bili stil afektivne vezanosti (siguran/nesiguran) i skorovi sa tri faktora drugog reda sa instrumenta CI-N4: Anksiozni sindrom, Konverzivni sindrom i Agresivno-asocijalni sindrom.

Rezultati

Najpre su proverene polne i starosne razlike s obzirom na obrasce afektivne vezanosti. Nisu registrovane polne razlike u odnosu na siguran, odnosno nesiguran stil afektivnog vezivanja, $\chi^2(1, N=57) = 1.42, p = .23$, niti postoje starosne razlike kada su u pitanju četiri obrasca afektivne vezanosti, $H(3) = .58, p = .90$. U prvom delu istraživanja, ispitane su razlike između četiri stila afektivne vezanosti prema izraženosti različitih psihopatoloških simptoma merenih putem dvanaest skala instrumenta CI-N4. U Tabeli 1 prikazani su deskriptivni statistički pokazatelji i rezultati Kruskal-Wallis testa uz rezultate neparametrijskog Dunn post-hoc testa sa Bonferroni korekcijom za sve skale Cornell Index-a. Na skali Anksioznost dobijene su statistički značajne razlike između četiri grupe afektivne vezanosti, a post-hoc poređenje pokazalo je da osobe sa sigurnim stilom pokazuju statistički značajno niže simptome anksioznosti u odnosu na preokupirani ($p = .003$) i bojažljivi stil vezanosti ($p = .005$). Dalje, detektovane su statistički značajne razlike između grupa na skali Fobičnost, gde je post-hoc test pokazao da se u sklopu sigurnog obrasca manifestuju značajno niži simptomi u odnosu na preokupirani stil ($p = .004$). Na skali Hipersenzitivnost prisutne su statistički značajne razlike, pri čemu je kod preokupiranog stila zastupljen značajno viši nivo hipersenzitivnosti u odnosu na siguran ($p < .001$) i izbegavajući obrazac ($p = .01$). Na skali Depresivnost, takođe su registrovane statistički značajne razlike, gde se u sklopu sigurnog stila registruju niži simptomi depresivnosti u odnosu na bojažljivi ($p = .02$) i preokupirani obrazac ($p < .001$). Na skali Kardiovaskularna konverzija postoje statistički značajne razlike između grupa, gde siguran stil manifestuje statistički značajno manje simptoma u odnosu na preokupirani obrazac ($p = .02$). Dalje, može se videti da su na skali Hipohondričnost takođe registrovane statistički značajne razlike između grupa, ali je post-hoc poređenje pokazalo samo marginalno-značajnu razliku između sigurnog i preokupiranog obrasca ($p = .07$), gde osobe koje pokazuju odlike preokupiranog stila ostvaruju više skorove na ovoj skali. Kada su u pitanju Opsesivno-kompulzivne tendencije, registrovane su statistički značajne razlike među grupama i pokazalo se da osobe čiji stil odgovara preokupiranom obrascu manifestuju više opsesivno-kompulzivnih tendencija u odnosu na ispitanike sa sigurnim stilom ($p = .002$). Na skali Agresivnost dobijene su statistički značajne razlike između grupa, a post-hoc poređenje ponovo je pokazalo da osobe koje manifestuju odlike preokupiranog stila imaju izraženije odlike agresivnih tendencija u odnosu na ispitanike sa sigurnim stilom ($p = .01$). Kada je u pitanju skala Paranoidnost, možemo videti da su registrovane statistički značajne razlike između grupa, a post-hoc test je i ovog puta pokazao da statistički značajna razlika postoji između sigurnog i preokupiranog stila ($p = .004$), gde osobe sa preokupiranim stilom manifestuju više paranoidnih simptoma. Nisu dobijene statistički značajne razlike između stilova afektivne vezanosti na sledećim skalama: Inhibitorna konverzija, Gastrointestinalna konverzija i Impulsivnost.

Tabela 1

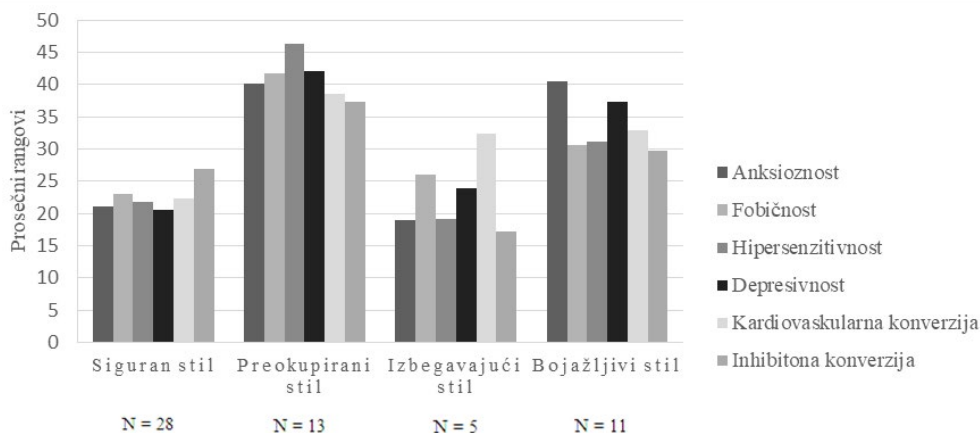
Deskriptivni statistički pokazatelji i rezultati Kruskal-Wallis testa sa post-hoc poređenjima izraženosti psihopatoloških simptoma prema četiri stila afektivne vezanosti

Supskale CI-N4	Stil afektivne vezanosti	Mdn	IQR	K-W test (df=3)	p	Supskale CI-N4	Stil afektivne vezanosti	Mdn	IQR	K-W test (df=3)	p
Anksioznost	Siguran ^(B)	3.00	3.00	19.95	.00	Gastrointestinalna konverzija	Siguran	.00	2.00	7.57	.06
	Preokup. ^(S)	8.00	5.00				Preokup.	1.00	3.00		
	Izbegav.	2.00	5.00				Izbegav.	1.00	2.00		
Fobičnost	Bojažljivi ^(S)	7.00	2.00	12.03	.01	Hipohondričnost	Bojažljivi	2.00	2.00	8.05	.04
	Siguran ^(P)	1.00	3.00				Siguran ^(P)	3.00	5.00		
	Preokup. ^(S)	5.00	3.00				Preokup. ^(S)	8.00	9.00		
Hipersenzitivnost	Izbegav.	1.00	4.00	21.94	.00	Opsesivno-kompulzivne tendencije	Izbegav.	3.00	6.00	15.09	.002
	Bojažljivi	3.00	4.00				Bojažljivi	6.00	7.00		
	Siguran ^(P)	3.00	4.00				Siguran ^(P)	.50	1.00		
Depresija	Preokup. ^(S,I)	6.00	4.00	20.37	.00	Impulsivnost	Preokup. ^(S)	3.00	2.00	4.40	.22
	Izbegav. ^(P)	3.00	3.00				Izbegav.	2.00	4.00		
	Bojažljivi	4.00	2.00				Bojažljivi	2.00	4.00		
Kardiovaskularna konverzija	Siguran ^(B)	.00	2.00	10.27	.02	Agresivnost	Siguran	1.00	2.00	11.68	.01
	Preokup. ^(S)	4.00	4.00				Preokup. ^(S)	5.00	3.00		
	Izbegav.	3.00	3.00				Izbegav.	1.00	3.00		
Inhibitorna konverzija	Bojažljivi	3.00	4.00	6.59	.09	Paranoidnost	Bojažljivi	2.00	3.00	14.18	.003
	Siguran ^(P)	1.00	3.00				Siguran ^(P)	1.00	2.00		
	Preokup.	3.00	4.00				Preokup. ^(S)	4.00	4.00		
	Izbegav.	.00	2.00				Izbegav.	1.00	5.00		
	Bojažljivi	1.00	1.00				Bojažljivi	3.00	3.00		

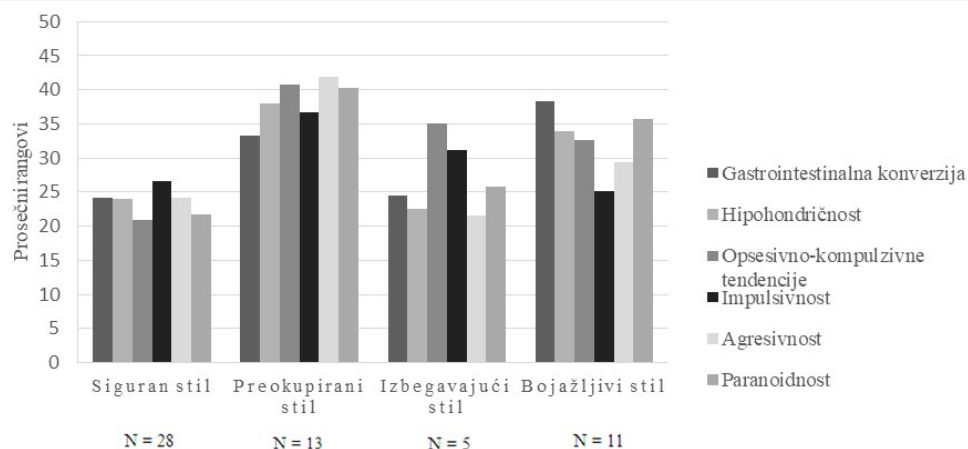
Napomena. Mdn = medijana, IQR = interkvartilni raspon, K-W test = Kruskal-Wallis test, (S) = siguran stil afektivne vezanosti, (P) = preokupirani stil afektivne vezanosti, (I) = izbegavajući stil afektivne vezanosti, (B) = bojažljivi stil afektivne vezanosti.

Na Grafiku 1 i Grafiku 2 prikazane su vrednosti prosečnih rangova za dvanaest skala sa Cornell Index-a, za četiri stila afektivne vezanosti. Kao što se na slikama može videti, kod preokupiranog obrasca registruju se najizraženiji psihopatološki simptomi. Osobe koje pokazuju odlike preokupiranog stila najviše skorove ostvaruju na skalama Hipersenzitivnost, Fobičnost, Depresivnost (Grafik 1), Agresivnost, Paranoidnost i Opsesivno-kompulzivne tendencije (Grafik 2). Sledeći stil afektivnog vezivanja kod kog se registruje najviše psihopatoloških simptoma jeste bojažljivi. Osobe koje imaju odlike bojažljivog stila manifestuju najviše simptoma na skali Anksioznosti i Depresivnosti (Grafik 1), te Gastrointestinalne konverzije i Paranoidnosti (Grafik 2), u odnosu na ostale psihopatološke skale. Ispitanici čiji stil afektivne vezanosti je identifikovan kao izbegavajući, izveštavaju

o sniženom nivou psihopatoloških simptoma i premda se između izbegavajućeg i sigurnog stila ne registruju statistički značajne razlike ni na jednoj od skala Cornell Indeksa, ipak se može primetiti da su se javili povišeni skorovi na skalama Kardiovaskularna konverzija (Grafik 1), Opsesivno-kompulzivne tendencije i Impulsivnost (Grafik 2). Kao što je i očekivano, najmanje psihopatoloških simptoma registruje se kod sigurnog obrasca afektivne vezanosti.



Grafik 1. Prikaz vrednosti prosečnih rangova na skalama psihopatoloških simptoma sa instrumenta CI-N4, prema četiri obrasca afektivne vezanosti. Grafik ilustruje podatak da se kod ispitanika sa preokupiranim stilom registruje najviše psihopatoloških simptoma.



Grafik 2. Prikaz vrednosti prosečnih rangova na skalama psihopatoloških simptoma sa instrumenta CI-N4, prema četiri obrasca afektivne vezanosti. Grafik ilustruje podatak da se kod ispitanika sa preokupiranim stilom registruje najviše psihopatoloških simptoma.

U drugom delu istraživanja, ispitane su razlike između četiri stila afektivne vezanosti na dimenzijama Pozitivna i Negativna socijalna razmena sa instrumenta NRI. Shapiro-Wilk test ukazao je na kompromitovanost homogenosti varijanse u slučaju dimenzije Negativna socijalna razmena, a Leveneov test na ugroženost uslova normalnosti u slučaju sigurne afektivne vezanosti za obe skale sa instrumenta NRI, te je i u ovom slučaju primenjen neparametrijski Kruskal-Wallis test, sa Dunn post-hoc testom uz Bonferroni korekciju. U Tabeli 2 možemo videti da su registrovane statistički značajne razlike između različitih stilova afektivne vezanosti na subskali Pozitivna socijalna razmena, a post-hoc test pokazao je da ispitanici sa bojažljivim stilom ostvaruju statistički značajno niže skorove u poređenju sa osobama koje karakteriše sigurna afektivna vezanost ($p = .009$), te da osobe sa dominantno preokupiranim obrascem takođe ostvaruju statistički značajno niže skorove u poređenju sa sigurno vezanim ispitanicima ($p = .008$). Na subskali Negativna socijalna razmena nisu registrovane statistički značajne razlike između grupa, što je takođe prikazano u Tabeli 2.

Tabela 2

Deskriptivni statistički pokazatelji i rezultati Kruskal-Wallis testa sa post-hoc poređenjima za pozitivnu i negativnu socijalnu razmenu prema četiri stila afektivne vezanosti

Supskale CI-N4	Stil afektivne vezanosti	Mdn	IQR	K-W test (df=3)	P
Pozitivna socijalna razmena	Siguran ^(P, B)	30.67	4.42	16.19	.001
	Preokupirani ^(S)	26.00	10.17		
	Izbegavajući	27.83	7.50		
	Bojažljivi ^(S)	24.67	6.67		
Negativna socijalna razmena	Siguran	4.00	1.00	3.99	.26
	Preokupirani	4.00	1.00		
	Izbegavajući	4.00	5.33		
	Bojažljivi	4.00	1.67		

Napomena. Mdn = medijana, IQR = interkvartilni raspon, K-W test = Kruskal-Wallis test, (S) = siguran stil afektivne vezanosti, (P) = preokupirani stil afektivne vezanosti, (B) = bojažljivi stil afektivne vezanosti.

Na kraju, želeli smo da proverimo koliki je prediktivni značaj afektivne vezanosti i psihopatoloških simptoma u predviđanju pozitivne i negativne socijalne razmene u interpersonalnim interakcijama ispitanika. Sa tim ciljem sprovedene su dve multiple regresione analize gde su kriterijumske varijable bile pozitivna, odnosno negativna socijalna razmena, dok su prediktori u obe analize bili stil afektivne vezanosti (kodiran kao binarna varijabla: 1 – siguran / 2 – nesiguran, pošto se iz prethodnih rezultata može videti da se ispitanici sa nesigurnim obrascima međusobno slabo razlikuju, ali se značajno razliku-

ju od sigurno privrženih) i skorovi sa tri faktora drugog reda instrumenta CI-N4, dobijeni prema Momiroviću (1971): Anksiozni sindrom (određen primarnim neurotskim reakcijama anksioznosti, fobičnosti, hipersenzitivnosti, depresivnosti i opsesivne kompulsivnosti), Konverzivni sindrom (integralna mera kardiovaskularnih, inhibitornih i gastrointestinalnih konverzivnih reakcija i hipohondrijskih simptoma) i Agresivno-asocijalni sindrom (dobijen akumulacijom primarnih mera impulsivnosti, agresivnosti i paranoidnih reakcija).

Pre interpretacije multiple regresione analize, osvrnućemo se na koeficijente korelacije između relevantnih varijabli. U Tabeli 3 možemo videti da dimenzija Pozitivna socijalna razmena ostvaruje statistički značajnu negativnu korelaciju sa stilom afektivnog vezivanja, što ukazuje na to da osobe kod kojih je identifikovan siguran obrazac ostvaruju više skorove na indikatorima pozitivne socijalne razmene, dok osobe sa nesigurnim stilovima ostvaruju niže skorove na ovoj meri. Dalje, Pozitivna socijalna razmena ostvaruje statistički značajnu negativnu povezanost i sa klasterom psihopatoloških simptoma okarakterisanim kao Anksiozni sindrom, te sa Agresivno-asocijalnim sindromom. Dimenzija Negativna socijalna razmena ostvaruje značajnu pozitivnu korelaciju samo sa stilom afektivne vezanosti, što ukazuje na to da osobe koje manifestuju odlike sigurne vezanosti ostvaruju niže skorove na ovoj meri, dok osobe sa obeležjima nesigurnih obrazaca postižu povišene rezultate. Nisu prisutne značajne korelacije ni sa jednim od tri faktora psihopatoloških simptoma.

U prvoj regresionoj analizi, gde je kriterijumska varijabla bila Pozitivna socijalna razmena dobijen je statistički značajan model, kojim je moguće objasniti oko 41% varijanse kriterijumske varijable. Kao što se u Tabeli 3 može videti, kao značajni prediktori izdvojili su se stil afektivne vezanosti i Agresivno-asocijalni sindrom, u negativnom smeru. To znači da osobe koje imaju siguran obrazac afektivne vezanosti i ispoljavaju manje agresivno-asocijalnih karakteristika ostvaruju pozitivniju socijalnu razmenu. Konverzivni i Anksiozni faktor nisu se pokazali kao statistički značajni prediktori pozitivne socijalne razmene.

U drugoj regresionoj analizi, gde je kriterijumska varijabla bila Negativna socijalna razmena, nije dobijen statistički značajan regresioni model, što je takođe prikazano u Tabeli 3. To znači da se varijansa negativne socijalne interakcije ne može na zadovoljavajući način objasniti putem afektivne vezanosti, niti pomoću tri različita psihopatološka sindroma.

Tabela 3
Koeficijenti korelacije i multipla regresiona analiza za Pozitivnu i Negativnu socijalnu razmenu sa prediktorima u vidu stila afektivne vezanosti i psihopatoloških simptoma

Pirsonova produkt-moment (i point biserijalna) korelacija						Multipla regresiona analiza			
	(2)	(3)	(4)	(5)	(6)	Pozitivna socijalna razmena			
						Model 1	Prediktori	β	p
Pozitivna soc. razmena (1)	-.12	-.52**	-.24	-.52**	-.51**		Stil afektivne vezanosti	-.31	.02
Negativna soc. razmena (2)		.29*	.09	.10	.12	F(4,52) = 9.16 p < .001	Konverzivni sindrom	.24	.11
Afektivna vezanost (3)			.35**	.55**	.42**	R ² = .41	Anksiozni sindrom	-.30	.10
Konverzivni sindrom (4)				.67**	.55**		Agresivno-asocijalni sindrom	-.31	.04
Anksiozni sindrom (5)					.68**		Negativna socijalna razmena		
Agres.-asoc. sindrom (6)						Model 2	Prediktori	β	p
							Stil afektivne vezanosti	.33	.05
						F(4,52) = 1.29 p = .29	Konverzivni sindrom	.03	.88
						R ² = .09	Anksiozni sindrom	-.14	.52
							Agresivno-asocijalni sindrom	.07	.71

Napomena. * p < .05, ** p < .01

Diskusija

U ovom radu razmatrana je relacija između stilova afektivne vezanosti, psihopatoloških simptoma i kvaliteta socijalnih odnosa, kao pokazatelja optimalnog funkcionisanja pripadnika kliničke populacije. Širok spektar psihopatoloških poteškoća i kvalitet interpersonalnih relacija sagledan je iz perspektive koncepta radnih modela sebe i drugih, formiranih tokom rane porodične interakcije. Postavili smo pitanje postojanja razlika između pojedinaca različitih stilova afektivne vezanosti prema većem broju psihopatoloških mera i kvaliteta socijalnih odnosa, kao i pitanje prediktivne značajnosti afektivne vezanosti i psihopatoloških simptoma u domenu socijalnog funkcionisanja.

Istraživanjem je uočena zastupljenost pojedinih obrazaca vezivanja slična onoj iz nekliničke populacije. Ranije je utvrđeno da u slučaju nekliničke populacije, najviše ispitanika pripada kategoriji sigurne afektivne vezanosti ili je učestalost sigurne i nesigurne afektivne vezanosti izjednačena (Bakermans-Kranenburg & Van Ijzendoorn, 2009), što je primećeno i u slučaju našeg uzorka. Isti autori utvrđuju da je prevalenca obrazaca nesigurne afektivne vezanosti u kliničkom uzorku veća u poređenju sa nekliničkim uzorkom. U našem slučaju, dobijene rezultate bismo mogli protumačiti činjenicom da je uzorkom obuhvaćen manji broj metalnih poremećaja iz psihotičnog spektra, koji se u najvećoj meri povezuju sa nesigurnom organizacijom vezivanja (Carr et al., 2018).

Rezultati istraživanja su ukazali na prisustvo značajnih razlika između pojedinaca sa različitim stilovima afektivne vezanosti na planu mera mentalnog zdravlja. Ispitanici kliničke populacije obuhvaćeni ovom studijom, kod kojih je izražen stil preokupirane afektivne vezanosti, u poređenju sa sigurno vezani ispitanicima, izveštavaju o učestalijim poteškoćama u oblasti mentalnog zdravlja u formi anksioznih, depresivnih, fobičnih, hipersenzitivnih, hipohondričnih, opsesivno-kompulzivnih, agresivnih i paranoidnih tendencija, kao i konverzija kardio-vaskularnog tipa. Od nesigurno vezanih ispitanika, još se samo bojažljivi odlikuju izraženijim depresivnim i anksioznim tendencijama. Sigurni i izbegavajući ispitanici ne izveštavaju o značajnijoj psihopatološkoj problematici bilo koje vrste. Objašnjenje relacija nesigurnih obrazaca afektivne vezanosti i psihopatologije generalno se pronalazi u bazičnim modelima o sebi i drugima (Bowlby, 1988), koji zahvaljujući svojoj organizacionoj funkciji usmeravaju način razmišljanja, osećanja i ponašanja pojedinca u pravcu manje ili više uspešne psiho-socijalne adaptacije (Sroufe, 2005). Međutim, sve više autora naglašava i značaj posrednih mehanizama i procesa, koji na različite načine boje relacije između psihopatologije i afektivne vezanosti (Čačić i Gavrilov-Jerković, 2013; Mikulincer & Shaver, 2012). Smatra se da relacija afektivne vezanosti i psihopatologije (osim u slučajevima separacionih poremećaja sa centralnom temom vezivanja), ne može biti direktna već je posredovana brojnim biološkim, psihološkim, socio-kulturalnim faktorima (Mikulincer & Shaver, 2012). Neki od psiholoških procesa za koje se smatra da moduliraju vezu između psihopatologije i ranih iskustava afektivne vezanosti su disfunkcionalna uverenja, strategije regulacije afekta, temperament, inteligencija, i dr. (Čačić i Gavrilov-Jerković, 2013; Mikulincer & Shaver, 2012). Ukoliko se ovome pridodaju i negativna životna iskustva, pre svega u oblasti interpersonalnih odnosa, nesigurnost vezivanja postaje zasigurno patogeno stanje koje može proizvoditi raznovrsnu psihopatološku problematiku. Moglo bi se reći da je veza psihopatologije i afektivne vezanosti odraz sinergije između prethodnih relacionih iskustva, kontinuiranih, naknadnih prilagođavanja i trenutnih kontekstualnih faktora (Carlson et al., 2009). Neki autori odlaze i korak dalje, naglašavajući značajnu ulogu afektivne vezanosti

u oblikovanju neurofizioloških svojstava pojedinca (Sameroff & Emde, 1989), koja se reflektuju na različite segmente psiho-socijalnog funkcionisanja.

Preokupirani ispitanici. Preokupirana afektivna vezanost se u radu pokazuje kao najistaknutiji faktor vulnerabilnosti kada su u pitanju psihopatološke poteškoće odraslih ispitanika. Izraženost navedene, pretežno internalizovane psihopatološke problematike preokupiranih ispitanika pronalazi se u bazičnom, negativnom modelu o sebi i pozitivnom modelu o drugima (Stovall-McClough & Dozier, 2016), čija kombinacija uslovljava hroničnu upotrebu hiperaktivacijskih strategija sistema vezivanja u situacijama uznemirenosti (Mikulincer et al., 2003). Kao rezultat navedenog, javlja se sklonost ovih pojedinaca ka disfunkcionalnim načinima razmišljanja, doživljavanja emocija i ponašanja (Sroufe, 2005), koje ih predisponiraju za kontinuirane maladaptivne reakcije i razvoj psihopatoloških poteškoća. Preokupirani pojedinci se odlikuju disfunkcionalnim uverenjima o sebi (Mikulincer & Shaver, 2012), jer sebe vide kao bezvredne ličnosti koje nisu dostojne ljubavi, što neminovno rađa osećanje neadekvatnosti i nekompetentnosti. U pitanju je ozbiljna i trajna narušenost slike o sebi koja za posledicu ima preteranu usmerenost na sebe, svoje unutrašnje doživljaje i misli, samokritičnost i stalnu sumnju u vlastitu vrednost, kao i preteranu zavisnost od odobravanja drugih, ali i preosetljivost na procene drugih ljudi (Park et al., 2004). Nepoverenje u vlastite mogućnosti posebno biva pojačano u pretećim situacijama, kada preokupirana osoba putem hiperaktivacijskih strategija pokušava na sve načine obezbediti dostupnost važnih drugih, koje posmatra kao najpouzdaniji izvor samoevaluacije, utehe i podrške (Mikulincer & Shaver, 2007). Posledica kognitivno-afektivne disfunkcionalnosti kako na individualnom, tako i na interpersonalnom planu su, između ostalog, stalno osećanje pretnje uz povišenu uznemirenost i kontinuirano doživljavanje i preplavljenost pretežno negativnim emocionalnim stanjima, što otvara put ka internalizovanoj psihopatološkoj simptomatologiji, što se ovim istraživanjem i potvrđuje.

Bojažljivi ispitanici. Podaci za bojažljive ispitanike ukazuju na izraženije anksiozne i depresivne tendencije. Dobijeni rezultati su u skladu sa brojnim prethodnim studijama, koje pronalaze istovremenu prisutnost depresivnih i anksioznih tendencija kod bojažljivo vezanih ispitanika (Gittleman et al., 1998; Murphy & Bates, 1997). Ove osobe neguju disfunkcionalna uverenja i o sebi i o drugima, izražavajući kako nepoverenje prema sebi kao manje vrednim pojedincima, tako i prema drugima kao nedostupnim i nepoverljivim u trenucima emocionalne uznemirenosti (Bartholomew & Horowitz, 1991). U isto vreme bojažljivi ispitanici žele da pristupe drugima, da potraže utehu i podršku, ali odustaju usled manjka poverenja prema njima. Sa disfunkcionalnom slikom o sebi i neefikasnim strategijama afektivne regulacije, ni u sebi ni u drugima ne pronalaze izvor podrške ostajući u stanju hroničnog nezadovoljstva koje ih vodi ka depresivnim i anksioznim reakcijama. Mož-

da se očekivala, u skladu sa teorijskim i empirijskim predikcijama, značajnija izraženost psihopatološke simptomatologije kod ovih ispitanika. U poređenju sa ostalim kategorijama afektivne vezanosti, bojažljivi ispitanici zaista postižu nešto više skorove na većini psihopatoloških mera, ali one ne dosežu nivo statističke značajnosti, kao što je to slučaj sa preokupiranim ispitanicima. Ukoliko se ne radi o specifičnosti uzorka, delimično objašnjenje je moguće potražiti u izbegavajućoj strategiji sistema vezivanja bojažljivih ispitanika koja se reflektuje i na proces samoposmatranja. Postoji mogućnost da su navedeni rezultati za preokupirane i bojažljive ispitanike odraz specifičnosti procesa izveštavanja o psihopatološkim poteškoćama, koje se takođe određuju kao moguće strategije afektivnog sistema vezivanja (Mikulincer, 1998). Preokupirani su ispitanici usled korišćenja hiperaktivacijske strategije skloni preneglašavanju i preuveličavanju unutrašnjih stanja i osećanja u svrhu predstavljanja sebe kao potrebitima i bespomoćnima, čime obezbeđuju pomoć drugih. U tom smislu je moguće da su preokupirani i u ovom istraživanju delimično preneglasili svoju psihopatološku simptomatologiju. S druge strane bojažljivi ispitanici, usled nepoverenja u druge, skloniji su deaktivaciji sistema vezivanja, otuda i umanjenja značajnosti unutrašnjih stanja, osećanja i potreba, što je rezultiralo sniženim procenama vlastite psihopatologije. Druge studije (Alzeer et al., 2019) ukazuju na nešto izraženiju psihopatološku problematiku bojažljivih ispitanika od one koja se pronalazi u ovom istraživanju.

Izbegavajući ispitanici. U sličnom pravcu se mogu tumačiti i rezultati vezani za ispitanike sa izbegavajućim stilom. Iako većina studija ukazuje na to da je kod izbegavajućih ispitanika izraženija psihopatologija eksternalizujućeg tipa, postoje i istraživanja koja izveštavaju o izostanku psihopatoloških tegoba kod ovih osoba (Kemp & Neimeyer, 1999), što je potvrdila i naša studija. Naime, izbegavajući i siguran obrazac predstavljaju dve kategorije afektivne vezanosti kod kojih se registruju sniženi psihopatološki simptomi. Sigurnost afektivne vezanosti se generalno određuje kao protektivni faktor kada je psihopatologija u pitanju, usled stabilne slike o sebi i funkcionalnih strategija afektivne regulacije koje doprinose emocionalnoj stabilnosti i zdravim interpersonalnim odnosima (Čačić i Gavrilov-Jerković, 2013). Možemo pretpostaviti da je u slučaju izbegavajućih ispitanika, koji se u literaturi ne povezuju sa merama optimalnog mentalnog zdravlja, više u pitanju efekat deaktivacijske strategije ovog sistema vezivanja na proces samoposmatranja. Izbegavajući ispitanici su usled nepovoljnih ranih relacijskih iskustava razvili strategiju negiranja afektivnih potreba (Mikulincer & Shaver, 2007), koja je značajno odredila njihov dalji emocionalni razvoj. Kod ovih osoba je od primarne važnosti da postignu što veću distancu u odnosu na pitanja emocija, bliskosti, afektivnih potreba, ili bilo čega drugoga što bi ugrozilo njihovu autonomiju (Dozier et al., 1999). U tu svrhu ove individue koriste brojne tehnike poput povlačenja, supresije i potiskivanja misli o odnosu, gubitku i bolnim uspomenu (Čačić

i Gavrilov-Jerković, 2013). Oslanjanju se isključivo na sebe, osećanja percipiraju kao pokazatelj ranjivosti i gubitka kontrole (Cassidy, 1994). Prikazuju se kao emocionalno stabilne i zdrave osobe sa fasadom sigurnosti i smirenosti, negirajući bilo kakve psihološke tegobe. Time se otkriva ranjivost njihove slike o sebi, koja ne toleriše ni jedan znak potencijalnog ličnog nedostatka, koji bi prema disfunkcionalnim uverenjima koja poseduju mogao voditi, ukoliko ga drugi pojedinci primete, u socijalno odbacivanje (Mikulincer, 1998). Kao rezultat navedenih odbrambenih procesa mogu se javiti i poteškoće u procesuiranju i mentalizaciji unutrašnjih stanja, otuđenost od vlastitog tela i distanciranje od drugih u bliskim odnosima (Dozier et al., 1999; Schimmenti et al., 2014). U skladu sa tim je primetno da se ovi pojedinci generalno ređe obraćaju lekarima i imaju manje adekvatan stav prema lečenju (Adams et al., 2018; Ciechanowski et al., 2002; Ciechanowski et al., 2003).

Afektivna vezanost i socijalni odnosi. Kada je u pitanju socijalno funkcionisanje kliničke populacije, rezultati ukazuju na značajne razlike između sigurno i nesigurno vezanih ispitanika. Istakle su se razlike između sigurnih ispitanika s jedne strane, i preokupiranih i bojažljivih ispitanika sa druge. Dok sigurni ispitanici izveštavaju o višem kvalitetu pozitivne relacijske razmene koju ostvaruju sa bliskim osobama, preokupirani i bojažljivi ispitanici ukazuju na suprotno. Ovakvi rezultati u skladu su sa većinom dosadašnjih istraživanja odnosa između afektivne vezanosti i socijalnog funkcionisanja (Bierhoff & Grau, 1999; Feeney & Noller, 1990; Knoke et al., 2010; Levy & Davis, 1988; Rakočević-Medojević, 2016).

Razvojno posmatrajući, iskustvo sigurno vezanih pojedinaca sa kontinuiranom i trajnom podrškom od strane roditeljskih figura, te stabilan osećaj emocionalne sigurnosti, omogućili su da se formiraju pozitivni modeli sebe i drugih, ali su takođe omogućili i usvajanje i uvežbavanje adekvatnih socijalnih veština (Mikulincer & Shaver, 2012). Ovakav razvojni put im je omogućio da svoje funkcionisanje u bliskim odnosima u odraslom dobu baziraju na relacijskoj razmeni zasnovanoj na brižnosti, privrženosti i uzajamnom poštovanju i pomoći. Dakle, sigurnost afektivne vezanosti koju odlikuje pozitivan doživljaj sebe i drugih, reflektuje se na domen kasnijeg socijalnog funkcionisanja u svim važnim aspektima, poput socijalne percepcije, regulacije afekta i interpersonalnih strategija (Collins, 1996). Sigurni ispitanici, u poređenju sa nesigurnim, pozitivnije objašnjavaju relacijske događaje, manje su emocionalno uznemireni povodom njih i nisu skloni kažnjavajućim obrascima ponašanja prema bliskoj osobi. Sigurni ispitanici fokusiraju svoje interpersonalne želje i ciljeve oko teme bliskosti i nagrađujućih relacijskih iskustava, za razliku od nesigurnih ispitanika koji ili teže izbegavanju bliskosti ili imaju prenaplašenu potrebu za vezivanjem (Mikulincer & Shaver, 2016). U interpersonalnoj interakciji sigurni ispitanici adekvatno izražavaju svoja unutrašnja stanja i potrebe, otvoreno traže podršku od bliske osobe u situacijama

uznemirenosti i efikasnije rešavaju eventualne sukobe (Feeney, 1999). Vrlo su senzitivni na relacijske potrebe partnera i kompetentni su u pružanju podrške i pomoći bliskoj osobi. Skloni su rešavanju nesporazuma razgovorom i postizanjem kompromisa, uz tendenciju sprečavanja eskalacije sukoba (Collins, 1996; Tianyuan & Chan, 2012).

U slučaju preokupiranih i bojažljivih ispitanika, razvojno posmatrajući, iskustva nepovoljne rane relacijske interakcije odražavaju se negativno na domen socijalnih odnosa u vidu otežane pozitivne razmene u kasnijim bliskim odnosima na planu sigurnosti, poštovanja, brige, intime, privrženosti, sigurnosti, pomoći i prijateljstva. Hronično osećanje emocionalne nesigurnosti usmerava ove pojedince ka upotrebi ili hiperaktivacijskih ili deaktivacijskih sekundarnih strategija vezivanja, koje otežavaju snalaženje u bliskim interakcijama (Mikulincer & Shaver, 2016). Hiperaktivacijska strategija preokupiranih ispitanika vodi ka preteranoj okupiranosti sobom i svojim relacijskim potrebama, onemogućavajući da jasno sagledaju relacijskog partnera i njegove potrebe. Preterana uključenost u aktivnosti koje im obezbeđuju da ne budu odbačeni, umanjuje njihov relacijski kapacitet da udovolje emocionalnim potrebama partnera, ali i njih same lišava povratnih pozitivnih relacijskih iskustava. Bojažljivi ispitanici su posebno vulnerabilni kada su u pitanju socijalni odnosi. Iako po rezultatima slični preokupiranim ispitanicima, odlike njihove socijalne motivacije i interpersonalni problemi značajno se razlikuju. Negativan doživljaj sebe i drugih preplavljuje ih strahom od vezivanja dovodeći u konfliktnu situaciju istovremenu želju za bliskošću i strah od iste (Bartholomew & Horowitz, 1991). Uz ovakvo emocionalno opterećenje, teško da možemo očekivati od bojažljivih ispitanika da funkcionalno traže i pružaju podršku, ljubav, negu i sve ono što nazivamo pozitivnom razmenom, koja obezbeđuje kvalitet bliskog odnosa.

Izostanak značajnosti razlika između sigurnih i izbegavajućih ispitanika u pogledu socijalnog funkcionisanja nije toliko iznenađujući i može se protumačiti slično kao rezultat vezan za izostanak psihopatološke simptomatologije izbegavajućih ispitanika. Deaktivacijska strategija izbegavajućih ispitanika usmerava ih ka minimiziranju važnosti svega što staje na put njihovoj autonomiji i slici samostalne i kompetentne ličnosti. Prikazuju su se kao osobe koje ni u domenu socijalnog funkcionisanja nisu ništa manje uspešne, naprotiv. Međutim, njihovo realno socijalno funkcionisanje, što je potvrđeno brojnim istraživanjima, ukazuje na to da su za njih socijalni odnosi posebno opasno polje koje ugrožava njihovu nezavisnost i težnju ka samoaktualizaciji (Collins, 1996; Feeney, 1999; Mikulincer & Shaver, 2016). Naime, preterana usmerenost ka vlastitoj autonomiji povlači za sobom distanciranje od bliskih osoba i ulaganje energije i vremena u druge lične potrebe i interesovanja. Stoga, i oni i relacijski partner ostaju bez adekvatne nege i brige koja proizilazi iz responsivnog i uzajamnog relacijskog pružanja i davanja. Ovome treba dodati i činjenicu da je upitnička instrukcija, koja je podrazumevala procenu uop-

štenog socijalnog funkcionisanja, umesto fokusa na konkretan bliski odnos, potencijalno "išla na ruku" težnji izbegavajućih ispitanika da se prikažu na što pozitivniji način, kao socijalno kompetentne osobe koje su sposobne za formiranje i održavanje visoko kvalitetnih socijalnih relacija.

U skladu sa rečenim jeste i rezultat vezan za prediktivnu značajnost afektivne vezanosti. Sigurnost vezivanja značajno predviđa visok kvalitet socijalnih odnosa, izražen putem pozitivne relacijske razmene. Ovakav rezultat je u saglasnosti sa rezultatima dobijenim na domaćoj nekliničkoj populaciji (Kuru-zović i Mihić, 2020), što potencijalno govori da je sigurna organizacija vezivanja, kako u slučaju kliničke, tako i u slučaju nekliničke populacije, resurs za funkcionalnu svakodnevnu relacijsku razmenu, koju najviše definišu pozitivni aspekti poput poštovanja, sigurnosti i intimnosti. Pored afektivne vezanosti, ono što značajno predviđa bolje socijalno funkcionisanje jesu i snižene agresivno-asocijalne tendencije poput impulsivnosti, agresivnosti i paranoidnosti. Prema rezultatima naše studije, ovakve odlike u najvećoj meri ugrožavaju pozitivnu socijalnu razmenu, čineći socijalne odnose manje kvalitetnim. Rezultati brojnih istraživanja ukazuju na to da svaka od ove tri tendencije pojedinačno, otežava socijalno funkcionisanje (Beck et al., 2001; Derrick et al., 2016; Tan et al., 2017; Vangelisti et al., 2002). Usled nestrpljivosti i sklonosti ka brzom donošenju odluka, impulsivnost može umanjiti kapacitet za uočavanje i reagovanje na potrebe bliskih osoba (Derrick et al., 2016; Tan et al., 2017), pa komunikacija sa značajnim drugima može biti posebno narušena (Tan et al., 2017). Agresivne tendencije se takođe negativno odražavaju na bliske odnose. Kod ovih je pojedinaca prisutna tendencija interpretacije relacijskih situacija na pretežno hostilan način, što je obično praćeno izraženom ljutnjom i češćim agresivnim reakcijama (Vangelisti et al., 2002). Osim toga, agresivno reagovanje se često koristi kao način rešavanja interpersonalnih problema (Orobio de Castro et al., 2002), što kod relacijskih partnera budi negativne reakcije, čime se kreira negativni relacijski obrazac (Anderson et al., 1986). Paranoidne tendencije čine osobu posebno ranjivom kada su u pitanju bliski odnosi. Disfunkcionalnost u doživljaju sebe i drugih stvara disbalans između percipiranja relacijskih situacija i realnosti (Beck et al., 2001). Doživljavanje drugih kao malicioznih i sklonih prevari vodi ka stalnoj potrebi samozaštite, čime se bliski odnosi opeterećuju sumnjom, kriticizmom, pesimizmom, te kontrolišućim ponašanjima. Bliskost se doživljava kao opasna, te stoga paranoidni pojedinci teže njenom izbegavanju, oslanjajući se na sebe i svoju samodovoljnost (Haslam et al., 2002). Kombinacijom ovih tendencija dobijamo nefunkcionalno relacijsko doživljavanje i ponašanje, koje se reflektuje u niskoj pozitivnoj razmeni i niskom kvalitetu bliskih odnosa.

Zanimljivo je da nisu dobijeni značajni rezultati u slučaju negativne relacijske razmene, koja se manifestuje putem učestalih konflikata i netrpeljivosti u socijalnim odnosima. U poređenju sa pozitivnom relacijskom razmenom,

ispitanici često izveštavaju o manje izraženoj negativnoj relacijskoj razmena u svojim bliskim odnosima (Batić-Očovaj i Kuruzović, 2019; Petrović, 2006), što može biti deo posebnog razmatranja i pokušaja da se odgovori na pitanje da li ispitanici ne žele o tome da izveštavaju ili je to zaista stvarna slika stanja njihovih bliskih odnosa. Pošto se smatra da svaki bliski odnos uključuje i manje pozitivne aspekte, poput neprijateljstva, svađa, odbacivanja i sl. (Vangelisti, 2006), neophodno je uložiti dodatni napor prilikom prikupljanja podataka, kako bi se detektovao i ovaj aspekt odnosa. Rezultati usmeravaju ka zaključku da ono što definiše kvalitet socijalnog funkcionisanja nije količina konflikata i netrpeljivosti, već upravo pozitivna relacijska razmena, odnosno mogućnost i sposobnost bliskih osoba da uzajamno zadovoljavaju važne relacijske potrebe poput pomoći, sigurnosti, brižnosti, poštovanja, prijateljstva i intime. Konflikti i netrpeljivost su možda odraz konkretnih relacijskih situacija, koji se lakše prevazilaze u poređenju sa onim relacijskim karakteristikama koje suštinski određuju jedan odnos. Prema većini teorija razvoja i održavanja odnosa (Altman & Taylor, 1973; Kerckhoff & Davis, 1962; Knapp, 1978; Murstein, 1970; Reiss, 1960), upravo produbljivanje odnosa prema dimenzijama sigurnosti, pomoći, poštovanja, intime i drugih navedenih kvalitativnih karakteristika, omogućava i formiranje odnosa i njihovo održavanje tokom vremena.

Iako dobijeni rezultati pružaju veoma važne informacije kada je u pitanju relacija stilova afektivne vezanosti i psihopatoloških simptoma, te njihova uloga i značaj za kvalitet socijalnih odnosa u kliničkom kontekstu, neophodno je osvrnuti se i na ograničenja koje ovo istraživanje sa sobom nosi. Pre svega, u narednim istraživanjima bilo bi preporučljivo obuhvatiti veći broj ispitanika, koji bi se regrutovao i iz drugih zdravstvenih ustanova, poput onih sa tercijarnog nivoa zdravstvene zaštite. Kada je u pitanju evaluacija stilova afektivne vezanosti, primenjen je upitnik koji procenjuje stilove samo putem kratkog opisa ponašanja i osećanja u bliskim odnosima, gde su ispitanici trebali sebe da svrstaju u jednu od četiri ponuđene kategorije. Moguće je da je usled toga upitnik bio manje osetljiv na finije razlike između stilova afektivne vezanosti, kao i da je samoprocena bila otežana. Preporuka je da se u budućim istraživanjima koriste i upitnici sa većim brojem stavki, i/ili AAI intervju (Adult Attachment Interview) radi što efikasnije detekcije stila afektivne vezanosti. Posebno je to važno kada je u pitanju izbegavajući stil vezivanja, s obzirom da je njihova zastupljenost generalno najređa, što se potvrdilo i ovim istraživanjem. Detektovanje većeg broja ispitanika iz ove kategorije bi moglo dati više informacija o relacijama izbegavajućeg stila vezanosti, psihopatologije i socijalnih odnosa, kao i dodatne informacije o razlikama unutar kategorije nesigurni stil vezivanja (izbegavajući, preokupirani, bojažljivi stil). Prilikom procene kvaliteta bliskih odnosa, evaluiran je njihov opšti kvalitet, koji ne obuhvata konkretne kontekste (prijateljski, partnerski i dr.), već generalno snalaženje i funkcionisanje u bliskim odnosima. Možda je teže proceniti svoj

opšti način relacijskog funkcionisanja, nego funkcionisanje u konkretnom bliskom odnosu. Stoga se preporučuje da se buduća istraživanja fokusiraju na određeni bliski odnos, s obzirom na činjenicu da je svaki odnos specifičan i različit od drugih prema karakteristikama, značaju i ulozi u životu pojedinca.

Zaključak

Naše istraživanje pokazalo je da ispitanici sa preokupiranim stilom afektivne vezanosti izveštavaju o najviše psihopatoloških simptoma, a potom slede ispitanici čiji stil je identifikovan kao bojažljiv. Ista dva stila pokazuju i najmanje pozitivne socijalne razmene. Takođe, ispostavilo se da su sigurna afektivna vezanost, te slabo izražen agresivno-asocijalni sklop koji podrazumeva impulsivnost, agresivnost i paranoidnost, najmoćniji prediktori pozitivne socijalne razmene kod ispitanika koji pripadaju kliničkoj populaciji.

Dobijeni podaci ukazuju na značaj evaluacije tipa afektivne vezanosti prilikom planiranja psihoterapijskog tretmana i intervencija koje bi bile prilagođene specifičnim relacionim potrebama svakog pojedinca. Još je Bowlby (1977) smatrao da je zadatak terapijskog procesa da klijentu obezbedi sigurnu bazu u kojoj može bezbedno da istražuje sebe i svoje odnose sa važnim drugima, te da revidira unutrašnje radne modele sebe i drugih. U skladu sa tim, razvijeni su i brojni psihoterapijski pristupi zasnovani na teoriji afektivne vezanosti (Levy et al., 2015). Tako se kao važna praktična implikacija naše studije nameće potreba za primenom znanja o obrascima afektivne vezanosti u terapijskom radu sa klijentima čiji psihopatološki simptomi podrazumevaju snažnu relacionu komponentu u smislu nesigurne vezanosti. Poznavanje dominantnih psihopatoloških manifestacija koje se povezuju sa različitim stilovima nesigurne vezanosti može olakšati detekciju konkretnih relacionih obrazaca, te doprineti efikasnosti psihodijagnostičkog i psihoterapijskog procesa. Dalje, podatak dobijen regresionom analizom o tome da nesigurna afektivna vezanost i agresivno-asocijalni sklop psihopatoloških simptoma u najvećoj meri kompromituju pozitivnu socijalnu razmenu kao izuzetno važan resurs kvaliteta života i blagostanja, može trasirati postavljanje terapijskih hipoteza, ciljeva i prioriteta u tretmanu. Jedan od tih prioriteta bi svakako trebala biti interpersonalna oblast funkcionisanja, sa fokusom na unapređivanje socijalnih veština i kapaciteta za uspostavljanje i održavanje kvalitetnih bliskih odnosa koji se temelje na uzajamnom poštovanju, pažnji, brizi, i brojnim drugim pozitivnim relacijskim aspektima. Na taj način bi se klijentima obezbedio dodatni resurs socijalne podrške, koji značajno može doprineti psihološkom blagostanju. Takođe, pored kontinuirane evaluacije i praćenja izraženosti psihopatoloških simptoma, tip afektivne vezanosti i kvalitet socijalnih odnosa mogu se koristiti kao indikatori ishoda tretmana u svakodnevnoj terapijskoj praksi. Pored psihoterapijskih implikacija, naglašavamo i potencijalne kliničke implikacije, s obzirom da se organizacija afektivne vezanosti

povezuju i sa ishodima kliničkog tretmana i rehabilitacije. Sigurnost afektivne vezanosti se pokazuje kao zaštitni faktor i kada je tok lečenja i rehabilitacija u pitanju. Sigurno vezane osobe sa poteškoćama u oblasti mentalnog zdravlja, češće koriste usluge zdravstvenih ustanova, imaju adekvatniji odnos sa lekarom, pozitivan stav prema tretmanu i mogućnosti lečenja, što olakšava i ubrzava proces lečenja i rehabilitacije (Adams et al., 2018; Ciechanowski et al., 2002; Ciechanowski et al., 2003).

Istraživanje, pored gore navedenih kliničkih i psihoterapijskih praktičnih implikacija, ima i naučni doprinos, koji se pre svega ogleda u činjenici da obuhvata tri koncepta (afektivna vezanost, socijalni odnosi i psihopatologija) koja se ređe dovode u vezu. Relacije psihopatoloških simptoma i afektivne vezanosti su još uvek polje otvoreno za izučavanje. Broj istraživanja afektivne vezanosti na nekliničkoj populaciji je daleko veći, a tek u skorije vreme istraživači se okreću i kliničkom domenu nadajući se da će osvetliti etiološki potencijal afektivne vezanosti. S druge strane, kao što je već bilo naglašeno, relacije psihopatoloških fenomena i afektivne vezanosti su daleko od jednobraznih, s obzirom da su modulirane brojnim drugim faktorima, poput bioloških, psiholoških i socijalno-kulturalnih. Nadali smo se da ćemo posmatrajući relacije ovih fenomena i interpersonalnih odnosa, barem jednim delom osvetliti potencijalni efekat socijalnih faktora.

Ipak, rezultati ovog istraživanja nas upozoravaju i na opasnosti primene tehnika samoprocene, s obzirom na to da se izbegavajući i sigurno vezani ispitanici gotovo i ne razlikuju značajno prema psihopatološkim odlikama i funkcionisanju na interpersonalnom planu, što ne oslikava verno intrapsihičku i interpersonalnu realnost ovih pojedinaca. Tako bi se nesigurno vezani ispitanici sa izbegavajućim stilom na prvi pogled mogli učiniti visoko funkcionalnim individuama čak i kada su u pitanju socijalni odnosi, koji zapravo predstavljaju značajnu zonu disfunkcionalnosti kod ovih osoba. Upravo zbog toga je izuzetno važno da se prilikom procenjivanja stilova afektivne vezanosti uključe i daleko senzitivnije i sofisticiranije tehnike, kao što bi bio intervju.

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The relationship between attachment styles, psychopathology and quality of social interaction: A study on a clinical sample

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The aim of this study is to examine the differences between four attachment styles in relation to symptoms of psychopathology and the quality of social interaction, as well as to determine the role of attachment and psychopathology in predicting positive and negative social exchange. A total of 57 participants from the neuropsychiatric department of the Service for Specialist-Consultative Health Activities of the Health Centre in Novi Sad took part in the research. Respondents were mostly female (61%), aged 17 to 68 ($M=40.13$, $SD=12.35$). The Relationship Questionnaire (RQ) was used for attachment styles assessment. Psychopathological symptoms were measured using the Cornell Index (CI-N4), and the quality of social relationships was evaluated via the Network of Relationship Inventory (NRI). The highest rate of symptoms was detected in subjects with a preoccupied style, followed by those whose style was identified as fearful. The same two styles showed the least positive social exchange. Statistically significant differences on most scales from CI-N4 were found mainly between the secure and preoccupied subjects, while subjects with the avoidant pattern did not demonstrate significant differences in psychopathology and social functioning compared to secure participants. Secure affective attachment and low aggressive-antisocial indicators (impulsiveness, aggression, and paranoia) were the most important predictors of positive social exchange. Understanding psychopathological manifestations of different insecure attachment styles can contribute to the efficiency of psychodiagnostic and psychotherapeutic processes. Furthermore, the fact that insecure attachment and aggressive-antisocial factor predominantly compromise positive social interaction can facilitate goal setting during psychological treatment within the clinical spectrum.

Keywords: attachment styles, social relationships, quality of social interaction, psychopathology

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Osobine ličnosti i taktike self-prezentacije

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Self-prezentacija je sveprisutni oblik ponašanja koji se tiče građenja slike o sebi pred drugim ljudima. To je oblik ponašanja koji ima za cilj strukturisanje utiska o osobi. Self-prezentacija objašnjava brojne socijalne odnose i situacije, ali i sama zavisi od brojnih faktora, pre svega faktora ličnosti i brojnih situacionih faktora. Glavni cilj istraživanja je ispitivanje povezanosti širokih dimenzija ličnosti, opercionalizovanih modelom ličnosti Velikih pet + 2 (Neuroticizam, Ekstraverzija, Agresija, Savesnost, Otvorenost za novine, Pozitivna valenca i Negativna valenca), i self-prezentacije. Ispitivana je i mogućnost predikcije ukupne self-prezentacije i pojedinih taktika self prezentacija na osnovu širokih dimenzija ličnosti. U istraživanju je korišćen Upitnik ličnosti Velikih pet + 2 i skala Taktika self-prezentacije. Uzorak je obuhvatio 526 ispitanika, prosečne starosti 21.6 godina (SD=2.88). Od svih ispitivanih dimenzija ličnosti, Neuroticizam i Negativna slika o sebi ostvaruju najjače korelacije sa ukupnom self-prezentacijom. Dimenzija Savesnost beleži najveći broj korelacija negativnog predznaka, dok dimenzija Otvorenost za novine najmanje korelira sa ukupnom self-prezentacijom i pojedinačnim taktikama self-prezentacije. Što se tiče predikcije self-prezentacije, sve dimenzije ličnosti, osim Otvorenosti za novine, su značajni prediktori, ali je njihova konstelacija drugačija u odnosu na sadržaj taktika self-prezentacije. Ovi nalazi omogućavaju predviđanje smeru prezentovanja slike o sebi. Naime, poznavajući osobine ličnosti možemo pretpostaviti koje će taktike self-prezentacije biti korišćene, posebno u situaciji kada su osobe motivisane da to čine.

Ključne reči: self-prezentacija, taktike self-prezentacije, osobine ličnosti, Velikih pet + 2 model ličnosti

Uvod

Proces produkovanja slike o sebi za koju osoba misli da je adekvatna u određenoj situaciji naziva se self-prezentacija (Goffman, 1959). To je pokušaj oblikovanja slike o sebi (Baumeister, 1982), modelovanje sopstvenog pona-

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šanja kako bi se drugima prenele željene informacije o sebi (Snyder, 1974) ili set postupaka kojima je cilj da se drugim ljudima pokaže kao neki tip osobe (Schlenker & Weigold, 1990). Self-prezentacija je akt kontrole slike o sebi pred realnom ili zamišljenom publikom (Schlenker, 1980) i ciljem vođeno ponašanje, barem delimično, da produkuje željenu sliku osobe (Schlenker & Leary, 1982). Istraživanje procesa self-prezentacije nam pomaže u razumevanju agresivnog ponašanja (Tedeschi & Felson, 1994), kognitivne disonance (Tedeschi & Rosenfeld, 1981, prema Lee et al., 1999), predstavljanju u poslovnim intervjuima (Stevens & Kristof, 1995), ponašanja u vezi sa zdravljem i socijalne anksioznosti (Leary, Tchividjian & Kraxberger, 1994). Self-prezentacija se navodi kao važna za razumevanje onlajn ponašanja (Sorokowski et al., 2015), a upravljanje utiscima kao neizostavna činjenica prilikom razmatranja ponašanja u vezi sa pravljenjem i objavljivanja selfija (Pounders et al., 2016). Rezultati studija govore u prilog činjenici da koreni specifičnog ponašanja u vezi sa praktikovanjem self-prezentacijskog ponašanja pronalazimo u detinjstvu osobe (Banerjee & Watling, 2010).

Taktike self-prezentacije

Taktike self-prezentacije definišemo kao svaki oblik ponašanja pokrenuta sa ciljem oblikovanja utisaka kod drugih (Paulhus & Trapnell, 2008). Slika koju osoba pokušava da ostavi kod drugih oblikovana je brojnim faktorima, pre svega dispozicionalnim i situacionim, uključujući socijalne norme, važnost i karakteristike osobe koju želimo da impresioniramo, razlog zbog koga to činimo, vlastita slika o sebi i željena slika o sebi (Leary, 1996; Leary & Kowalski, 1990). Budući da su socijalne interakcije složene i dinamične one zahtevaju raznovrsnost i prilagodljivost prezentovane slike o sebi (Paulhus & Trapnell, 2008). Izvesno je neslaganje u nalazima istraživanja, od kojih neka upućuju na podatak da pojedine osobe koriste jednu dominantnu taktiku self-prezentacije, dok nalazi drugih ukazuju da svaka individua koristi mnoštvo različitih self-prezentacijskih taktika (Jones & Pittman, 1982; Robins & John, 1997). Postoji i stanovište da svaka osoba ima potencijal za korišćenje brojnih taktika self-prezentacije i da ih u relaksiranim socijalnim odonositima zaista i praktikuju, ali da se u kritičnim i važnim situacijama najčešće služe jednom taktikom koja je ključna i dominantna u njihovom ponašanju (Paulhus & Trapnell, 2008).

Self-prezentacije koje su obuhvaćene self-konceptom se međusobno razlikuju. Neke su istaknutije i prilagođenije zahtevima koje postavlja neka situacija. Neke su afirmativne i pokazuju osobu u najboljem izdanju, neke, naprotiv, imaju za cilj da osobu predstave u negativnom svetlu. Neke su odraz prošlih iskustava, neke se odnose na trenutnu situaciju, neke se oblikuju u skladu sa očekivanjima od budućnosti. Neke imaju za cilj da predstave osobu kakva jeste, druge kakva bi osoba želele da bude, šta očekuje od sebe ili, čak, šta nikako ne bi želela da budu (Markus & Wurf, 1986).

U postojećoj literaturi self-prezentacija se ne posmatra kao jedinstven konstrukt (Olson & Johnson, 1991). Arkin (Arkin, 1981) opisuje dva stila self-prezentacije: stil zaštite, koji je povezan sa submisijom, popuštanjem u socijalnim odnosima, izbegavanjem suprostavljanja i konflikta sa drugima, i preduzimački stil koji podrazumeva vlastitu promociju uz pomoć socijalnog odobravanja i podrške. Široko korišćena podela stilova self-prezentacije je izdvajanje pet različitih stilova self-prezentacije: samopromovisanje, ulagivanje, davanje ličnog primera, moljenje i zastrašivanje i svaki od njih može ostaviti i pozitivne i negativne efekte na druge (Jones & Pittman, 1982). Stilovi self-prezentacije mogu se organizovati u odnosu na usmerenost na vlastitu ličnost i spostvena dostignuća, nasuprot self-prezentaciji usmerenoj na grupu i dobrobit drugih (Paulhus & Trapnell, 2008). U literaturi je moguće pronaći i podelu stilova self-prezentacije na asertivne taktike nasuprot defanzivnim taktikama (Tedeschi & Melburg, 1984). Asertivne samoprezentacione taktike imaju za cilj afirmaciju i nadogradnju identiteta, dok defanzivne samoprezentacione taktike imaju za cilj da sačuvaju ili porave narušenu sliku o sebi (Lee et al., 1999). Poznata je i podela stilova self-prezentacije na one koje afirmišu pozitivne osobine u građenju slike o sebi, nasuprot prikrivanju i/ili minimiziranju negativnih osobina (Roth, Snyder & Pace, 1986).

Li i saradnici (Lee, Quigley, Nesler, Corbett, & Tedeschi, 1999) su na osnovu opsežne pretrage literature izdvojili 12 taktika self-prezentacije: Korišćenje izgovora, Traženje opravdanja, Odricanje od odgovornosti, Samohendikepiranje, Izvinjavanje, Zadobijanje naklonosti, Zastrašivanje, Moljenje, Preuzimanje zasluga, Preuveličavanje svojih dostignuća, Miniranje i Davanje ličnog primera. Taktika samoprezentacije *Korišćenje izgovora* obuhvata ponašnja kojima se umanjuje ili negira odgovornost za neki događaj (Tedeschi & Lindskold, 1976; prema Lee et al., 1999). *Traženje opravdanja* podrazumeva traženje i nalaženje različitih razloga za sopstvene postupke uz prihvatanje lične odgovornosti za događaje koji su negativni po osobu (Scott & Lyman, 1968; Lee et al., 1999). *Odricanje od odgovornosti* podrazumeva ponašanja koja imaju za cilj da unapred, pre negativnog ishoda, skinu odgovornost sa osobe (Hewit & Stokes, 1975; Lee et al., 1999). *Samohendikepiranje* kao taktika samo-prezentacije obuhvata ponašanja osobe sa ciljem da stvori okolnosti koje otežavaju postizanje uspeha, kako drugi ne bi mogli da dovedu u pitanju sposobnosti osobe (Berglas & Jones, 1978). Taktika self-prezentacije *Izvinjavanje* podrazumeva izražavanje krivice, preuzimanje odgovornosti za eventualno nanošenje štete drugome, te naglašene verbalne izave kajanja i izvinjavanja. (Tedeschi & Lindskold, 1976; prema Lee et al., 1999). *Zadobijanje naklonosti (ulagivanje)* obuhvata ponašanja koja osoba čini kako bi obezbedila simpatije kod drugih. To može biti u formi saglašavanja sa tuđim mišljenjem, povladjivanje, upućivanje komplimenata i ugađanje (Jones & Pittman, 1982). *Zastrašivanje* podrazumeva akcije koje imaju za cilj da prikažu osobu moćnijom ili opasnijom nego što to realno jeste. Ima za cilj da drugu osobu uplaši i učini

zabrinutom da se pretnje lako mogu obistiniti (Jones & Pittman, 1982). Taktika self-prezentacije *Moljenje* obuhvata ponašanja u kojima osoba konstruše sliku o sebi kao nemoćne i zavisne od osobe na koju pokušava da ostavi utisak (Jones & Pittman, 1982). *Preuzimanje zasluga* predstavlja naglašavanje vlastite uloge u postizanju nekog pozitivnog ishoda, isticanje spostvenih kompetencija i zasluga (Tedeschi & Lindskold, 1976; prema Lee et al., 1999), dok *Preuveličavanje sopstvenih dostignuća* predstavlja taktiku self-prezentacije koju koriste osobe kada žele da prenaglase svoja dostignuća i predstave ishode u pozitivnom svetlu (Schlenker, 1980). Pričanje nepopularnih stvari o suparničkoj grupi, verbalni akti usmereni ka podrivanju i unižavanju nekog zarad nekog cilja predstavljaju taktiku *Miniranje* (Cialdini & Richardson, 1980; Lee et al., 1999). *Davanje ličnog primera* je taktika kojom osoba emituje visoko moralno ponašanje koje drugima treba da posluži kao primer, da izazove divljenje i, eventualno, podstakne imitaciju (Jones & Pittman, 1982).

Rodne razlike u taktikama self-prezentacije

Self-prezentacija je nesumnjivo prisutna i kod žena i kod muškaraca. Rezultati istraživanja rodni razlike u self-prezentacijskom ponašanju nisu jednoznačni, ali ukazuju na izvesne razlike u pogledu self-prezentacijskog ponašanja. Pokazalo se da muškarci učestalije koriste taktike koje su povezane sa naglašavanjem sposobnosti, isticanjem moći i promociju vlastite ličnosti. S druge strane, žene će više insistirati na taktikama u kojima su naglašena osećanja, saosećanje za druge i interes za socijalne relacije (Leary, Robertson, Barnes, & Miller, 1986; Schlenker, 1980). Neophodno je da self-prezentaciju posmatramo i iz ugla socijalnih determinanti koji utiču na konkretni kontekst, pre svih, uzimanje u obzir svatanje o tradicionalnim rodni ulogama. Self-prezentacija je neodvojiva i od specifičnih očekivanja socijalne sredine vezanih za rodne uloge i percepciju rodni uloga, gde do izražaja dolazi takozvani „efekat dozvole“ (backlash effect), a koji se tiče percepcije od strane socijalne sredine, jer jedno isto ponašanje može biti potpuno drugačije doživljeno u odnosu na to da li ga praktikuje žena ili muškarac (Rudman, 1998, 2000; prema Belić, 2018). Ukoliko žena koristi samopromovisanje to može obezbediti da se ona doživljava kao kompetentnija i uspešnija, ali na drugoj strani to može platiti socijalni gubitcima, te biti okarakterisana kao muškobanjasta ili surova (Burušić, 2007).

Self-prezentacija i osobine ličnosti

Self-prezentacijske taktike kojima je zajedničko pokušaj popravljanja narušenog identiteta češće koriste socijalno anksiozne osobe (Schlenker & Leary, 1982) i osobe sa spoljašnjim lokusom kontrole (Lee et al, 1999). Najčešće

imaju želju da se dokažu pred drugima i povećaju sopstvenu vrednost (Doherty & Schlenker, 1991), strah od negativne evaluacije i neuspeha i nisko samopoštovanje (Schlenker & Pontari, 2000). Utvrđeno je da osobe koje vešto prilagođavaju sliku o sebi i upravljaju utiscima drugih, što su zapravo asertivne taktike (Wolfe, Lennox & Cutler, 1986.; Arkin, 1981; prema Sadler, Hunger, Miller, 2010) češće doživljavaju pozitivne emocije i imaju više skorove na dimenziji ekstraverzije (Gangestad & Snyder, 2000). Utvrđene su veze između self-prezentacije i Makijevlizma, Narcizma i Psihopatije, odnosno mračne trijade ličnosti (Hart, et al., 2018; 2019).

Studija Sadlera i saradnika (Sadler, Hunger & Miller, 2010) bila je prva sprovedena studija koja je pokušala da utvrdi odnos između taktika self-prezentacije i širokih dimenzija ličnosti, ispitivanih Multidimenzionalnim upitnikom ličnosti (MPQ) definisanim u modelu Telegena i Volera (Smederevac, Mitrović, Čolović, 2010). U ovoj studiji se pokazalo da se može govoriti o doslednim vezama između dimenzija ličnosti i taktika self-prezentacije. Ispitanici sa visokim skorovima na Negativnoj emocionalnosti češće koriste taktike samoprezentacije u odnosu na individue sa nižim skorovima. Rezultati su pokazali da anksioznije osobe i osobe koje imaju teškoća u interpersonalnim odnosima češće koriste različite taktike self-prezentacija, što su i nalazi prethodnih istraživanja (Heerey & Kring, 2007; Leary, Kowalski & Campbell, 1988). Dobijena je veza između Pozitivne emocionalnosti, posebno subdimenzije Socijalna potencija, i asertivnih taktika samoprezentacije, što su autori i postavili kao hipotezu.

Ispitivan je i odnos između self-prezentacije i šest faktora HEXACO modela strukture ličnosti, koji uključuje dimenzije: Iskrenost–Poštenje, Emocionalnost, Ekstraverzija, Otvorenost za iskustvo, Srdačnost i Savesnost (Bourdaige et al., 2015). Utvrđene su veze između ovih dimenzija ličnosti i asertivnih taktika self-prezentacije, ali ograničeno na iskaze ispitanika koji su se odnosili na njihovo ponašanje na radnom mestu.

Pretragom literature nije nađena nijedna studija kojom su ispitivane veze između širokih dimenzija ličnosti i taktika self prezentacije na srpskoj populaciji niti su se studije bazirale na sedmofaktorskim modelima ličnosti. Zanimalo nas je da li se rezultati studija koje su se bavile odnosom širokih dimenzija ličnosti i self-prezentacijskog ponašanja iz drugih sredina mogu uopštiti na populaciju u Srbiji.

U ovom istraživanju pošli smo od sedmofaktorskog modela ličnosti koji je nastao na osnovu leksičkih opisa u srpskom jeziku, operacionalizovane skorovima upitnika Velikih pet + 2 (VP+2; Smederevac, Mitrović, Čolović, 2010). Ovaj model izdvaja sedam širokih dimenzija ličnosti: Neuroticizam, Ekstraverzija, Savesnost, Otvorenost, Agresivnost, Pozitivna valenca, Negativna valenca.

Osnovni cilj ovog istraživanja predstavlja ispitivanje povezanosti širokih dimenzija ličnosti, operacionalizovanih modelom ličnosti Velikih pet +2 i self-prezentacije. Saglasno tome, specifični ciljevi su bili da se utvrdi prediktivna moć osobina ličnosti postuliranih modelom ličnosti Velikih pet + 2 (neuroticizam, ekstraverzija, savesnost, agresivnost, otvorenost za novine, pozitivna valenca i negativna valenca) u predviđanju opšte sklonosti korišćenja self-prezentacije kao i korišćenju pojedinačnih taktika self-prezentacije.

Metodološki pristup

Uzorak i procedura istraživanja

Prigodni uzorak istraživanja činilo je 525 ispitanika, studenata državnih fakulteta na prostoru Republike Srbije. U uzorku je učestvovalo 340 žena (64,6%) i 185 muškaraca (35,2%). Prosečna starost ispitanika bila je 21,6 godina (SD=2,88). Ispitanici su dobrovoljno pristajali na učešće i od njih je prethodno pibavljena informisana salglasnost. U istraživanju su učestvovali studenti Filozofskog fakulteta u Nišu (N=254), Filozofskog fakulteta u Novom Sadu (N=51), Filozofskog fakulteta u Prištini sa privremenim sedištem u Kosovskoj Mitrovici (N=70), Poljoprivrednog fakulteta u Novom Sadu (N=51), Državnog univerziteta u Novom Pazaru (N=140) i Filozofskog fakulteta u Beogradu (N=10). Istrživanje je sprovedeno tokom 2015. godine. Upitnici su od strane istraživača zadavani u fakultetskim prostorijama u formatu papir/olovka.

Instrumenti

1. **Upitnik ličnosti Velikih pet plus dva (VP+2; Smederevac, Mitrović & Čolović, 2010)** je upitnik namenjen proceni sedam širokih dimenzija ličnosti. Upitnik sadrži 184 tvrdnji, a od ispitanika se traži da proceni stepen slagaj sa svakom od njih na petostopenoj skali (1– uopšte se ne slažem; 5 – potpuno se slažem). Ajtemi su raspoređeni u sedam velikih skala: Neuroticizam, Ekstraverzija, Savesnost, Otvorenost za novine, Agresivnost, Negativna valenca, Pozitivna valenca. *Neuroticizam* (n=35, $\alpha = .92$) je dimenzija individualnih razlika u stepenu reaktivnosti na potencijalno ugrožavajuće stimulse. Obuhvata individualne razlike u anksioznosti, sklonosti da se dožive negativne emocije, depresivnog raspoloženja, ogorčenosti i otuđenosti. *Ekstraverzija* (n=24, $\alpha = .87$) je dimenzija individualnih razlika koja se odnosi na društvenost, okrenutost drugima, ali i sklonost da se dožive pozitivne emocije. *Savesnost* (n=28, $\alpha = .89$) je dimenzija individualnih razlika koja se odnosi na upornost, istrajnost, odgovornost i odnos osobe prema obavezama. *Agresivnost* (n=30, $\alpha = .88$) je dimenzija individualnih razlika u doživ-

ljavanju besa. Obuhvata individualne razlike u takozvanom “teškom karakteru”, tvrdoglavosti i nepoverenju prema drugima i njihovim namerama. *Otvorenost za iskustva* ($n=20$, $\alpha = .83$) je dimenzija individualnih razlika u sposobnosti kreiranja podsticajnog okruženja, traganju za informacijama i intelektualnoj stimulaciji. Odnosi se na intelektualni aktivitet, intelektualnu radoznalost i otvorenosti ka novim iskustvima. *Positivna valenca* ($n=25$, $\alpha = .89$) obuhvata individualne razlike u potrebi za potenciranjem vlastite važnosti i svesti o vlastitim kvalitetima. *Negativna valenca* ($n=22$, $\alpha = .87$) je dimenzija samoevaluacije koja se tiče individualnih razlika u manipulativnosti i svesti o vlastitim nepoželjnim osobinama i nedostatku pozitivnih osobina. Sve skale instrumenta Velikih pet +2 pokazuju visoku pouzdanost.

2. **Skala Taktika self-prezentacije** (*Self-presentation tactis scale, SPT; Lee, Quigley, Nesler, Corbett, & Tedeschi, 1999*). Skala se sastoji od 63 ajtema koje se odnose na 12 taktika self-prezentacije: Korišćenje izgovora ($n=5$, $\alpha = .82$), Traženje opravdanja ($n=5$, $\alpha = .71$), Izbegavanje odgovornosti ($n=5$, $\alpha = .82$), Samohendikepiranje ($n=5$, $\alpha = .69$), Izvinjavanje ($n=5$, $\alpha = .68$), Zadobijanje naklonosti ($n=8$, $\alpha = .79$), Zastrašivanje ($n=5$, $\alpha = .79$), Moljenje ($n=5$, $\alpha = .62$), Preuzimanje zasluga ($n=5$, $\alpha = .75$), Preuveličavanje svojih dostignuća ($n=5$, $\alpha = .68$), Miniranje (šikaniranje) ($n=5$, $\alpha = .72$). i Davanje ličnog primera ($n=5$, $\alpha = .76$). Ispitanici učestalost korišćenja pojedinačnih stilova samo-prezentacije procenjuju na devetostepenoj skali (1-izuzetno retko; 9-izuzetno često), te je osim ukupnog skora korišćenja self- prezentacije, moguće utvrditi i koje taktike ispitanik koristi i sa kojom učestalošću. Primeri stavki iz upitnika su: „Kad nešto skrivim, tražim izgovore“ (Traženje izgovora); „Kada drugi vide moje ponašanje kao negativno, ja ponudim razloge kako bi shvatili zašto je moje ponašanje opravdano“ (Traženje opravdanja); „Tražim izgovore za mogući neuspeh pre nego što polažem neki težak test“ (Odricanje od odgovornosti); „Razbolim se kada sam pod pritiskom da nešto moram dobro da uradim“ (Samohendikepiranje); „Izražavam krivicu i žaljenje kad nešto pogrešim“ (Izvinjavanje); „Koristim laskanje kako bih osvojio naklonost drugih“ (Zadobijanje naklonosti); „Činim stvari da me se ljudi plaše“ (Zastrašivanje); „Govorim drugima da su snažniji ili kompetentniji od mene sa ciljem da urade nešto umesto mene“ (Moljenje); „Preuzimam zasluge za stvari koje nisam uradio“ (Preuzimanje zasluga); „Preuveličavam vrednost mojih dostignuća“ (Preuveličavanje svojih dostignuća); „Naglašavam negativne osobine ljudi koji se takmiče sa mnom“ (Miniranje); „Trudim se da podstaknem imitaciju kod drugih služeći im kao dobar primer“ (Davanje ličnog primera). Sve supskale pokazuju zadovoljavajuću pouzdanost merenja (bez obzira što neke imaju nižu koeficijent pouzdanosti od .69 – što se može pripisati malom broju stavki u okviru svake od

supskala). Skala je nakon dobijanja saglasnosti od autora prevedena na srpski jezik metodom prevoda unapred (forward translation). U tom procesu angažovani su diplomirani filolozi.

Proverena je faktorska struktura Skale self-prezentacije. Prethodno je ocenjena prikladnost podataka za faktorsku analizu. Uvid u korelacionu matricu (mnogo vrednosti .3 i više), Kajzer-Mejer-Oklinov pokazatelj (vrednosti .94) i statistički značajan Bartletov test sferičnosti su zadovoljili uslove za sprovođenje faktorske analize. Analiza glavnih komponenti otkrila je prisustvo 13 komponenti s karakterističnim vrednostima iznad 1. Pregledom dijagrama prevoja utvrđeno je postojanje prevojne tačke iza druge komponente. Na osnovu Katelovog kriterijuma odlučeno je da se za dalje istraživanje zadrže dve komponente.

Tabela 1

Rotirana matrica glavnih komponenti: Skala taktika self-prezentacije

	Komponente	
	1	2
Korišćenje izgovora	0.785	0.259
Traženje opravdanja	0.732	0.389
Odricanje od odgovornosti	0.686	0.421
Samohendikepiranje	0.643	0.096
Izvinjavanje	-0.148	0.846
Ulagivanje	0.804	0.239
Zastrašivanje	0.734	-0.211
Moljenje	0.787	0.152
Preuzimanje zasluga	0.833	0.065
Isticanje dostignuća	0.837	0.042
Miniranje	0.836	-0.144
Davanje ličnog primera	0.210	0.610

To dvokomponentno rešenje objašnjava ukupno 33.66% varijanse, pri čemu je doprinos prve komponente 26.6%, a druge 7.1%. Pregledom stavki upitnika utvrđeno je da prvi faktor zasićuje ajteme koji pripadaju takikama self prezentacije: Korišćenje izgovora, Traženje opravdanja, Odricanje od odgovornosti, Samohendikepiranje, Zadobijanje naklonosti, Zastrašivanje, Moljenje, Miniranje, Preuzimanje zasluga, Isticanje sopstvenih dostignuća; dok drugi faktor zasićuje samo ajteme koji pripadaju taktikama Izvinjavanje i Davanje ličnog primera. Između ta dva faktora postoji slaba korelacija ($r = .11$). Jedan faktor zasićuje ajteme koji pripadaju taktikama self-prezentacije koje imaju za cilj predstavljanje sebe u pozitivnom svetlu, isticanje sopstvene ličnosti i svojih dostignuća ili popravljanju narušene slike o sebi. Drugi faktor zasićuje ajteme koji pripadaju taktikama self-prezentacije, koji uprkos elementima strukturiranja poželjne slike o sebi sadrže i okrenutost drugima i brige za dobrobit drugih. Autori skale

koja je korišćena u ovom istraživanju su na osnovu faktorske analize predložili dvofaktorsku strukturu upitnika. Prvi faktor zasićuje tzv. defanzivne taktike self-prezentacije, dok drugi faktor zasićuje tzv. asertivne taktike self-prezentacije (Lee, et.al., 1999). Rezultati faktorske analize u ovom istraživanju upućuju na drugačiju faktorsku strukturu. Uvidom u literaturu i pokušaje objašnjenja faktorske structure self-prezentacijskog ponašanja, najbliža koncepcija sa kojom se poklapa dobijena faktorska struktura je sa strukturom upitnika do koje su došli Paulhus i Trapnel (Paulhus & Trapnell, 2008), a koja podrazumeva da se taktike self-prezentacije mogu svrstati u taktike vođene isključivo vlastitim interesom i taktike vođene zajedništvom (agency vs communion), što je usvojeno i ovde kao nazivi faktora.

Rezultati istraživanja

Ispitana je i povezanost sedam širokih dimenzija ličnosti iz modela ličnosti Velikih pet +2 sa 12 taktika self-prezentacije operacionalizovanih Skalom taktika self-prezentacije i generalne sklonosti korišćenja self-prezentacije. Rezultati su dati u Tabeli 2.

Tabela 2

Povezanost dimenzija ličnosti iz modela Velikih pet +2 sa Taktikama self-prezentacije i ukupnog skora self-prezentacije (Pirsonov koeficijent korelacije)

	Neuroticizam	Ekstraverzija	Savesnost	Agresivnost	Otvorenost	Pozitivna valenca	Negativna valenca
Korišćenje izgovora	.358**	-.133**	-.244**	.170**	-.115**	.042	.434**
Traženje opravdanja	.319**	-.019	-.142**	.200**	.008	.134**	.376**
Odricanje od odgovornosti	.395**	-.064	-.258**	.138**	-.064	.021	.349**
Samohendike- piranje	.515**	-.183**	-.315**	.141**	-.038	-.048	.372**
Izvinjavanje	.135**	.229**	.143**	-.196**	.205**	-.037	-.241**
Zadobijanje naklonosti	.228**	.026	-.062	.159**	.036	.218**	.442**
Zastrašivanje	.158**	-.115	-.036	.475**	.011	.291**	.556**
Moljenje	.378**	-.102*	-.237**	.178**	-.088*	.059	.501**
Preuzimanje zasluga	.195**	.005	-.056	.228**	.008	.284**	.438**
Isticanje sopstvenih dostignuća	.257**	-.081	-.118	.272**	-.034	.230**	.486**
Miniranje	.222**	-.147**	-.119**	.292**	-.084	.190**	.547**
Davanje ličnog primera	-.064	.236**	.286**	-.051	.202**	.301**	-.037
Opšta sklonost self-prezentaciji	.377**	-.037	-.155*	.242**	.008	.215**	.509**

Dimenzije Neuroticizam, Savesnost, Agresivnost, Pozitivna valenca i Negativna valenca statistički značajno koreliraju sa ukupnim nivoom korišćenja self-prezentacije. Najviša pozitivna korelacija dobijena je sa dimenzijama Neuroticizam i Negativna valenca.

Značajno je zapaziti da dimenzije Neuroticizam i Negativna valenca beže najveći broj statističkih značajnih korelacija sa ispitivanim taktikama self-prezentacije, dok dimenzija Otvorenost za novine najmanje korelira sa ispitivanim taktikama. Rezultati ove korelacione analize pokazuju odsustvo multikolineranosti, što je jedan od osnovnih uslova za primenu multiple regresione analize.

Budući da je pol jedna od varijabli istraživanja proverili smo i rodne razlike u pogledu opšte sklonosti korišćenja self-prezentacije i razlike u sklonosti korišćenja pojedinih taktika self-prezentacije. Rezultati pokazuju da rodne razlike postoje, kako u opštoj sklonosti tako i pri korišćenju pojedinih taktika self-prezentacije.

Tabela 3

Razlika između muškaraca i žena u pogledu opšte sklonosti korišćenja self-prezentacije i pojedinih taktika self-prezentacije

	Muškarci	Žene	t	p
Opšta sklonost korišćenja self-prezentacije	267.53	242.38	3.764	.000
Korišćenje izvora	19.17	17.95	1.436	.152
Traženje opravdanja	22.31	21.07	1.532	.126
Odricanje od odgovornosti	20.69	20.74	-0.53	.958
Samohendikepiranje	17.64	15.93	2.154	.032
Izvinjavanje	32.18	33.93	-2.527	.012
Zadobijanje naklonosti	34.29	29.08	4.650	.000
Zastrašivanje	17.27	3.12	5.313	.000
Moljenje	19.81	17.23	4.029	.000
Preuzimanje zasluga	19.29	16.62	3.549	.000
Preuveličavanje sopstvenih dostignuća	20.21	16.95	4.388	.000
Miniranje	17.58	12.65	6.680	.000
Davanje ličnog primera	27.08	27.09	-0.19	.985

Sa ciljem da utvrdimo da li dimenzije ličnosti modela Velikih pet + 2 mogu da predvide opštu sklonost korišćenja self-prezentacije, a u skladu sa dvofaktorskom strukturom taktika self-prezentacije, upotrebljena je višestruka linearna regresija. Imajući u vidu i da prethodni empirijski ukazuju na polne razlike u glavnim varijablama istraživanja (Belić, 2018), kao i da uzorak ispitanika nije ujednačen s obzirom na pol (340 žena i 185 muškaraca), uveli smo statističku kontrolu varijable pol.

Tabela 4

Rezultati hijerarhijske regresione analize za taktike vođene vlastitim interesom

	Standardizovani β koeficijent	T	Statistička značajnost
Blok 1			
Pol	.184	-3.365	.000
Blok 2			
Pol	.097	2.255	.025
Neuroticizam	.327	6.686	.000
Ekstraverzija	.140	2.711	.007
Savesnost	-.035	-.726	.469
Agresivnost	-.024	-.474	.636
Otvorenost za novine	-.047	-.908	.365
Pozitivna valenca	.202	3.681	.000
Negativna valenca	.411	6.895	.000

U prvom koraku bila je unesena promenljiva Pol što je objasnilo 3% varijanse korišćenja Taktika self-prezentacije vođene ličnim interesom Model 1: $R = .184$ $R^2 = .034$; Prilagođeno $R^2 = .031$; $p < .01$. U drugom koraku unesena je varijabla Osobine ličnosti. Nakon toga model objašnjava 40% varijanse Model 2: $R = .646$; $R^2 = .417$; Prilagođeno $R^2 = .404$; $p < .01$. U konačnom modelu, kao značajni prediktori korišćenja self-prezentacijskih taktika vođenih ličnim interesom pokazali su se Pol, Neuroticizam, Ekstraverzija, Pozitivna valenca i Negativna valenca. Muškarci u većoj meri koriste taktike self-prezentacije koje su vođene vlastitim interesom. Povećanje na dimenzijama Neuroticizam, Ekstraverzija, Pozitivna i Negativna valenca doprinosi češćem korišćenju taktika self-prezentacije vođene ličnim interesom.

Tabela 5

Rezultati hijerarhijske regresione analize za taktike vođene zajedništvom

	Standardizovani β koeficijent	T	Statistička značajnost
Blok 1			
Pol	-.063	-1.199	.231
Blok 2			
Pol	.019	-.395	.693
Neuroticizam	.301	5.381	.000
Ekstraverzija	.256	4.322	.000
Savesnost	.215	3.860	.000
Agresivnost	-.151	-2.561	.011
Otvorenost za novine	.005	.92	.927
Pozitivna valenca	.122	1.927	.055
Negativna valenca	-.103	-1.504	.134

U prvom koraku bila je unesena promenljiva Pol što je objasnilo .1% varijanse Model 1: $R = .063$; $R^2 = .004$; Prilagođeno $R^2 = .001$; $p = .231$. U drugom

koraku unesena je varijabla Osobine ličnosti. Nakon toga model objašnjava 22% varijanse: Model 2: $R = .484$; $R^2 = .234$; Prilagođeno $R^2 = .217$; $p < .01$. U konačnom modelu, kao značajni prediktori korišćenja self-prezentacijskih taktika vođenih zajedništvom pokazali su se Neuroticizam, Ekstraverzija, Savesnost i Agresivnost. Povećanje na dimenzijama Neuroticizam, Ekstraverzija i Savesnost vodi češćem korišćenju taktika self-prezentacije vođenih zajedništvom, dok veći skorovi na dimenziji Agresivnost znači i manju sklonost ovim taktikama.

Diskusija

Dosadašnja istraživanja ukazuju da osobe koje izveštavaju o višem nivou Neuroticizma generalno češće koriste self-prezentaciju što potvrđuju rezultati dobijeni u ovom istraživanju. Iako su Li i saradnici (Lee et al., 1999) izveštavali o jačoj povezanosti između socijalne anksioznosti i tzv. defanzivnih taktika, koje za zajednički imenitelj sadrže povlačenje u socijalnim odnosima, ovo istraživanje je došlo do zaključka da osobe koje su generalno osjetljivije na socijalne teškoće češće koriste self-prezentaciju, nezavisno od sadržaja taktika. Takav nalaz je u saglasnosti sa teorijama koje su self-prezentaciju dovodili u blisku vezu sa socijalnom aksioznošću (Leary & Allen, 2011; Schlenker & Leary, 1982). Prethodna istraživanja objašnjavaju da socijalno anksiozne osobe često svesno žele da ostave dobar utisak i emituju pozitivnu sliku o sebi, ali nedostatak samopouzdanja ih sputava u tome (Schlenker & Weigold, 1992; Belić, M. 2017). Zabrinutost da li će konstruisati željeni identitet najčešće je praćena napetošću u socijalnim odnosima što kod drugih najčešće deluje kao kontraefekat i postiže baš ono što je osoba prvobitno želela da izbegne, tj. negativne reakcije drugih (Heerey & Kring, 2007; Leary, Kowalski, & Campbell, 1988). Osobe koje su emotivno stabilnije, manje su zabrinute o tome kakvu sliku o sebi emituju, odaju utisak samopouzdanja i opuštenosti, što pozitivno utiče na socijalne interakcije i druga osoba stiče pozitivan utisak, što osobi daje pozitivnu povratnu informaciju za aktuelne i buduće odnose (Schlenker & Pontari, 2000). U našem istraživanju, Neuroticizam se pokazao kao značajni prediktor u oba postavljena modela, odnosno predikciji taktika usmerenih na lični interes i taktika vođenih zajedništvom.

Što se tiče dimenzije ličnosti Ekstraverzija, nije dobijena statistički značajna korelacija ove dimenzije i generalne sklonosti self-prezentaciji, što je i rezultat studije Sadlera i saradnika (Sadler et al., 2010). Ova dimenzija pozitivno korelira sa taktikama Izvinjavanje i Davanje ličnog primera, dok su ostale statistički značajne korelacije sa ispitivanim taktikama negativnog predznaka. Ako uzmemo u obzir sadržaj dimenzije koja podrazumeva socijabilnost i sročnost u socijalnim odnosima (Smederevac, Mitrović & Čolović, 2010) nije iznenađujuće što je dobijena veza sa prosocijalnim taktikama self-prezentacije. Ekstraverzija se pokazala kao značajni prediktor u predviđanju upotrebe i taktika vođenih interesom i taktika vođenih zajedništvom.

Agresija je u pozitivnoj korelaciji sa ukupnom sklonošću korišćenja self-prezentacije, što potvrđuje rezultate studije Sadlera i saradnika (Sadler et.al., 2010). Međutim, u našem istraživanju dobijena je pozitivna korelacija sa svim taktikama self-prezentacije, izuzev taktika Izvinjavanje i Davanje ličnog primera. Pozitivna korelacija je bila posebno izražena kada su u pitanju taktike Zastrašivanje i Miniranje. Sadržaj ovih taktika podrazumeva odavanje utiska zastražujuće osobe, osobe sklone da pripreti i ostvari svoje pretnje (taktika Zastrašivanje), da kompromituje konkurente i uruši njihovu poziciju (Miniranje) (Cialdini & Richardson, 1980; Jones & Pittman, 1982). Što se tiče mogućnosti predikcije korišćenja određenih taktika self-prezentacije agresija se pokazala kao značajan prediktor kada je jer reč o taktikama vođenih zajedništvom, te da veći skor na ovoj dimenziji prediktuje nižu sklonost korišćenja ovih taktika self-prezentacije. Uspešna konstrukcija željenog identiteta često podrazumeva pažljivo vođenje računa o interesima drugih i poštovanje njihovih granica, što najčešće znači odsustvo agresivnih, impulsivnih reakcija i "teške naravi".

Savesnost negativno korelira sa svim taktikama self-prezentacije, dok je sa taktikama Izvinjavanje i Davanje ličnog primera u pozitivnoj korelaciji. Savesne osobe su odgovorne prema sebi i drugima. Iz perspektive savesne osobe svako namerno prikazivanje može se smatrati kao nepošteni odnos. Savesnost se pokazala kao značajan prediktor upotreba taktika orijentisanih na zajedništvo kojima je zajednički odgovoran odnos prema drugima, prikazivanje sebe kao visoko moralne i osobe za primer, koja kad učini nešto loše sprema je da otvoreno izrazi žaljenje i krivicu.

Od svih dimenzija operacionalizovanih upitnikom Velikih pet + 2, Otvorenost za novine ostvaruje najmanji broj statistički značajnih veza. Dobijene su pozitivne korelacije jedino sa taktikama Izvinjavanje i Davanje ličnog primera. Kada je u pitanju predikcija situacija je slična, te ova dimenzija nije pokazala prediktivne vrednosti ni u jednom od dva postavljena modela ovog istraživanja. Sadržaj ove dimenzije se možda najviše tiče unutrašnjeg života čoveka i nije u vezi sa drugim ljudima i interpersonalnim relacijama, što može eventualno objasniti dobijene podatke i odustvo relacija sa self-prezentacijskim ponašanjem.

Dimenzija Pozitivna valenca korelira sa taktikama Traženje opravdanja, Ulaganje, Zastrašivanje, Preuzimanje zasluga, Isticanje sopstvenih dostignuća, Miniranje i Davanje ličnog primera. Zajedničko ovim taktikama je pokušaj osobe da održi pozitivnu sliku o sebi, proaktivni pristup u interakcijama i očuvanje slike o sebi. Ova dimenzija ima prediktivni značaj kada su u pitanju taktike vođene vlastitim interesom, ali ne i taktike vođene zajedništvom. Pozitivna slika o sebi je korelat uspešnog prikazivanja sebe i insistiranja na sopstvenoj važnosti, što u svetlu self-prezentacijskog ponašanja koje je, pre svega, okrenuto očuvanju slike o sebi i zaštiti svojih interesa, prilično očekivani podatak.

Dimenzija Negativna valence, pored dimenzije Neuroticizma, beleži najveći broj statistički značajnih korelacija, kako sa generalnom sklonošću self-prezentacijskom ponašanju, tako i sa pojedinačnim taktikama self-prezentacije. Najjače korelacije su sa taktikama Zastrašivanje i Miniranje. Objašnjenje može biti to da sklonost manipulaciji uz bazično negativnu sliku o sebi često nagoni osobu da putem pretnje, zastrašivanja, verbalnih iskaza uperenih protiv drugih i drugih manipulacija, pokušavaju da održe poželjnu konstrukciju. Otuda i ne iznenađuje rezultat da se Negativna valenca pokazala kao dobar prediktor taktika vođene sopstvenim interesom, ali ne i taktika vođenih zajedništvom.

Rezultati su pokazali da je pol značajan prediktor kada je u pitanju sadržaj self-prezentacijskih taktika koje se odnose na vlastiti interes. Muškarci češće koriste taktike koje emituju sliku kompetentne osobe, spremni su da svoje zasluge prikažu većim od realnih, da zastraše ili pričaju loše konkurentima, da pokušaju da poprave narušenu sliku o sebi ili čine sve da i ako ishod bude loš to ne bude posledica njihovih sposobnosti. Kada su u pitanju taktike koje su okrenute zajedništvu, odnosno taktike koje za cilj imaju da osobu prikažu kao pažljivu u socijalnim odnosima, zabrinutu za interes drugog i osobu koja je za primer drugima, pol se nije pokazao kao značajan prediktor. Ako se osvrnemo na visoku socijalnu poželjnost ovih taktika, ali i shvatanje o tradicionalnim rodnim ulogama, to nam može barem delimično objasniti ovaj rezultat. Nezavisno od pola, ljudi koriste strategije koje su adaptivne i imaju ulogu da jedinku prikažu kao osobe vredne poštovanja. Međutim, bez obzira što u većoj ili manjoj meri koriste self-prezentaciju, i muškarci i žene ih u određenoj meri saobražavaju tradicionalnim rodnim ulogama.

Self-prezentacija je sveprisutna i sastavni je deo većine socijalnih odnosa i situacija. Brojni su faktori koji utiču na proces self prezentacije i izbor pojedinih taktika, a jedan od značajnih faktora su osobine ličnosti. U našem istraživanju se pokazalo da osobine ličnosti mogu u izvesnoj meri objasniti razlike u self-prezentacijskom ponašanju. Pol je značajan prediktor taktika usmerenih vlastitim interesom, ali ne i kada su u pitanju taktike vođene zajedništvom. Budući da se taktike self-prezentacije saobražavaju tradicionalnim rodnim ulogama, moguće objašnjenje je da muškarci otvorenije brane svoj interes gradeći sliku o sebi ili popravljajući narušenu sliku o sebi. Sadržaj taktika vođene zajedništvom je visoko socijalno poželjno ponašanje, te pol nije značajan prediktor. Kada su u pitanju dimenzije ličnosti, self-prezentacijsko ponašanje vođeno vlastitim interesima najbolje objašnjavaju dimenzije Neuroticizma, Ekstraverzije, Pozitivne i Negativne valenca. Što se tiče taktika vođene zajedništvom, najbolji prediktori ličnosti su se pokazali Neuroticizam, Ekstraverzija, Savesnost, dok je negativni prediktor dimenzija Agresivnost. Ovi nalazi se dobrim delom poklapaju sa rezultatima istraživanja koji su se bavili self-prezentacijskim ponašanjem, posebno u pogledu dimenzija Neuroticizma, Ekstraverzije, Savesnosti i Agresivnosti (Heerey & Kring, 2007;

Leary, Kowalski, & Campbell, 1988; Sadler et.al., 2010). Posebno je interesantan prediktorski uticaj samoevaluativni dimenzija ličnosti, Pozitivne i Negativne valence, što ukazuje da odnos prema sebi i samoprocena direktno utiče i na sliku koju se prezentuje drugima. Ovi podaci mogu biti značajni u razumevanju i predviđanju ponašanja ljudi, posebno u situacijama kad su motivisani na self-prezentaciju, te na osnovu poznavanja osobina ličnosti možemo predvideti i sklonost self-prezentaciji ili izbor pojedinih taktika. Ako se osvrnemo na značaj društvenih mreža, on-lajn komuniciranja i drugih vidova savremene interakcije, bilo bi interesantno proveriti da li dobijene veze u ovom istraživanju važe i kada je u pitanju situacija predstavljanje slike o sebi u virtuelnom svetu, te bi dalja istraživanja trebalo okrenuti u tom smeru. Glavno ograničenje ovog istraživanja je činjenica da je uzorak ispitanika uglavnom populacija mladih ljudi, te u tom smislu možemo reći da bi valjalo proširiti opseg istraživanja i ispitati self-prezentacijsko ponašanje i kod osoba srednjeg i starijeg životnog doba. Osim toga, svakako treba imati u vidu činjenicu da je samoprocena vlastitog self-prezentacijskog ponašanja pod uticajem samopredstavljanja, a same taktike ne moraju nužno biti osveščene.

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Personality traits and self-presentation tactics

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Self-presentation is an omnipresent form of behaviour that involves building a self-image in front of other people. This form of behaviour aims at structuring the impression of a person. Self-presentation explains numerous social relations and situations, but it also depends on numerous factors, primarily personality factors, as well as a number of situational factors. The main goal of this research is to examine the relationship between broad personality dimensions, operationalized by the Big Five + 2 personality model (Neuroticism, Extraversion, Aggression, Conscientiousness, Openness, Positive Valence and Negative Valence) and self-presentation. The possibility of predicting self-presentation in total, as well as some of its individual tactics, based on broad personality dimensions, is also examined. The survey uses the Big Five + 2 Personality Questionnaire and the Self-Presentation Tactics Scale. The sample included 526 respondents, average age 21.6 years (SD=2.88). Of all the examined personality dimensions, Neuroticism and Negative Self-Image have the strongest correlations with overall self-presentation. The Conscientiousness dimension records the highest number of negative correlations, while the Openness dimension records the lowest number of statistically significant correlations with the overall self-presentation and individual self-presentation tactics. As for the prediction of self-presentation, all dimensions of personality, except Openness, are important predictors, but their constellation is different in relation to the content of self-presentation tactics.

The obtained findings make it possible to predict the direction of the presentation of self-image. Namely, knowing the personality traits, we can assume which self-presentation tactics will be used, especially in a situation when people are motivated to do so.

Keywords: self-presentation, self-presentation tactics, personality traits, the Big Five + 2 personality model

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Acoustic features of voice in adults suffering from depression¹

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In order to examine the differences in people suffering from depression (EG, N=18) compared to the healthy controls (CG1, N=24) and people with the diagnosed psychogenic voice disorder (CG2, N=9), nine acoustic features of voice were assessed among the total of 51 participants using the MDVP software programme (“Kay Elemetrics” Corp., model 4300). Nine acoustic parameters were analysed on the basis of the sustained phonation of the vowel /a/. The results revealed that the mean values of all acoustic parameters differed in the EG compared to both the CG1 and CG2 as follows: the parameters which indicate frequency variability (Jitt, PPQ), amplitude variability (Shim, vAm, APQ) and noise and tremor parameters (NHR, VTI) were higher; only the parameters of fundamental frequency (F0) and soft index phonation (SPI) were lower (F0 compared to CG1, and SPI compared to CG1 and CG2). Only the PPQ parameter was not significant. vAm and APQ had the highest discriminant value for depression. The acoustic features of voice, analysed in this study with regard to the sustained phonation of a vowel, were different and discriminant in the EG compared to CG1 and CG2. In voice analysis, the

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parameters vAm and APQ could potentially be the markers indicative of depression. The results of this research point to the importance of the voice, that is, its acoustic indicators, in recognizing depression. Important parameters that could help create a programme for the automatic recognition of depression are those from the domain of voice intensity variation.

Keywords: acoustic features, vowel, depression, voice disorder, voice analysis

Introduction

As a complex psychophysical disorder affecting every aspect of life (affective, cognitive, motivational, physical, and social), depression is usually defined as a long-lasting low mood accompanied by a loss of interest in the activities a person used to enjoy, combined with an inability to perform daily activities for at least two weeks (WHO, 2017). Due to its high prevalence in the general population, ranging from 2% to 6% in the literature, with a proportion of 3.44% according to some reports (Ritchie & Roser, 2018), 3.8% (IHME, 2019) and 4.4% according to WHO (2017), which can further lead to suicide (accounting for 1.5% of the total mortality rate in the world according to WHO, 2017), scientists are trying to find the causing factors of depression in order to prevent it. A meta-analytical study (Bueno-Notivol et al., 2021), conducted during the COVID-19 pandemic, determined a depression rate between 7.45% and 48.30%, indicating almost seven times higher prevalence of depression than before the pandemic. All this points out to the significance of early detection of depression. Furthermore, in recent years, growing scientific interest has been focused on determining the ways to detect mental disorders through speech signals so that voice could be used as an objective biomarker in detecting these disorders instead of relying solely on the patients' subjective self-assessment and clinicians' experience. Thus, examining the acoustic features of voice may contribute to creating programmes for the automatic recognition of depression and other mental disorders.

What is the relation between voice and emotions?

Speech communication consists of direct and indirect channels. The direct (verbal) channel includes linguistic content (what is said), while the indirect (nonverbal) one refers to the paralinguistic content related to the speaker (how something is said) (Yang & Lugger, 2010). Emotions, quality of voice, and accentuation are just some of the paralinguistic features (Yang & Lugger, 2010). It is well known that emotions can be vocally expressed. According to Scherer's theory, physiological factors largely determine the nature of phonation and resonance in vocal expression (Scherer, 1986). Specific acoustic voice features may be expected with regard to the physiological condition. The three most common acoustic indicators are fundamental frequency (F0), vocal intensity, and speaking rate (Yang & Lugger, 2010).

Emotions can largely affect voice and phonation. Numerous studies have shown that acoustic features of voice are indicators of different emotions (Juslin & Laukka, 2003; Scherer, 2003; Scherer, Clark-Polner & Mortillaro, 2011; Patel & Scherer, 2013). This influence is related to the subcortical parts of the central nervous system (CNS) responsible for expressing emotions, while some also regulate the activity of the neurovegetative system. Due to this close relation, emotions directly influence the activity and tone of voice organs (Milutinović, 1997). It is possible to distinguish between the positive and negative effects of emotions on voice. The positive impact is manifested in the increased tone and activation of the CNS, which improves the coordination of phonation organs. The negative impact of low mood is reflected in the inhibiting effect on phonation organs (Milutinović, 1997).

Depression and acoustic features of voice

The assessment of depression is based on the patients' subjective self-reporting and clinicians' experience (Alghowinem et al., 2013; Mundt et al., 2007). An experienced clinician can subjectively perceive the vocal changes typical of depression, but the practice is not based on the assessment of objective voice parameters. However, with regard to the close relation between voice and emotions, scientists are becoming increasingly interested in determining the ways to detect mental disorders through speech signals, i.e., creating an algorithm for detecting depression with great precision (Alghowinem et al., 2013; Afshan et al., 2018; Cummins et al., 2015; Cummins et al., 2011; He & Cao, 2018; Jiang et al., 2017; Kiss & Jenei, 2020; Lopez-Otero & Docio-Fernandez, 2020; Nunes et al., 2010; Rejaibi et al., 2022; Sturim et al., 2011; Xing et al., 2022). Such studies on depression are suitable since they are not intrusive, do not require direct contact with participants, and are not expensive (Cummins et al., 2011).

Acoustic analysis can provide objective data in addition to clinicians' subjective assessment. Such analysis is much more precise than the perceptive one since it provides quantitative measures (Petrović-Lazić et al., 2014) and may thus be used in both diagnostic and therapeutic clinical processes. Objective acoustic analysis is increasingly used in the literature on voice analysis in depression. Different speech tasks (sound phonation, spontaneous speech, reading texts, describing pictures) are used in the analysis. However, there is a discrepancy in determining the most suitable speech task for detecting depression. For example, according to some findings, acoustic features analysed on the basis of text reading have a high predictive value for depression measured by the Hamilton scale (Hashim et al., 2017) and, in others, those are acoustic features analysed on the basis of sound phonation for the Beck depression inventory (Silva et al., 2021).

Selecting a limited number of relevant variables for voice analysis and assessment has long been the main problem of speech analysis in psychiatry (Nilsonne, 1988). The existing literature has determined some acoustic variables indicating the difference between the participants with depression and the control group.

The most frequently examined acoustic features in people suffering from depression are the parameters which indicate frequency and its variation (F0, Jitter), amplitude variation (Shimmer) and noise and tremor parameter (NHR). The fundamental frequency of voice (F0) refers to the number of vibration cycles in one second (the frequency at which vocal cords open and close) (Baken & Orlikoff, 2000). The parameter of frequency variation from cycle to cycle (Jitter) measures short-term, cyclic irregularities of a voice period, while the amplitude variation of the sound wave (Shimmer) indicates amplitude variations during vocal cord vibrations (Zwetsch et al., 2006). The Noise-to-harmonics Ratio (NHR) is the ratio between harmonic and noise (non-harmonic) voice components (Ferrand, 2002). Most studies have examined the mean values of F0 and its deviations. Numerous studies indicate a smaller range of F0 variability in participants with depression, which, according to some authors, points to monotonous speech (Ellgring & Scherer, 1996; Moore et al., 2004; Mundt et al., 2007; Nilsonne, 1988; Silva et al., 2021). Several studies show that the mean value of F0 is lower in people with depression than in the typical control group (Mundt et al., 2007; Mundt et al., 2012; Wang et al., 2019), as well as that F0 decreases with the degree of depression severity (Yang et al., 2013). However, there are findings, although scarce, according to which there is no significance (Taguchi et al., 2018). Nilsonne suggests that smaller changes in F0 in the participants with depression compared to the control group could be the basic difference between these two groups of participants (Nilsonne, 1988). Most research studies show that the value of the Jitter parameter is higher in people suffering from depression (Nunes et al., 2010; Sahu & Espy-Wilson, 2016; Silva et al., 2021). The same is true for the Shimmer parameter (Sahu & Espy-Wilson, 2016; Silva et al., 2021), while in some studies, Shimmer was lower when analysing the voice in sadness (Nunes et al., 2010). Ozdas et al. (2004) point out that the increase in Jitter and glottal spectral tilt could be the acoustic features distinguishing between people with depression, suicidal people, and the control group. The NHR parameter is higher in the participants with depression than in the control group in some papers (Low et al., 2011), and lower in others (Quatieri & Malyska, 2012).

By reviewing the research findings, we have noticed that the results related to acoustic (vocal) analysis are not consistent. According to the literature, there is a need to determine additional acoustic features and

different classifications in this field (Sahu & Espy-Wilson, 2016). The topic-related literature is quite inconsistent with regard to sample selection, methodology, type, and number of the analysed parameters. To our knowledge, scarce studies in the Serbian-speaking area (Ćuk-Jovanović, 2002; 2003; Popović, 2003) have found differences in specific acoustic voice features in people with depression compared to the control group, primarily in the intensity and duration of speech. Some authors recommend examining whether the acoustic features in depression other than F0 (which has the highest consistency of results) are consistent in different speech and cultural areas (Wang et al., 2019). In addition, the studies have only dealt with the comparison of voice between people with depression and the typical control group, not considering the group of participants with a voice disorder. Stress and depression are known to be some of the causes of hyperfunctional (psychogenic) dysphonia (Koszyła-Hojna et al., 2018). This type of dysphonia involves excessive muscle tension due to an inadequate phonation process (Teixeira & Fernandes, 2015).

Thus, we wish to determine whether there are any differences in the acoustic features of voice between the people with psychogenic voice disorders and those with depression. Furthermore, we examine the acoustic features of voice in adults suffering from depression compared to the healthy controls in the control group in the Serbian-speaking area. We include the measures of frequency and its perturbations, amplitude, and the parameters of noise and tremor. We also want to determine whether the acoustic features of voice are discriminant for depression.

We hypothesize that the participants with depression differ in their acoustic parameters compared to the healthy controls and participants with psychogenic voice disorders.

Method

The sample

The research included 51 participants ($F_{\text{male}} = 29.4\%$), divided into three subgroups: 18 participants with diagnosed depression (experimental group – EG, aged between 27 and 63, $AS=51.83$; $SD=9.357$), 24 healthy controls (control group 1 – CG1, aged between 18 and 34, $AS=24.25$; $SD=4.286$), and 9 with a diagnosed psychogenic voice disorder (control group 2 – CG2, aged between 34 and 61, $AS=46.44$; $SD=9.671$). The age range of all included participants was 18 to 65 years. There were no significant differences with regard to gender ($\chi^2 = 4.974$, $p > .05$).

Table 1
Distribution of the participants (N=51) with regard to gender

Variable	Category	Frequency	%
Gender	Male	15	29.4
	Female	36	70.6
Group	Experimental group	18	35.3
	Control group 1	24	47.1
	Control group 2	9	17.6

To obtain the consent for conducting this study, we first sent a request to the head of the Psychiatry Clinic at the Zvezdara Medical Centre in Belgrade, thoroughly explaining the research aim, method, and procedure. After obtaining the consent, we sent a written request to the Medical Centre's Ethics Committee. The research was conducted after obtaining the consent of the local Ethics Committee of the Zvezdara Medical Centre (number IRB00009457). A speech and language pathologist who recorded voice, a psychiatrist who applied the MADRS Scale, and an otorhinolaryngologist who assessed the larynx participated in data collection.

After each patient had consented to participate in the study, psychiatric history data were taken from the medical records (which included a psychiatric interview). Only participants who had a major depressive disorder without comorbidity were selected based on archive documents. The data indicating the major depressive disorder were collected by a psychiatrist based on the Montgomery-Asberg Depression Rating Scale (MADRS scale, Montgomery & Asberg, 1979) and used only as a confirmation of the condition of each participant (which was previously taken as archive data, from medical records), e.g. to certify the absence of remission. Participants in the control group had no previous psychiatric history.

Participants with a psychogenic voice disorder were included in the study upon their examinations at the Ear, Throat, and Nose Clinic of Zvezdara, where the authors had access. The study included only those participants who had given their consent and were examined by an otorhinolaryngologist and a vocal pathologist. Healthy control subjects were randomly selected, also upon giving consent and being examined.

The inclusion criteria were the absence of chronic diseases affecting the quality of voice, such as neurological, endocrine, and infectious, the absence of other psychiatric disorders and the absence of the aging voice. Only the participants with normal laryngoscopy findings, without organic voice disorders, were included in the study. Also, the participants who were vocal professionals were excluded from the research.

Materials and apparatus

The Multi-Dimensional Voice Programme (MDVP) of the Computerized speech lab ("Kay Elemetrics" Corp., model 4300) was used in the analysis of acoustic voice features. The programme offers a detailed graphical and numerical display for 33 acoustic parameters. Before voice recording, the examiner instructed the participants to calmly and spontaneously phonate the vowel /a/ (as the most commonly used one) for 3–4 seconds in a sitting position. According to the authors' recommendations, this procedure was repeated three times to get the best quality voice. A microphone was placed at a 5 cm distance from the participant's mouth. The signal was recorded directly on a computer.

We selected the sustained phonation of a vowel as a speech task in this research because previous studies have shown that continuous speech tasks, such as spontaneous speech, tend to have greater prosodic and segmental variability, and that phoning vowels provides more consistent results (Gerratt et al., 2015).

We analysed nine acoustic parameters: frequency variability (F0, Jitt, PPQ), amplitude variability (Shim, vAm, APQ), and noise and tremor parameters (NHR, VTI, SPI).

F0, Jitter, Shimmer, and NHR are the most frequently analysed acoustic features of voice in people with depression. The other analysed parameters (PPQ, APQ, VTI, and SPI) were selected due to their significance in studying voice disorders and insufficient research in the field of voice in depression.

The MDVP programme has frequently been used for voice assessment in various participants in the Serbian-speaking area, and has significant diagnostic and therapeutic implications, e.g. in monitoring the effects of treatment in vocal polyyps (Petrović-Lazić et al., 2014; Petrović-Lazić et al., 2009).

Procedure

We explained the research aim and procedure to every participant. Only the participants who signed the informed consent for patients were included in the research with the possibility to withdraw at any time. The recording took place in a room isolated from noise. A Sony ECM-T150 microphone (Sony, Tokyo, Japan), attached to headphones at a 5.0 cm distance from the participant's mouth, was used for recording. All participants were instructed to sustain the phonation of the vowel /a/ for 3–4 seconds. Every phonation was recorded three times. In this way, the best quality recording was included in the analysis. The registered signal was recorded directly on a computer. The research was conducted during the optimal period, from 11 to 12 o'clock, when the participants were not tired.

Statistical analysis

SPSS 23.00 was used for statistical analysis. The obtained values of acoustic parameters were presented by descriptive statistics methods: mean and standard deviation. Analysis of variance was used to test the differences between the experimental and control groups. We used the Tukey post hoc test to further examine partial comparison of the groups. Cohen's *d* was used to measure the effect size of the differences. Discriminant analysis determined which of the parameters had the highest discriminant value for the groups. Power was calculated by the G-power programme and it was indicated that for the effect size analysis of 0.40, the measurement error of $\alpha = 0.05$ (and therefore the power of the test of $\beta = 0.95$), 3 groups of participants and 0 covariates, the predicted smallest sample size was 162.

Results

Differences in acoustic features of voice between groups

The one-way analysis of variance (ANOVA) was used to examine whether the EG was different from CG1 and CG2 in the acoustic features of voice. The independent variable in the analysis was the group (EG, CG1, and CG2), while the dependent variables were acoustic voice features (9 of them). There were 18 participants in the EG, 24 in the CG1, and 9 in the CG2. Cohen's *d* and eta-squared tests measured the effect size of the differences between the groups. The results of group comparisons (EG vs. CG1, CG1 vs. CG2, and EG vs. CG2) were tested by the Tukey post hoc test. Table 2 shows the results of the analyses.

Table 2

Results of the variance analysis examining the differences in the acoustic features of voice (F0, Jitter, Shimmer, NHR, vAm, APQ, PPQ, VTI, SPI, dependent variable) in three groups of participants (EG, CG1, CG2) (the factor or independent variable)

Parameter / group	Experimental group M (SD)	Control group 2 M (SD)	Control group 1 M (SD)
F0	163.58 (43.487)	153.07 (53.821)	232.82 (47.189)
Jitter	3.35 (2.638)	1.63(0.618)	0.55(0.267)
Shimmer	11.96(4.704)	6.26(3.350)	2.10(1.024)
NHR	0.31(0.191)	0.17(0.055)	0.11(0.013)
vAm	27.07(8.479)	11.41(4.462)	9.41(4.275)
APQ	9.51(3.235)	4.50(2.178)	1.49(0.694)
PPQ	2.09(1.691)	0.95(0.371)	0.32(0.158)
VTI	0.18(0.105)	0.08(0.048)	0.04(0.015)
SPI	4.59(2.416)	11.64(3.486)	6.58(3.273)

Notes: Acoustic features of voice: F0, Jitter, Shimmer, NHR, vAm, APQ, PPQ, VTI, SPI; three groups of participants: experimental group, control group 1, and control group 2; M – mean, SD – standard deviation

The results showed that the EG had significantly higher values than CG2 and CG1 on many scales of acoustic parameters: NHR (0.31 vs. 0.17 vs. 0.11; $F(2/48)=15.627$, $p<.01$), Shimmer (11.96 vs. 6.26 vs. 2.10; $F(2/48)=49.060$, $p<.001$), Jitter (3.35 vs. 1.63 vs. 0.55; $F(2/48)=15.744$; $p<.001$), VTI (0.18 vs. 0.08 vs. 0.04; $F(2/48)=20.923$; $p<.001$), APQ (9.51 vs. 4.50 vs. 1.49; $F(2/48)=70.082$; $p<.001$), vAm (27.07 vs. 11.41 vs. 9.41; $F(2/48)=15.296$, $p<.001$). In F0 and SPI parameters, the EG had lower mean values than the other two groups (control group 1 and control group 2) and statistically significant differences in the acoustic parameters (F0 (163.58 vs. 232.82 vs. 153.07; $F(2/48)=15.296$, $p<.001$), SPI (4.59 vs. 11.64 vs. 6.58; $F(2/48)=16.251$, $p<.001$)). These results indicate that the greatest differences between EG, CG1, and CG2 (expressed in η^2) were found in Shimmer, APQ, and vAm parameters.

We used discriminative analysis using the stepwise method, in which predictors are included one by one, making the layers of the analysis. Results of the discriminative analysis via the stepwise method indicated a model with two significant discriminative functions (Box'M = 53,153; $F(12/3036)=3,917$, $p<.01$).

Table 3.

Results of the canonical standardized function coefficients and function at group centroids

		Function	
		1	2
Standardized Canonical Discriminant Function Coefficients	vAm	.418	-.526
	APQ	.716	.659
	SPI	-.083	.969
group		1	2
Function at the group centroid	EG	2.349	-.234
	CG1	-1.551	-.515
	CG2	-.561	1.841

The final model included three layers. At the first layer, only the APQ voice feature was significant (Wilks L=.255; $F(2/48)= 70.082$, $p<.01$), at the second, SPI was significant (Wilks L=.160, $F(4/94)=35.233$, $p<.01$), while at the third it was vAm (Wilks L=.129, $F(6/92)= 27.344$, $p<.01$).

The first discriminative function has its own eigenvalue of 3.331 and explained 80.9% of variance of the criteria (Wilks L=.129 ($\chi^2(6)=96.221$, $p<.01$), while the second has its own eigenvalue of .789 and explained 19.1% of variance of the criteria (Wilks L=.559; ($\chi^2(2)=27.334$, $p<.01$). The value of the canonical correlation of the first discriminative function is .877, while that of the second is .664.

At the first discriminative function, the parameters vAm and APQ have the highest value of the standardized coefficient of the canonical discriminative function, while at the second the parameter SPI has the highest value (Table 3).

Table 4.

Results of the predicted group membership according to the discriminant functions

	group	EG	CG1	CG2
Original		17	0	1
	count	0	21	3
		0	0	9
		94.4	0	5.6
	%	0	87.5	12.5
		0	0	100
Cross validated		16	1	1
	count	0	21	3
		0	0	9
		88.9	5.6	5.6
	%	0	87.5	12.5
		0	0	100

The first discriminative function is for the depressive, while the other is for voice disorders (Table Coefficients of the matrix structure of the discriminative functions also indicated such a pattern of the results). Results of the classification of the participants according to the results of the discriminative function indicate that one participant from the depressive group should be classified in voice disorder, and the three participants classified in the depressive should be in voice disorders (Table 4).

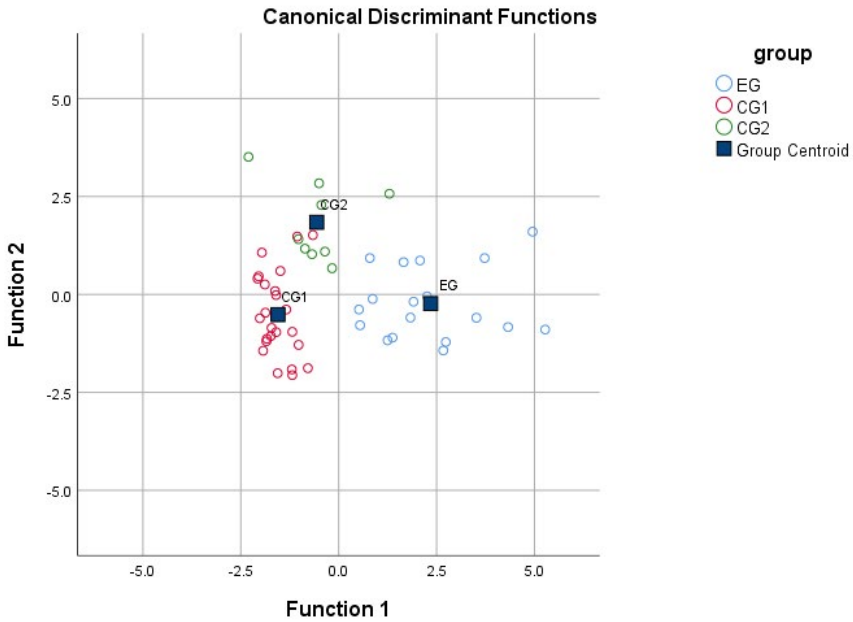


Figure 1. The overall presentation of the results is organized in a coordinate space defined by two discriminative functions. The first (Function 1) represents the X-axis, while the second (Function 2) represents the Y-axis. The EG is marked by blue circles, CG2 by red, and CG1 by green circles.

The figure indicates three separate groups of participants. It can be clearly seen that the EG is the most prominent in the first discriminative function (hence the highest discriminative function coefficients for this group of disorders in the table that represents the group centroids). In addition, we can notice that voice disorders are in a completely different quadrant of the coordinate system from depression. However, they have the highest scores in the second discriminative function according to the position in group centroids (where they have the highest coefficients on the Y-axis).

Discussion

Although with some inconsistent results, the literature largely indicates the existence of differences in acoustic features of voice in people with depression compared to a control group of healthy controls (Low et al., 2011; Mundt et al., 2007; Nunes et al., 2010; Sahu & Espy-Wilson, 2016; Taguchi et al., 2018; Quatieri & Malyska, 2012). We wanted to examine whether introducing an additional subgroup of participants with psychogenic voice disorders could significantly strengthen the existing results and contribute to the literature on

depression and its relation to acoustic features of voice. Thus, we conducted an acoustic analysis of voice in adults suffering from depression (EG), aiming to compare their differences in relation to healthy controls (CG1) and adults with a psychogenic voice disorder (CG2).

The analysis of variance showed that practically all mean values of the parameters significantly differed between the EG and CG1, and between the EG and CG2. Almost all parameters in the EG (parameters of frequency variability (Jitt, PPQ), amplitude variability (Shim, vAm, APQ) and noise and tremor parameters (NHR, VTI)) had higher values except for fundamental frequency (F0) in relation to CG1 and soft index phonation (SPI) in relation to both control groups. These results indicated that the EG differed from both control groups in all measures of frequency and its variability, amplitude variability, and noise and tremor assessment in this research.

The fundamental frequency (F0) of voice (subjectively observed as voice pitch) is one of the most frequently examined acoustic variables. The EG had lower mean values in F0 compared to CG1 and higher compared to CG2. This is in accordance with numerous studies indicating that F0 is lower in depression (Mundt et al., 2007; Mundt et al., 2012; Silva et al., 2021; Wang et al., 2019). The fundamental frequency of voice refers to the number of vibration cycles in one second (the frequency at which vocal cords open and close). Lower F0 can result from slower vocal cord vibrations due to bad mood and stress. Slow and long vibrations produce a low tone of voice. Being directly associated with vocal cord vibrations, F0 can be observed through the relation to the speaker's general muscle tension. The strong relation between F0 and muscle tension is particularly significant (Ellgring & Scherer, 1996). Taguchi et al. (2018) did not find significant differences in F0 between the participants with depression and the control group. However, they used the reading numbers task in their study and explained that the short pauses between the numbers possibly affected the F0 value (Taguchi et al., 2018). Based on vowel phonation, our research found that F0 was significant for depression. Interestingly, the value of this parameter in our study was higher in the EG than in CG2 (when considering mean values, see Table 2). Also, our study showed a lower variability of the fundamental frequency. Moore et al. (2004) point out that a smaller range of F0 indicates monotonous speech in people with depression. This decrease in the F0 range and its variability can, according to some authors, be explained by the increased rigidity in the phonation mechanism based on high muscle tension (Ellgring & Scherer, 1996). From the paralinguistic aspect, speech intelligibility depends on prosodic segments. F0 variations are considered the main carrier of prosodic information (Ellgring & Scherer, 1996). Ozdas et al. (2000) assume that the difference between perceptive descriptions of a suicidal voice heard by clinicians is based on long-term F0 variations rather than its fluctuations between periods.

The results of our research indicate a statistically significant increase in the mean values of Jitter and Shimmer parameters in the EG compared to both control groups, which is in accordance with research findings in this field (Low et al., 2011; Sahu & Espy-Wilson, 2016). One of the possible effects of high laryngeal tension caused by emotional stress is the irregularity of vocal cord vibrations that can lead to increased Jitter parameter (Scherer, 1986). Jitter measures short-term, cyclic irregularities of a voice period (Zwetsch et al., 2006). A study aiming to determine suicidal tendency on the basis of voice features showed that the Jitter parameter was higher in participants with this tendency than in the control group (Ozdaz et al., 2000). Shimmer indicates amplitude variations during vocal cord vibrations (Zwetsch et al., 2006). A recent study also found an increase in Shimmer and Jitter, which is in accordance with our results (Silva et al., 2021). The literature is mainly consistent with regard to the values of the mentioned parameters. We are familiar with one study in which Shimmer was lower, but the parameter was analysed on a speech sample for the emotion of sadness and not in participants with depression (Nunes et al., 2010).

According to some authors, different airflow during speech increases the noise-to-harmonics ratio in people with depression compared to healthy controls (Low et al., 2011). This was also confirmed in our study in relation to both control groups. However, some studies indicate that this parameter is lower in participants suffering from depression (Quatieri & Malyska, 2012), explaining that laryngeal muscle tension decreases in depression due to a motor impairment (weakening) which causes greater glottal turbulence. NHR (noise-to-harmonics ratio) is the ratio between harmonic and noise (non-harmonic) voice components. Noise may come from the glottis, resulting from supraglottic constriction, and may be mixed. An increase in vocal intensity occurs in greater vocal cord occlusion due to excessive muscle tension, increased vibration amplitude, and increased subglottal pressure. NHR is an objective indicator of breathiness as a perceptual feature.

Although F0, Jitter, Shimmer and NHR are the most commonly examined acoustic parameters in people with depression, it is also important to examine other parameters of frequency and amplitude variability, and noise and tremor parameters. The selected additional parameters are significant in researching voice disorders. Apart from these most frequently examined parameters, our results show a significant increase in the APQ and vAm (variation of amplitude, Cappellari and Cielo, 2008) parameters, indicating the possible effect of increased laryngeal tension due to emotional stress and amplitude irregularities. APQ is the amplitude perturbation quotient in percentages and is thus an appropriate Shimmer measure (Petrović-Lazić et al., 2014). This parameter usually increases in breathy and hoarse voice. The vAm indicates long-term variations in the peak amplitude expressed in percentages (Cappellari & Cielo, 2008). PPQ is the pitch period perturbation quotient (Cappellari & Cielo, 2008). This parameter measures short-term irregularities in this period.

PPQ is the only parameter that was not statistically significant in our research. In addition to NHR, VTI is also a good indicator of breathiness and was higher in the EG in our study. VTI measures the ratio between the energy density of high-frequency noise (in the range of 1800–5800 Hz) and the spectral energy density of harmonics (in the range of 70–4200 Hz) (Cappellari & Cielo, 2008). It represents the voice turbulence index.

Apart from the lower F0, our research also showed a decrease in the soft phonation index (SPI) in the EG compared to both control groups. This parameter refers to the approximation and tightening of vocal cords during phonation (Heđever, 2012). It implies the average ratio between low-frequency harmonics (in the range of 70–1550 Hz) and high-frequency harmonics (in the range of 1600–4200 Hz). The increased SPI value usually indicates insufficient closure and tightening of vocal cords during phonation. On the other hand, low values of this parameter imply an increase in vocal cord adduction (Roussel & Lobdell, 2006). However, the literature shows that this parameter decreases with the increase of F0. Thus, it is possible that the sample size is the reason for the discrepancy between these parameters.

In our research, amplitude variability parameters – vAm and APQ – had the highest discriminant value for voice in depression (Figure 1). These findings are in accordance with a study indicating that Shimmer (the parameter from the domain of amplitude variability) was the parameter most associated with depression, unlike Jitter (Quatieri & Malyska, 2012). However, some authors point out that lowering the fundamental tone and reducing the variability range of F0 may be the main objective parameter indicating depressed speech, i.e., the basic measure of the difference between participants with depression and healthy controls (Nilsonne, 1988). Ozdas et al. (2004) point out that the increase in Jitter and glottal spectral tilt can be observed as the acoustic features distinguishing between people with depression, suicidal people, and healthy controls (Ozdas et al., 2004). Also, a recent paper shows that Jitter is the parameter that predicts most whether participants have depression (Silva et al., 2021). The authors believe that neurophysiological changes in depression cause glottis irregularities and thus affect motor and dynamic coordination of the larynx. Our results could potentially provide significant insights with regard to predicting depression based on the acoustic features of voice, which would be our focus in future research.

Our findings confirm previous findings that there are differences in the acoustic features of voice between the EG and CG1, and also between the EG and the added CG2. These new findings, along with the confirmed previous ones, preliminarily indicate that voice in depression is a separate entity independent of psychogenic voice disorders. This could facilitate the diagnostic process by differentiating this mental disorder from other comorbid diagnoses. By pointing out important acoustic parameters associated with depression, this pilot research could contribute to creating a programme for automatic recognition of depression. However, the practical

implementation requires significantly more systematic research in this field, where we see the future of multidisciplinary cooperation of experts in mental health, voice, and computer engineering.

Limitations

According to the power calculation and the small sample, it is necessary to conduct further research in this field on a larger sample in order to generalize the results. Also, it would be potentially significant to divide the sample into subgroups according to the severity of depression. As a variable that can make a difference in acoustic values, gender was not taken into account, as well as whether the history of smoking and taking medications can be confounding variables, which would be significant to examine in future studies. There are indications of medication effects on voice, although they have not been shown to affect the ability to discriminate between the depressed and control groups (Silva et al., 2021). Therefore, future research should certainly consider a research design that would include both the participants who are taking and who are not taking medicine. The relation between acoustic analysis and other voice and speech analyses (e.g. spectral analysis) and depression should also be examined in this sample in future studies. Further, the study should be replicated on other sounds, e.g. words and different types of speech tasks (such as reading, continuous speech, etc.), to confirm the results. It could be useful to compare depression voice with other types of voice disorders. In future studies, it is necessary to thoroughly examine depressive states in all groups, not only based on self-reports.

Conclusion

The acoustic features of voice analysed on the basis of the sustained phonation of the vowel /a/ in this research were different and discriminant in the EG compared to CG1 and CG2. Practically all analysed acoustic parameters were different between these groups. Discriminant analysis indicated that vAm and APQ had the highest discriminant value for depression. The results of this research point to the importance of the voice, that is, its acoustic indicators in the recognition of depression. Important parameters that could serve to create a programme for automatic recognition of depression are those from the domain of voice intensity variation.

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Akustičke karakteristike glasa kod odraslih osoba sa depresivnim poremećajem

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U cilju utvrđivanja razlika između grupe osoba sa depresivnim poremećajem (EG, N=18) u odnosu na grupu osoba iz tipične populacije (CG1, N=24) i grupu osoba sa dijagnostikovanim psihogenim poremećajem glasa (CG2, N=9) analizirano je 9 akustičkih karakteristika glasa primenom MDVP softverskog programa ("Kay Elemetrics" Corp., model 4300) na uzorku od 51 ispitanika. Devet akustičkih parametara analizirano je na osnovu produženog foniranja vokala /a/. Rezultati istraživanja pokazuju da se srednje vrednosti svih akustičkih parametara razlikuju između osoba sa depresivnim poremećajem u odnosu na obe kontrolne grupe i to: parametri varijabilnosti frekvencije (Jitter, PPQ), varijabilnosti amplitude (Shimmer, vAm i APQ), i parametri procene šuma i tremora (NHR i VTI) imaju više vrednosti; samo su parametar fundamentalne frekvencije (F0) i indeks pri-
gušene fonacije (SPI) niži (F0 u odnosu na CG1, i SPI u odnosu na CG2). Samo se parametar PPQ nije pokazao značajnim. Parametri vAm i APQ imaju najveću

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diskriminativnu vrednost za depresivni poremećaj. Akustičke karakteristike glasa analizirane na osnovu produženog foniranja vokala u ovom istraživanju razlikuju i diskriminišu EG i u odnosu na CG1 i u odnosu na CG2. U vokalnoj analizi parametri vAm i APQ bi potencijalno mogli biti markeri koji ukazuju na depresivni poremećaj. Rezultati ovog istraživanja ukazuju na značaj glasa, odnosno njegovih akustičkih pokazatelja, u prepoznavanju depresije. Važni parametri koji bi mogli da pomognu u kreiranju programa za automatsko prepoznavanje depresije su oni iz domena varijacije intenziteta glasa.

Ključne reči: akustičke karakteristike, vokal, depresija, poremećaj glasa, vokalna analiza

I fight, therefore I am: Success factors of Roma university students from Serbia

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In spite of the improvements in the inclusive policies and practices, Roma students are still underrepresented in higher education (HE) in Serbia. The main aim of this study is to ascertain contextual and personal factors of the success of Roma university students. Study participants were Roma studying at four public universities in Serbia who filled in a questionnaire on their family- and school-related experience, and participated in interviews on their educational trajectories, as well as in a two-day workshop dedicated to empowering students through reflecting upon their educational trajectories and personal strengths. Qualitative thematic analysis was applied on one open-ended question on life mottos from 89 questionnaires, 20 interviews and their products and elaborations of 16 workshop participants. It showed that psychological and instructional support from parents and teachers, in some cases – peers and Roma NGOs, together with scholarships and affirmative measures by enrolment, were important success factors. Students' life mottos predominantly contained the themes of fight and persistence. Most personal strengths were related to proactivity and optimism. This points to a highly developed psychological capital of Roma university students. Besides continuous financial support, participants stressed that the provision of continuous psychosocial support, informal learning opportunities and opportunities for peer mentorship and networking would result in a higher number of Roma students in HE.

Keywords: Roma students, higher education (HE), social capital, psychological capital, Serbia

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Introduction

According to the Council of Europe estimations (which are higher than the official census data), between 700,000 and 1,360,000 Roma live in the Western Balkans (European Commission, 2014). Roma are one of the most marginalized and deprived groups, with limited access to education, health, social protection, and the labour market in most countries (Robayo-Abril & Millan, 2019). Given that lower quality education is at the same time a product of social exclusion and an introduction to a new cycle of social exclusion, since it reduces employment opportunities after graduation, the recommendations of the European Parliament and the Council of the European Union for the educational inclusion of Roma are based on the social and economic importance of education (Council of EU, 2013). The importance of education was also recognised by the Roma Decade (2005–2015) since the largest number of initiatives and national strategies within it were focused on education.

Although education is the priority area in which the most progress has been made (Rorke, 2015), there are still many challenges that impede inclusion in schools – segregation and ghettoized schools still exist, the policies still use non-inclusive terminology and do not address antigypsyism in an appropriate manner. Also, there is a lack of cooperation with Roma organizations and the Roma who are actively involved in the protection of their rights (Kirova & Thorlakson, 2015; Lajčakova et al., 2020). Research conducted in eleven European Union countries (FRA, 2014) and the Western Balkans (Robayo-Abril & Millan, 2019) indicates that the most common problems faced by Roma in education include the following: low coverage of Roma children with pre-school education, increased risk of segregated schooling accompanied by prejudice and discrimination, as well as high dropouts during secondary education. Research shows that, in many countries, inequality in education begins during early childhood and that the education gap widens at higher education (HE) levels. This reflects the need for more evidence-based recommendations and actions, i.e. more studies on the factors affecting the academic success of Roma students.

Education of Roma students in Serbia

According to the latest Census, 147,604 (2.05%) people declared themselves as Roma; however, the unofficial data from several other sources show that around 600,000 Roma actually live in Serbia (European Commission, 2014). The Strategy for Social Inclusion of Roma Men and Women in the Republic of Serbia from 2016 to 2025 provides a precise description of the position of Roma and provides insight into the challenges that Roma continue to face in various social spheres directly related to their unfavourable socio-

economic position. The biggest problems of Roma in Serbia are poverty, social exclusion, racism, explicit and implicit discrimination, especially in the field of employment, education and housing (Cvejić, 2020; Sicurella, 2016).

In the context of education, the Law on the Fundamentals of Education System from 2009 introduced changes in educational practice that facilitate the availability of education and promote high quality education for all children (not only for children from different vulnerable groups). During the Roma Decade, Serbia developed recommendations for educational inclusion of all children, including promoting the early education, understanding education as a driver of social inclusion and developing institutional mechanisms to prevent discrimination (Jovanović et al., 2013).

Although existing policies do support diversity and inclusion in general and widening of Roma participation in HE, they seem to represent a form of policy compliance as a strategy towards faster accession to EU (Jovanović, 2018), and do not lead to substantial changes in practice. Roma students are still underrepresented at all levels of education. A total of 99% of the general population aged 6–13 is covered by mandatory primary education, while the percentage of Roma children aged 6–13 enrolled in primary school is 92% (SORS & UNICEF, 2020). While the coverage of the general population by secondary education, which is not mandatory, stands at 94%, the share of Roma students (more boys than girls) attending secondary school stands at 28% (SORS & UNICEF, 2020). The number of youths enrolling in HE institutions has been increasing over the past years, but the number of Roma attending college is still negligible. The coverage of the general population by tertiary education stands at 42%, whereas the number of Roma youths attending college is under 1% (Bojadijeva, 2015).

Wider social factors that hamper the education of Roma students are stereotypes and prejudices that exist in the society towards the Roma population, expectations that the stakeholders have in relation to Roma children and parents regarding their abilities and motivation for schooling. There are numerous studies that show the extent to which the values and beliefs of teachers (and also future teachers), as well as institutional racism, affect the quality of education and opportunities that will be provided to youth from vulnerable groups (Jovanović, 2018; Peček, et al., 2014; Namrata, 2011; Petrović et al., 2010). Prejudices serve to justify different discriminatory practices (explicit and implicit) in the society (and education as one of its parts), which produce inequality and support established relations of power and domination (Bhabha et al., 2017; Tomanović & Stanojević, 2015). This can lead to lower educational aspirations (Simić et al., 2021) and experiencing studying at the HE institutions stressful (Tomanović & Stanojević, 2015).

Significant obstacles for continuing education at colleges include limited access to information, the lack of social support, the lack of adequate role

models, as well as the model of ethnic socialization (Hughes et al., 2009; Jovanović, 2018) that deepens the gap and mistrust between Roma and the general population.

Present study

Although the obstacles for Roma students to continue their education beyond compulsory primary school have largely been explored, there were few studies focusing on academic success factors. In the international literature, one can find out about the factors that contribute to academic success of children from vulnerable and marginalized groups. On the individual level, these factors are optimism, dominance of instrumental coping strategies, good emotional regulation, proactive attitude and self-confidence, as well as hope (Burton & Dowling, 2005; Snyder et al., 2002; Vanderbilt-Adriance & Shaw, 2008). On the family level, the factors that stand out, in addition to the socioeconomic and educational status of the family, are the quality of parental relationships and social support of important people in the environment, as well as the promotion of independent decision-making by parents (Masten & Reed, 2002; Soenens et al., 2007). Research also points to a link between ethnic socialization and academic success. Cultural socialization and the adoption of a positive image of the group to which they belong, conditions a positive identity and high self-esteem, which leads to greater confidence in their competencies (academic) and academic success (Hughes et al., 2009; Murry et al., 2009), and also to resilience – the capacity to overcome different obstacles and to recover from adversities (Spencer, 1983). On the local community level, existence of adequate role models, as well as the values that are nurtured in the community, related to respect for diversity and interculturalism, proved to be significant factors (Benner & Graham, 2013).

However, there were few academic studies that specifically addressed the factors that contribute towards the Roma students' academic success in HE (see e.g., Jovanović, 2018). Therefore, we are interested in exploring Roma university students' personal stories about their educational trajectories, with the special focus on determining the factors that are related to academic success. The goal of this study is to identify the contextual and personal success factors of Roma university students. Therefore, our research questions include the following:

1. What are the family-related factors of academic success of Roma university students?
2. What are the school-, community- and system-factors of academic success of Roma university students?
3. What are the personal factors of academic success of Roma university students?

Although not in our focus, when talking about success factors, some respondents spontaneously mentioned challenging factors, as well as some kinds of support they did not have, but wished they had. In addition to the identification of success factors, this encouraged us to offer recommendations for the improvement of practices related to Roma students in Serbia.

Methodological background

This study was a part of a larger mixed-method research conducted within the project “Roma champions”, realized in partnership between the Centre for Interactive Pedagogy and François-Xavier Bagnoud Centre for Health and Human Rights (FXB Centre). The research in question was organized in three phases: 1) administering questionnaires to Roma HE students, 2) conducting in-depth interviews with a sample of Roma HE students, and 3) conducting one workshop with a sample of Roma HE students. In this paper, we focus only on qualitative data collected through all three phases of the Project with Roma HE students.

Research participants and instruments

Participants in this research were 89 Roma students from four Serbian state universities (56% female) – Belgrade, Novi Sad, Niš and Kragujevac. They were mostly students of social sciences and humanities (51%), with almost one half of them (47%) enrolled in the first or the second study year. They were approached with the help of Roma student organizations and Roma NGOs. After obtaining a signed informed consent, they filled out the questionnaire that involved several scales and questions assessing the personal, family-, school-, and community-related factors that might have been related to academic success. The questionnaires were administered by young researchers, Roma studying social sciences, who had themselves grown up in the places where the research was conducted. Although they had already had basic knowledge of scientific research methodology, the main research team organized two-day training on data collection through questionnaires and the process of data entry in the database to strengthen their capacities for fieldwork. The researcher was present when the respondents were completing the questionnaires in order to clarify certain issues in case they had any dilemmas or questions, but the respondents completed the paper-and-pencil questionnaires on their own.

A group of 20 participants from the original group of 89 was selected for further Project and research activities in the following manner: the researchers called up every fifth questionnaire respondent on the list, or the next one if the fifth declined to take part in this stage of the research. Five Roma

students from each University centre (12 female) participated in one-hour interviews conducted by their peers – the same persons who administered the questionnaires. Beforehand, these four students received one-day training on interviewing process and skills. Interview guides included the following question sections: life journey, family, community, educational journey (the contexts of primary school, secondary school and college) and plans for the future. Interviews were transcribed for further analyses.

Finally, the same group of 20 students were invited to a two-day workshop *Writing Lives*, whose goal, besides collecting additional data, was to connect students, empower them to create small support communities and take over leadership roles in their local communities. It was based on the work of Bhabha and associates (2017) and has similarities with the work of Daiute and Kovač Cerović (2017), but was adjusted to this project's context and goals. Sixteen students (8 females) joined the workshop and participated in several participatory techniques (drawing educational trajectories, writing letters and messages from the perspective of significant others, modelling personal strengths, creating chapters of a book about university experiences and creating short slogans targeting different stakeholders). The workshop was facilitated by one member of the main research team, audio-recorded and then transcribed for the sake of data analysis.

Data analysis

In this study, data were elicited from three sources: a) questionnaires, b) interviews and c) workshop. Answers to one open-ended question from the questionnaire on students' life mottos were analysed, because we believed these mottos could point to the values and beliefs that represented students' personal drivers of success. Out of 89 students who filled in the questionnaire, 46 provided answers to this open-ended question. We also analysed the narratives from 20 interviews, in particular those parts that referred to the educational journey – experiences with teachers and peers from the primary and secondary school and from the university, personal strengths and external support that contributed to their academic success. Finally, we analysed the narratives and the products from the workshop in which 16 students participated – students' clay representations of personal strengths and accompanying explanations, the messages students reported they had been receiving from others, the messages they would like to convey to others, as well as elaborations of educational trajectories. Students' readiness to openly share personal stories varied, so it was not possible to reliably notify the frequencies of certain themes; therefore, narratives from the workshop only served to illustrate some, more elaborated and robust findings from the interviews and questionnaires.

When narrating about their successes in both the interviews and the workshop, students tended to spontaneously mention the challenges and support they lacked, which we decided to include in our analysis. Although not comprehensively explored, we believed these data enabled us to define recommendations for educational policy and practice improvement.

We inductively searched for the recurring themes in students' narratives and products – for personal, family, school and community success factors – but we coded the challenges as well, since they spontaneously emerged in the participants' narratives. One author of this paper coded data from the questionnaires and interviews in the first phase, while the other coded data from the workshop. In the second phase, after approximately one third of materials had been analysed, the authors discussed the codes created for all three types of material and revised the coding scheme (the code names were slightly clarified, and some codes were merged). In the third phase, after all materials had been coded, we randomly selected approximately one quarter of coded segments from each data collection source and used them for determining the agreement between coders. There was a need for slight modification of the coding scheme for life mottos only, while intercoder reliability proved to be high (90% of segments were coded with the same code by two coders).

We did not connect the answers from single participants obtained through three different data collection techniques because our goal was not to investigate individual participants' narratives, but to find out about common themes at the level of the entire sample. Although this study was of limited scope, methodological triangulation (having three research instruments exploring the same topics and two researchers doing and fine-tuning analyses) contributed to its credibility (Denzin, 1978). Moreover, we ensured additional validation of data through member checking (Creswell & Miller, 2000); namely, two Roma students who participated in this study provided their feedback on the conclusions and recommendations.

Results and Discussion

Contextual factors – Family-related factors

We learned about the students' family background – the challenges and success factors – mostly from the interviews. Out of 20 Roma college students, nine (45%) talked about their families in a positive tone. These nine students reported about education being promoted as valuable (mostly due to extrinsic reasons) and continuing education as unnegotiable (see Table 1).

Parents (in some cases – grandparents and close relatives) were mentioned as the most relevant source of educational (instructional) support in primary school (in 7, that is, 35% of interviews), and the most important sources of

psychosocial support at the university level (in 13, i.e. 65% of interviews). Financial security the parents instilled in their children was also perceived as one of the success factors (see Table 1).

Table 1.
Family success factors – codes, examples and frequencies

Code	Examples (from the interviews)	Frequency (interviews)
Valuing education	<i>It has never been questioned whether I will enrol into secondary school and continue my education. (Female student of social sciences, Belgrade)</i>	9
Educational support	<i>My mother spent a lot of her time with us in the first grades, she helped us with homework, so we have developed study habits from the start. (Male student of technology, Kragujevac)</i>	7
Psychological support	<i>My mother and my grandparents have always believed in me. When someone insulted me because I was Roma, they taught me how I should ignore such people and always work hard so I demonstrate my value. (Female students of social sciences, Belgrade)</i>	13
Financial support	<i>Parents have always been saying how we need to study diligently, and they will earn money for our education. (Male student of medicine, Niš)</i>	8

During the workshop it has been revealed that, out of all family members, mothers' support had the greatest impact on students' academic endeavours. As reported by Workshop participants, mothers were supporting resilience and a proactive attitude towards life, repeating messages like: *Never give up, this day will always end and a brighter one will always follow*. They encouraged their children's autonomy, independence and responsibility. Mothers offered unconditional support and care, as well as direct financial support (messages they conveyed to their children were: *Don't worry, I'll always be here for you as long as I live; We'll be together whatever happens; Don't worry about money. That's my problem*).

However, five interviewees (20%) reported dysfunctional family relationships, accompanied with loss of parent(s), parents' divorce, frequent relocations, bullying, discrimination from teachers, discrimination from immediate and wider environment etc. They described these relationships and events as being stressful and traumatic to them. They felt neglected, while some of them were forced to take over responsibilities around household and younger siblings from an early age on. Some were dissuaded by family members from continuing their education. In such an unsupportive and neglecting environment, they felt different and lonely.

Contextual factors – School-, community- and system-related factors

When talking about success factors outside family in the interviews, the majority of participants mentioned psychological support received from school staff (in 11 cases from teachers and in one case from the school expert associate), and instructional support received from teachers (see Table 2). Teachers' educational support in primary school was mentioned in six interviews (30%), while their educational support in secondary education was mentioned as relevant in 11 cases (55%). Another success factor related to school was the provision of financial support and necessary learning material and clothes through school-organized initiatives (see Table 2).

Workshops for Roma students organized by local Roma NGOs led by local Roma leaders appeared as a topic in two interviews (10%). Similarly, encouragement by university professors appeared only in one interview as a factor that helped a Roma student successfully adjust to the university environment. However, peer support appeared as relevant, especially in secondary schools, in the context of socialization and accepting oneself (elaborated in three interviews, i.e. 15%). Peer support in primary school and at college was mentioned only by one person (Table 2).

Students' narratives from the workshop confirmed the importance of teachers as role models (*I remembered a college teacher who had come from a poor family and made it*), who set high expectations, thus expressing trust in students' capacities. There were teachers who nurtured proactivity and persistence (messages like: *Don't give up now, you've just started, we haven't seen everything you can do*), showed respect for Roma identity and heritage and understanding for all the unprivileged (*She attached a lot of importance to the preservation of culture and tradition I carry in me, her message was never to be ashamed of my nation*).

When students mentioned peers as a source of support in the interviews and the workshop, it referred to helping them make contact with others, overcome their timidity and demureness in communication with other peers, helping them to reframe their priorities in life (messages like: *Enjoy life!*), encouraging them (*You've been through a lot and you managed to survive, you can cope with this, too*), and advising them how to protect themselves from being hurt (messages like: *Don't expect too much from others, Don't think about them, they're not important*).

Finally, the most frequently mentioned type of support obtained during secondary school (mentioned in 11, i.e. 55% of the interviews) and university (9, i.e. 40%) were scholarships, received from the Ministry of Education, National Council of Roma, Municipality, NGOs or Roma Education Fund (Table 2). Financial support was particularly important for making the decision to enrol in college. Thirteen of the interviewees (65%) highlighted that wit-

hout financial support they would not be able to study, although sometimes even such scholarships were not enough to cover all the expenses involved in studying. Similarly, affirmative measures during enrolment in college were also very useful (mentioned in 11, i.e. 55% of the interviews in the context of college and in two interviews in the context of secondary school as well, see Table 2) because they were exempted from paying tuition fees. However, some participants pointed to the risk of affirmative measures leading to stigmatization of Roma and deepening of beliefs among teachers and peers that Roma students are, on the one hand, insufficiently capable and, on the other, privileged in society, as elaborated below:

I had problems with friends who were telling me that no one should enrol through affirmative measures, they rejected me because I was Roma. (Male student of medicine, Niš)

Table 2.
School-, community- and system-related success factors – codes, examples and frequencies

Code	Examples (from the interviews)	Frequency (interviews)
Psychological support from school staff	<i>She was helping all Roma students because she believed we were not guilty for our position in the society. (Male student of medicine, Niš)</i>	12
	<i>As opposed to the usual story, she always demanded and expected more of me than of others. She used to tell the other kids to follow my lead. (Female students of social sciences, Niš)</i>	
Instructional support from schoolteachers	<i>Teachers encouraged me, they praised me when I did something well and explained to me patiently when I didn't understand something. (Female student of social sciences, Kragujevac)</i>	11
Material and financial support organized by school	<i>Several times, the school organized donation of learning material, so I always had nice pens, notebooks... (Male student of social sciences, Novi Sad)</i>	3
Psychological support from a college professor	<i>Only one professor showed interest in me in a positive sense, offered me support and encouraged me. (Female student of social sciences, Belgrade)</i>	1
Psychological support from peers	<i>The only person from my class who supported me was my friend Tamara, with whom I was inseparable for those four years, and she was the only one who supported me. She was the only one who taught me how to fight with my feelings and she always told me not to think about them, they were irrelevant. She didn't ask about details of my family, she didn't want to hurt me, but when she saw I had a problem, she always gave me positive energy. (Female student of social sciences, Belgrade)</i>	4

Code	Examples (from the interviews)	Frequency (interviews)
Local NGOs empowering workshops	<i>I remember I participated in a set of workshops where we learned about learning strategies, about discrimination and violence... (Male student of social sciences, Novi Sad)</i>	2
Scholarships	<i>Without the scholarship from the Ministry and the support of the school psychologist, I would not have entered the university. This is what was key in making the decision to continue my education. (Female student of medicine, Niš)</i>	19
Affirmative measures	<i>I enrolled in the first year, but I was self-financing, later I was transferred to state financing with the help of affirmative measures, so that made it a lot easier for me. (Female student of social sciences, Kragujevac)</i>	11

Despite many positive examples, our participants (14, i.e. 70% of interviewees) also reported being discriminated against from kindergarten to university because of their ethnic background. The stereotypes and explicit messages repeated by others mainly implied distrust in the intellectual abilities of Roma, attribution of poor hygiene habits, as well as socially inappropriate and deviant behaviours (for example, propensity to pickpocketing). Such messages, as well as the experience of discrimination, were more frequent in the period of primary school compared to other periods of life. However, in secondary school (not obligatory by Law in Serbia) and at college there were comments by peers and teachers reflecting their belief that Roma were privileged because of the affirmative measures and allegedly lower criteria applied to them. It is noticeable that our participants more often stated that they had experienced discrimination by teachers than by peers. Participants talked about frequent discrimination on almost daily basis from the people they met in their surrounding (*It was common that someone just say 'Hey, Gipsy, what are you looking for here?'*) but also from teachers (e.g. *When I told my teacher that I wanted to enrol into secondary school, she told me that I was not capable of achieving that and that I should better enrol into a three-year vocational school*) and peers (*We all sat in the back rows. There was discrimination by peers. They avoided us and called us derogatory names*).

Finally, students narrated about the support they would have appreciated, but had not received. They stressed that free motivational training, professional psychological support and career guidance, as well as language courses, would have helped them cope with stress and gain new skills and confidence they needed. However, the first and most important step is to promote the already existing types of support because, as stated by four participants in workshops (25%), many of them were not aware of all the support available (e.g., *I would tell them [policy makers] to talk more with Roma who graduated from high school, from some university, and to provide more information to Roma youth about measures, potential challenges and solutions.*).

Personal factors

The data on personal success factors were gathered from students' life mottos elaborated in the questionnaires and the beliefs shared through two workshop activities. Qualitative thematic analysis of 46 answers to an open-ended question in the questionnaire (some including two mottos) yielded six themes in total (see Table 3).

Table 3
Life mottos – codes, examples and frequencies

Code	Examples (from the questionnaires)	Frequency (questionnaires)
Fight and persistence	If you can't fly – run, if you can't run – walk, if you can't walk – crawl, but whatever you do, keep going! Whatever happens, you have to keep fighting, no matter the cost!	21
Humility and benevolence	<i>One good thing drives another good thing.</i> <i>Happiness is in the little things.</i> <i>Love conquers all.</i>	10
Optimism and faith	<i>After the rain, there comes a rainbow.</i> <i>God is good.</i>	6
Personal accountability and autonomy	The way you think is the way you live. I live my life and I do not allow others to decide my fate.	6
Learning and reflecting	<i>Cogito, ergo sum.</i> <i>Those who did not search for the meaning of life did not even live it.</i>	5
Mindfulness	<i>Live each day as if it were your last.</i>	2

The results show that the predominant driving force of our Roma students is persistence. Almost half of all life mottos reflected the value of fighting for higher goals, proactivity and persistence. Other important values are personal accountability and independence, accompanied with hope, optimism and benevolence. Participants also stressed the importance of mindfulness, reflection and comprehension of the world.

Finally, through one modelling activity (sculpting personal strengths using modelling clay) in the workshop, participants had a chance to reflect upon and present their personal strengths. All personal strengths were connected with the participants' inner capacity to be proactive and have a clear vision of important goals, together with the strength, energy and optimism to achieve those goals (*I am my own strength, support and energy; Calmness is my power; Optimism that provides safeness, sense of belonging, acceptance, desire to broaden our horizons; My hands are accepting everything and are capable of*

everything, that's why they are a little bit longer). Most of them mention the capacity to extend support to others, to help them and to protect the people they love (*Love emanates from me, as does the need to protect and support dear people*). Some participants mention support they get from important people in their lives as a source of their personal strength, together with their inner strengths and potentials (*Those little dots on the heart are my friends, family, the Roma community and the support I get from all of them. Mushrooms represent my potential and capacity*). Their inner strength stems from the support they received from important others (*This is me, leaning on a pillar that can also be seen as the big backpack I always carry with me*). Roma students believed that they succeeded thanks to their inner hope and persistence, as well as the desire to step out of their comfort zone and prove to themselves and others that they can have a fulfilled and academically successful life (*This is an academic cap, because I think that my knowledge, the one I have and use, is my power*).

Conclusions and recommendations

In this paper, we strived to identify family-, school-, community- and system-related factors, as well as personal factors that were related to academic success of Roma university students in Serbia. Despite a relatively small sample size and the predominance of junior students in the sample, this study yielded several important conclusions.

In accordance with previous studies in Serbia and other countries (Jovanović, 2018; Robayo-Abril & Millan, 2019; SORS & UNICEF, 2014), it was confirmed that Roma students' social contexts were highly unfavourable – their educational trajectories were usually characterized by discrimination by teachers and peers, and, in some cases, by experiencing tough family life. However, such discrimination by teachers, which usually leads towards lower academic achievements (Neblett et al., 2006; Rüppel et al., 2015), did not discourage our participants to pursue their education, which can be explained by a combination of success factors – psychosocial support from some family member (typically, mother), peer and/or teacher, system and the financial support (scholarship and/or affirmative measures) and certain psychological characteristics.

The importance of family support has already been recognized in other studies, which showed that close and warm relations with parents served as a protective factor that built resilience and reduced the negative effects of discrimination (Brody et al., 2006). Moreover, parents' high expectations and aspiration level serve as a strong motivator for children and are in positive correlation with their academic success (Jovanović, 2018; Padfield, 2005). Our participants reported that their parents valued education, motivated them to

continue education and set high expectations for them that they internalised and that helped them in achieving academic success. This is in line with the studies addressing academic success factors of youth from disadvantaged backgrounds (Masten & Reed, 2002; Soenens et al., 2007). At the level of primary education, parents' instructional support was important, while at the secondary school and university level, their psychosocial and financial support played a considerable role. In cases of parents' absence, grandparents or close relatives were the primary source of encouragement.

Apart from family, school staff, peers and local NGO representatives were highlighted as success factors. Teachers were usually mentioned in the context of educational and psychosocial support in secondary schools. Teachers and local NGO representatives also served as role models if they came from an unprivileged background. By setting high expectations and demonstrating trust in Roma students' capacities, teachers helped them to remain proactive and persistent, but also to respect their culture and be proud of their ethnic identity. They also served as a kind of guide through the opportunities that are provided during schooling in terms of pieces of information on scholarships and student grants, possibilities for internships or volunteering and other forms of civic engagement. This is in line with Jovanović (2018), who determined that the existence of role models or mentors helped Roma students succeed in HE. Peers were mentioned in the context of socialization and identity formation and, in some cases, they represented a significant "mediator" between Roma students' personal virtues, Roma background and heritage and general population's expectations and norms.

These findings confirm the relevance of both bonding and bridging social capital (Coleman, 1988; Putnam, 2000). Although some studies pointed to higher relevance of family-related factors (see e.g., Dufur et al., 2013), in our study we found that both the family role models and support, and the peers and mentors who belonged to other, more privileged groups, but respected and nurtured identity of the marginalized, led together to higher academic achievements. However, we can say that family-related factors may have a more important role in earlier stages of education, when children learn about the value of education and acquire study habits, while the bridging social capital becomes more important in secondary and tertiary education when one needs to socialize, shape own identity and resist institutional racism more strongly.

Through the analyses of life mottos and personal strengths we could conclude that Roma college students had a high psychological capital (Luthans et al., 2007). It seems that strong social capital helped Roma students to develop hope, optimism, and a proactive attitude towards one's own future, which proved to positively affect both their psychological well-being and their motivation and academic success (Catalano et al., 2004; Burton & Dowling, 2005; Isik et al. 2018; Snyder et al. al., 2002).

Scholarships and affirmative measures in enrolling also proved to be a significant success factor that needs to be acknowledged. For most Roma students, the lack of finances was a big obstacle in spite of their parents' efforts to provide enough resources. Some of them believed that they would not have been able to enrol in college and continue their studies without scholarships. Some participants also reported that they had not been well informed about scholarships and other forms of support.

Although recommendations had not been in our focus from the beginning, the conclusions of our study on success factors, along with Roma students' explicit recommendations for policy makers and educational practitioners, motivated us to define several recommendations for practice improvement. First of all, it should be stated that the financial support and affirmative measures for enrolment are necessary, but more thorough information sharing (among Roma) and awareness raising (among the general population) is needed as well. Policy makers and donor organization representatives need to put more effort in reaching out to Roma NGOs and individuals, so that they learn about their rights and sources of support. General population should be better informed through the media about the relevance and implementation of affirmative measures in practice, so that they do not get concerned about their rights. Second, activism and networking (e.g., through extracurricular activities) should be encouraged, especially in secondary school and at college. While teachers tend to focus on remedial classes and provision of additional educational support, they should also be aware of the potential of extracurricular activities for building of the social capital of Roma children. At the HE level, peer mentorship, networking and "self-help" groups for Roma students are needed. More free-of-charge capacity building activities (e.g., language courses, time-management training) should be organized by HE institutions, student organizations, local authorities or NGOs. Contact with a larger number of role models is beneficial, so schools and local communities could invite academically successful Roma to participate in classes and other types of activities with youth. Positive role models must be visible and promoted through all the levels of schooling and in the media. Given such an important role of teachers, both as motivators and those who discriminate, capacity building in inclusive and intercultural education should be organized on an ongoing basis for pre- and in-service teachers. Such training should be implemented, inter alia, by the representatives of the Roma community and NGOs and schools with good practice in inclusive education. Finally, since our study showcased that most participants relied on themselves and considered themselves to be the main cause of success or failure, neglecting at the same time structural inequalities and an oppressive system that denies equal chances for all, additional educational and psychological support to Roma HE students, accompanied with social changes (in order to break down systemic barriers), is recommended.

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Borim se, dakle postojim: Faktori uspešnosti studenata romske nacionalnosti u Srbiji

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Uprkos unapređenju inkluzivnih politika i praksi, studenti romske nacionalnosti i dalje su podzastupljeni u visokom obrazovanju u Srbiji. Glavni cilj ovog istraživanja bio je da se utvrde kontekstualni i lični faktori uspešnosti romskih studenata. Učesnici u istraživanju bili su Romi koji studiraju na četiri državna univerzitetu u Srbiji, a koji su popunili upitnik o svom porodičnom i školskom iskustvu, učestvovali u intervjuima o svojim obrazovnim putanjama, kao i u dvodnevnoj radionici posvećenoj osnaživanju studenata kroz podsticanje refleksije o obrazovnim putanjama i ličnim snagama. Kvalitativna tematska analiza primenjena je na sledećem materijalu: odgovorima na jedno pitanje otvorenog tipa o životnim geslima (89 učesnika), intervjuima (20) i narativima i produktima radionice (16). Pokazalo se da su psihološka i obrazovna podrška roditelja i nastavnika, u nekim slučajevima – vršnjaka i romskih nevladinih organizacija, zajedno sa stipendijama i afirmativnim merama pri upisu, bili važni faktori uspeha. Životna gesla studenata pretežno su ukazivala na teme borbe i upornosti. Većina ličnih snaga odnosila se na proaktivnost i optimizam. Ovo ukazuje na visoko razvijen psihološki kapital romskih studenata. Pored kontinuirane finansijske podrške, učesnici su istakli da bi pružanje psihosocijalne podrške, prilika za neformalno učenje i mogućnosti za vršnjačko mentorstvo i umrežavanje rezultiralo većim brojem romskih studenata u visokom obrazovanju.

Ključne reči: studenti romske nacionalnosti, visoko obrazovanje, socijalni kapital, psihološki kapital, Srbija

PRIKAZI

Zašto nam je toliko teško da se složimo ili o jahačima slonova i devedesetoprocenatnim šimpanzama

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Džonatan Hajt, *PSIHOLOGIJA MORALA - O pravičnom umu ili mogu li politika i religija podeliti dobre ljude*, Beograd: Clio, 2022. http://clio.rs/PSIHOLOGIJA-MORALA-O-pravicnom-umu-ili-mogu-li-politika-i-religija-podeliti-dobre-ljude_Knjiga_316996

Priča o dobrom i lošem stara je onoliko koliko i ljudski rod, rasprave o poreklu morala i moralnosti onoliko koliko i filozofija, a istraživanja razvoja moralnog suđenja onoliko koliko i psihologija. Retke su teme koje, poput morala, u tolikoj meri i tako lako „presecaju“ granice naučnih disciplina ili one koje više definišu prirodu ljudskosti i imaju veći potencijal da ljude vode kako udruživanju i kooperaciji, tako i razmiricama. Čini se da je opsesija pravičnošću gotovo normalno ljudsko stanje, a moralna trvljenja perzistentna. No, razumna smo bića i lako ćemo se složiti da je, recimo, povređivanje drugih loše, zar ne? Ne baš, sudeći po odgovorima koje na ovo pitanje nudi knjiga Džonatana Hajta *Psihologija morala – O pravičnom umu ili mogu li politika i religija podeliti dobre ljude* u izdanju izdavačke kuće Clio (edicija Imago), koja je iznedrila jedan potpuno novi pogled na stari problem porekla i prirode morala, njegovih izvora i posledica.

Džonatan Hajt je jedan od najznačajnijih socijalnih psihologa današnjice i medijski najprominentnih psihologa u globalnim razmerama. Socijalni je psiholog na Poslovnoj školi Univerziteta Stern u Njujorku, TED govornik i član Američke akademije nauka i umetnosti. U glavnom fokusu njegovog interesovanja nalaze se psihologija morala, politička polarizacija i efekti društvenih mreža na mentalno zdravlje tinejdžera, o kojima je već publikovao ne-

koliko knjiga koje su postale „bestseleri“, a jedna od njih je i ova. U knjizi se razrađuju tri glavne ideje koje su, svaka na svoj način, revolucije u malom.

Prva od njih glasi da su, u sferi moralnog suđenja, *intuicije na prvom mestu, a strateško rezonovanje na drugom*; metaforički govoreći, um je „podeljen“ na dva dela, podseća na jahača (strateško rezonovanje) koji jaše slona (intuicije). Iako na prvi pogled ne izgledaju kao nešto previše teorijski novo ili makar zvuče samo kao razrada dobro poznatih teza o centralnim i automatskim kognitivnim procesima, Hajtove teze su zapravo „radikalne“ i iz temelja preispituju dominantnu racionalističku paradigmu koja u rezonovanju vidi najvažniji i najpouzdaniji način za sticanje moralnog znanja. „Obožavanje“ razuma u zapadnoj misli, od Platona do Pijažea i Koldberga, Hajt naziva zabludom i staje na stranu aktuelnih (a, zapravo, još Hjumovih) gledišta o tome da razum jeste ili bi trebalo da bude sluga strastima i emocijama, koje rezonovanje zapravo zahteva; jahačev posao je, drugim rečima, da služi slonu. „Radikalni“ iskorak koji na tragu ovih razmatranja Hajt pravi jeste teza da su glavni izvor moralnih sudova „osećaji iz stomaka“, „automatske“ intuicije, dok strateško rezonovanje dolazi tek naknadno. Moralno rezonovanje je, drugim rečima, *post hoc* traganje za razlozima i njegova priroda je u biti ubeđivačka i socijalna; vrlo lako i brzo nešto možemo odmah oceniti kao dobro ili loše, a da nismo baš u stanju da objasnimo zašto. Moralno, dakle, (strateški) rezonujemo ne da bismo rekonstruisali stvarne razloge na osnovu kojih smo mi sami došli do određenog moralnog suda, nego da bismo pronašli najbolje moguće razloge zbog kojih bi neko drugi trebalo da nam se pridruži u našem suđenju. (Samo)opravdamo se. Naše moralno suđenje pre je nalik političaru koji traga za glasovima, nego naučniku koji traga za istinom. Ovakvim gledištima Hajt ne samo da nudi novu teoriju moralnih osnova koja prevazilazi neke dobro poznate slabosti klasičnih gledišta, već na velika vrata vraća emocije u psihologiju morala i prevazilazi dualističko suprotstavljanje kognicija i emocija.

Moral podrazumeva nešto više od štete i pravednosti, „jezik“ je sa šest receptora, suština je druge glavne ideje koja se u knjizi obrađuje. Ako je u prvom delu iz temelja uzdrmao pretpostavku o ljudima kao, u sferi morala, primarno racionalnim bićima, Hajt se u drugom poduhvatio osetljivog posla viviseciranja druge žile kucavice psihologije morala, povrede/štete kao ultimativnog kriterijuma moralnosti. U seriji domišljatih ogleđa u kojima koristi tzv. „neškodljivo narušavanje tabua“ sa fokusom na gađenje (provociranog, na primer, pričom o jedenju preminulog kućnog ljubimca) i nepoštovanju (izazvanog, recimo, pričom o pravljenju krpa za pranje podova od državne zastave), Hajt pokazuje da moralni domeni idu dalje od štete i povrede i da se narušavanja tabua ocenjuju kao univerzalno loša, iako nikome nisu štetna (budući opisana kao obavljena u tajnosti i bez povređivanja drugih ljudi). Ovo su, za Hajta, bili ključni dokazi u prilog značaja kako urođenih moralnih

intuicija tako i kulturno uslovljenog učenja. Rođeni smo da budemo pravični, ali moramo naučiti u vezi sa čim tačno bi ljudi poput nas trebalo da budu pravični. Tipična gledišta o moralnosti svode ga na jedan jedini princip koji obično predstavlja maksimizovanje blagostanja (pomozite ljudima – nemojte ih povrediti) ili je to ponekad ideja o pravednosti, pravima ili poštovanju pojedinca i njegove autonomije. Ali to su, kaže Hajt, tipične WEIRD/zapadnjačko/individualističke predstave o moralnosti, „utilitaristički roštilj“ koji služi samo slatko (blagostanje) ili „deontološki restoran“ koji poslužuje samo slano (prava). I to su jedine opcije. Nasuprot moralnom monizmu i po analogiji sa time da svi imamo iste receptore ukusa, ali nam se ne sviđa ista hrana, Hajt debatuje o tome da i moralne matrice variraju, ali sve one moraju zadovoljiti pravične umove koji su opremljeni sa istih šest socijalnih „receptora“, tačnije, kognitivnih modula koji su rezultat evolutivne adaptacije. To su: (1) briga/šteta (evoluirala kao potreba da se zašтите mladi), (2) pravednost/varanje (utemeljena u recipročnom altruizmu i strategijama „milo za drago“), (3) odanost/izdaja (adaptacija na potrebu da se formiraju savezništva kako bi se odbili napadi rivalskih grupa), (4) autoritet/subverzija (osnov joj je hijerarhija u životinjskom svetu), (5) svetost/degradacija (adaptacija na izbegavanje patogena, parazita i drugih pretnji) i (6) sloboda/ugnjevatanje (adaptacija na zahtev da se izađe na kraj s pojedincima koji bi, kada bi im se ukazala prilika, dominirali, maltretirali i sputavali druge unutar male grupe). Ove moralne osnove su urođene, u smislu da su organizovane pre iskustva, ali postoje velike kulturne varijacije koje su posledica činjenice da kulture mogu suziti ili proširiti aktuelne okidače bilo kog modula.

Treća sržna Hajtova ideja je da *moralnost vezuje i zaslepljuje*. Kao vrsta smo uglavnom sebični, iako ne uvek, iliti 90% smo šimpanze (koje gotovo nikada ne sarađuju), a 10% pčele („socijalna“ bića). Samo smo uslovno društvena bića „košnice“, a, kada to jesmo, veća je verovatnoća da ćemo saosećati sa „našima“, sa drugima onda kada su se oni konformirali našoj moralnoj matrici, nego onda kada su je narušili. Naši pravični umovu su stoga naši „plemenski“ umovi – parohijalna ljubav, ograničena granicama naše grupe, možda je najviše što možemo ostvariti. Moralno je u tom smislu izvor solidarnosti, a „smisao“ postojanja morala upravo je u njegovoj funkciji da potiskuje sebični interes i omogućava postojanje saradljivih grupa i društava. Zašto nas onda dele religija i politika? Zato što isto ono (npr. politička ideologija) što nas povezuje u moralnu matricu koja glorifikuje pripadnike svoje grupe, dok istovremeno demonizuje drugu grupu, može za rezultat imati nepremostive podele. Ali, nije to posledica toga što su neki dobri, a neki zli, već zato što su naši umovi dizajnirani za grupno zauzimanje pozicija pravičnosti. Našim strateškim rezonovanjem upravljaju osećanja „iz stomaka“ i teško nam je da se povežemo sa onima koji žive u drugim matricama i čiji sudovi o dobrom i ispravnom, jednostavno rečeno, imaju druge izvore.

Iako se bavi veoma složenom tematikom, Hajtov stil izlaganja je beskrajno zanimljiv, gotovo beletristički, i o najsloženijim pitanjima piše sa neverovatnom lakoćom; otvoreno govori i o ličnim dilemama, detaljima iz privatnog života i iskustvima iz različitih delova sveta u kojima je obavljao svoja istraživanja. Sve to stvara svojevrsni osećaj prisnosti sa autorom, poverenje u njegove benevolentne namere i humane ideale i spremnost da se čuju njegove višesmislene poruke. A Hajtove poruke su, najpre, otrežnjujuće (čitaj: pesimističke) – jahači smo koji služimo slonove, sa ograničenim kapacitetima da se ponašamo racionalno i da budemo etični, a sve što znamo o moralu produkt je WEIRD teoretisanja koje politički i ideološki legitimise zapadno-centrično viđenje sveta. Hajtove poruke su, dalje, intrigantne – zagovara grupnu selekciju, evoluciju višeg nivoa; „brani“ religiju kao „rešenje“ za jedan od najtežih problema sa kojima se ljudi suočavaju, saradnju mimo srodničkih odnosa; osporava liberalizam kao dovoljnu vladajuću političku filozofiju (jer ne vodi računa o moralnoj matrici zajednice pri propagiranju radikalnih promena). Hajtove poruke su, potom, ohrabrujuće – svi smo samoispravni licemeri koji vide „trn u oku brata svojega, a ne vide brvno u oku svojemu“ i on nam jednostavno kaže da treba prvo „počistiti svoje dvorište“ i biti otvoren za moralne intuicije drugih ljudi. Hajtove poruke su, najзад, drugačije i osvežavajuće – kao jedan od retkih otvoreno konzervativnih mislilaca, glasnogovornik je onih čiji glas se u (socijalnoj) psihologiji retko čuje, a koji su u ovoj knjizi, nasuprot tipičnih negativno konotiranih psiholoških opisa i interpretacija konzervativizma, opisani kao moralno kompleksniji ili raznovrsniji (jer njihovi moralni sudovi počivaju na svih šest osnova, a onih liberalnih primarno na dve ili tri). Provokativno i za diskusiju? Svakako. Pristrasno? Moguće. Neargumentovano? Nipošto. A to je jedino što bi trebalo da je bitno.

UPUTSTVO ZA AUTORE

Časopis *Psihološka istraživanja* objavljuje teorijske radove, pregledne radove, originalne istraživačke radove, stručne radove i prikaze iz svih oblasti psihologije koji nisu prethodno objavljeni i nisu istovremeno podneti za objavljivanje u nekoj drugoj publikaciji. Važan kriterijum selekcije radova jeste društvena relevantnost analizirane teme (videti *Uređivačku politiku* časopisa). Rukopisi treba da budu pripremljeni prema standardima časopisa *Psihološka istraživanja*, tj. u skladu sa APA (American Psychological Association) Publication Manual, 6. izdanje (<http://www.apastyle.org/>). Za prijavu radova koristi se SCIndeks Asistent - Sistem za online uređivanje časopisa preko linka: <http://aseestant.ceon.rs/index.php/psistra/login>

Radovi koji nisu adekvatno pripremljeni neće se recenzirati.

Autori iz celog sveta pozivaju se da pošalju svoje radove.

U pripremi rada treba se držati sledećih uputstava:

Dužina rada

Rad mora biti napisan u tekst procesoru Microsoft Word, na stranici formata A4, fontom Times New Roman (12 tačaka), latinicom, s proredom od 1,5 redova. Sve stranice moraju biti numerisane. Rad treba da bude dužine do jednog autorskog tabaka (30.000 slovnih mesta ili 20 strana bez referenci i priloga). Izuzetak su pregledni radovi koji mogu biti dužine do 50.000 znakova i prikazi koji mogu biti dužine do 5.000 znakova. Redakcija zadržava pravo da objavi i radove koji premašuju tu dužinu u slučajevima kada izlaganje naučnog sadržaja zahteva veću dužinu, odnosno prostor. Rad treba da bude lektorisan.

Jezik rada

Časopis objavljuje radove na srpskom i engleskom jeziku.

Naslov rada

Naslov rada treba da bude što konzicijni. Iza naslova rada slede ime autora i naziv institucije u kojoj autor radi. Iza imena prvog autora treba staviti fusnotu koja sadrži e-mail adresu (jednog od) autora.

Sažetak

Sažetak dužine od 150 do 250 reči treba da bude na početku rada. Sastavni delovi sažetka treba da budu: cilj istraživanja, metod, rezultati i zaključak. Sažetak po pravilu ne sadrži reference. Bez obzira na jezik rada, prilažu se sažetak i ključne reči i na srpskom i na engleskom jeziku.

Ključne reči

Na kraju sažetka treba navesti do pet ključnih reči. Pri odabiru ključnih reči, poželjno je odabrati one pojmove koji se često koriste za pretragu časopisa.

Tabele, grafikoni i slike

Tabele i grafikoni treba da budu sačinjeni u Wordu ili nekom Word kompatibilnom formatu. Isti podaci ne mogu se prezentovati i tabelarno i grafički. Svaka tabela, grafikon

ili slika treba da budu označeni brojem, s naslovom koji ih jasno objašnjava. U slučaju tabele, u jednom redu navodi se broj tabele, običnim fontom i bez tačke na kraju, a u novom redu naslov tabele ispisan kurzivom, kao u donjem primeru. Treba izbegavati linije i senčenja koja nisu neophodna.

Tabela 1

Struktura uzorka prema polu i uzrastu u tri istraživanja

Karakteristike	Godina istraživanja			Total (N = 3700)
	1996 (n = 1280)	2001 (n = 1200)	2006 (n = 1220)	
Pol				
Muški	49.2%	47.8%	50.7%	49.2%
Ženski	50.8%	52.2%	49.3%	50.8%
Uzrast				
15–29 godina	20.8%	19.0%	25.5%	21.8%
30–49 godina	38.5%	38.5%	41.4%	39.4%
50 i više godina	40.7%	42.5%	33.1%	38.8%

U slučaju grafičkih priloga (npr., slike, grafikoni), oznaka slike/grafika uz redni broj navodi se italikom, nakon čega, u produžetku, sledi naslov slike/grafika i kratko pojašnjenje njegovog sadržaja slovima u normalu (videti primer grafika ispod). Ti elementi navode se ispod odgovarajućeg grafičkog priloga. U tekstu se treba pozvati na svaku tabelu, grafikon ili sliku, upućivanjem na brojčanu oznaku.

Grafik 1. Promene u raširenosti vrednosti autonomije. Grafik ilustruje podatak da svaka uzrasna kohorsta s vremenom sve više prihvata vrednosti autonomije.

Statistika

Oznake primenjenih statističkih testova pišu se italikom (npr., *F*, *t*, *p*), izuzev ukoliko se ne radi o simbolima grčkog alfabeta (npr. χ^2 , α). Rezultati statističkih testova treba da budu prikazani u sledećem obliku: $F(1,8) = 19.53$; $p < .01$ i slično za druge testove (npr.: $\chi^2(3) = 3.55$, $p < .01$ ili $t(253) = 2.061$, $p < .05$). Treba navoditi manji broj konvencionalnih nivoa značajnosti *p* (npr.: .05, .01, .001).

Citati

Svaki citat, bez obzira na dužinu, treba da bude praćen referencom s brojem strane. Za svaki citat duži od 350 slovnih mesta autor mora imati pismeno odobrenje vlasnika autorskih prava, koje treba da priloži.

Fusnote i skraćenice

Fusnote treba izbegavati. Skraćenice, takođe, treba izbegavati, osim izrazito uobičajenih. Skraćenice koje su navedene u tabelama i slikama treba da budu objašnjene.

Navođenje referenci u tekstu

U radovima na srpskom jeziku preporučljivo je da se imena stranih autora navode u srpskoj transkripciji, prilagođenim (fonetskim) pisanjem prezimena, a zatim da se u

zagradi prezime navodi izvorno, uz godinu publikovanja rada, na primer: Pijaže (Piaget, 1951). Ukoliko se u zagradi navodi više autora, oni se navode alfabetskim, a ne hronološkim redom (npr., Lazić, 1994; Pantić, 1990). Ukoliko su dva autora rada, oba se navode u tekstu (npr., Kuzmanović i Petrović, 2007). Ukoliko rad ima više od dva autora, pri prvom spominjanju navode se svi autori, a pri svakom sledećem navodi se prezime prvog autora i skraćenica „i sar.” (za radove na srpskom jeziku, npr., Joksimović i sar., 2007) ili „et al.” (za radove na engleskom jeziku, npr., Millner et al., 2005). U radovima na engleskom jeziku reference u tekstu treba navoditi u skladu s Priručnikom za objavljivanje Američke psihološke asocijacije, APA (American Psychological Association) Publication Manual, 6. izdanje (<http://www.apastyle.org/>).

Reference

Reference se navode u skladu sa APA uputstvima, 6. izdanje (<http://www.apastyle.org/>), na kraju rada, u odeljku koji treba da bude naslovljen „Reference”. U spisku referenci navode se samo one reference na koje se autor pozvao u radu, abecednim redom po prezimenima autora. Ne treba navoditi reference koje nisu pomenute u tekstu. Ukoliko je tekst pisan na engleskom jeziku, za izvore na srpskom jeziku naslove knjiga, članaka itd. potrebno je dati i engleske prevode u zagradi. Uobičajeni izvori navode se na sledeći način:

- a) **Knjiga**; Sadrži prezime i inicijale (svih) autora, godinu izdanja, naslov knjige (*kurzivom*), mesto izdanja i izdavača.
Opšti format: Autor, A., Autor, B., i Autor, C. (godina). *Naslov knjige*. Mesto izdanja: Izdavač.
Primer: Green, D., Palmquist, B., i Schickler, E. (2002). *Partisan hearts and minds: Political parties and the social identities of voters*. New Haven: Yale University Press.
- b) **Poglavlje u knjizi ili zborniku**; sadrži prezime i inicijal imena (svih) autora, godinu izdanja, naslov poglavlja, inicijal imena i prezime urednika ili redaktora, naslov knjige (*kurzivom*), strane poglavlja u zagradi, mesto izdanja i ime izdavača.
Opšti format: Autor, A., i Autor, B. (godina). Naslov poglavlja. U A. Urednik, B. Urednik & C. Urednik (ur.), *Naslov knjige* (str. xxx–xxx). Mesto izdanja: Izdavač.
Primer: Popkin, S., i Dimock, M. (1999). Political knowledge and citizen competence. U S. Elkin & K. Soltan (ur.), *Citizen competence and democratic institutions* (str. 117–146). University Park: Pennsylvania State University Press.
- c) **Članak u časopisu**; sadrži prezime i inicijale (svih) autora, godinu izdanja u zagradi, naslov članka, pun naziv časopisa (*kurzivom*), volumen (*kurzivom*) i stranice.
Opšti format: Autor, A., Autor, B., i Autor, C. (godina). Naslov članka. *Naziv Časopisa*, xxx, xxx–xxx.
Primer: Kuzmanović, B., Popadić, D., i Havelka, N. (1995). Social changes and changes of values. *Psihologija*, 28, 7–26.
- d) **Saopštenje sa skupa**; sadrži prezime i inicijale (svih) autora, godinu i mesec održavanja skupa u zagradi, naslov izlaganja (*kurzivom*), naziv konferencije i lokaciju.
Opšti format: Autor, A. (godina, mesec). *Naslov saopštenja*. Saopštenje na Naziv konferencije, Lokacija.
Primer: Maksić, S., i Ševkušić, S. (2011, februar). *Problemi identifikacije kreativnosti učenika u školi*. Saopštenje sa XVII naučnog skupa Empirijska istraživanja u psihologiji, Beograd.

- e) **Web dokument**; sadrži prezime i inicijale (svih) autora, godinu, naziv dokumenta (*kurzivom*) i Internet adresu sajta.

Opšti format: Autor, A., Autor, B., i Autor, C. (godina). *Naziv dokumenta*. Preuzeto sa <http://xxxxxxx>.

Primer: Foa, R. (2007). *Socioeconomic development and parenting values*. Preuzeto sa http://www.roberto.foa.name/Parenting_Attitudes_Foa.

- f) **Neobjavljena magistarska ili doktorska teza**; sadrži prezime i inicijal autora, godinu u zagradi, naslov teze, identifikaciju rada kao teze u zagradi, ime institucije i mesto.

Opšti format: Autor, A. (godina). *Naslov magistarske ili doktorske teze* (Neobjavljena magistarska ili doktorska teza). Ime institucije, Mesto.

Primer: Smith, B. (1995). Youth and political participation (Neobjavljena doktorska disertacija). Institute of Psychology, Vienna.

Ukoliko se navodi veći broj radova istog autora, reference se ređaju prema godini objavljivanja, od najstarije prema novijima. Reference jednog autora koje su objavljene u istoj godini treba pisati abecednim redom prema naslovima, npr., (1995a), (1995b).

Navođenje nepublikovanih radova (npr. rukopisa i sl.) nije poželjno. Ukoliko je takvo navođenje baš neophodno, treba navesti što potpunije podatke.

Pozivanje na sekundarnu literaturu ili njeno citiranje (npr., Marsh, 1980, prema: Stevenson, 2005) treba izbegavati.

Prilog

U prilogu treba dati samo one sadržaje koji bi bili korisni čitaocima za razumevanje, evaluiranje ili ponavljanje istraživanja.

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Sve radove anonimno recenziraju dva kompetentna recenzenta. Na osnovu recenzija redakcija donosi odluku o objavljivanju rada i može doneti jednu od četiri odluke: da rad objavi u formi kakva je priložena, da rad objavi nakon minimalnih izmena od strane autora u skladu sa uputstvima recenzenata, da rad objavi nakon neophodnih ozbiljnijih izmena prerađene od strane autora u skladu sa uputstvima recenzenata, ili da odbije da objavi rad. Redakcija šalje obe recenzije autoru na uvid i uz odgovarajuće obrazloženje obavestava autora o svojoj odluci najduže tri meseca od prijema rada. Ukoliko se autor odluči da koriguje tekst u skladu sa preporukama recenzenata, može ponovo podneti rad za objavljivanje, i tada je dužan da u formi pisma redakciju upozna sa svim izmenama koje je načinio u tekstu (broj stranice na kojoj se nalazi takva izmena). Ukoliko autor smatra da neka od preporuka recenzenata nije opravdana, ili je iz nekog razloga nije moguće ispuniti, potrebno je da o tome napiše detaljno obrazloženje redakciji. Redakcija zadržava pravo da konačnu odluku o objavljivanju donese samostalno.

Kategorija (tip) članka

U skladu sa uputstvima Ministarstva prosvete, nauke i tehnološkog razvoja Republike Srbije, članci koji se objavljuju u časopisu *Psihološka istraživanja* biće razvrstani u neku od sledećih kategorija:

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Table 1

Sample structure by sex and age in three surveys

Characteristics	Year of the survey			Total (N = 3700)
	1996 (n = 1280)	2001 (n = 1200)	2006 (n = 1220)	
Sex				
Male	49.2%	47.8%	50.7%	49.2%
Female	50.8%	52.2%	49.3%	50.8%
Age				
15–29 years old	20.8%	19.0%	25.5%	21.8%
30–49 years old	38.5%	38.5%	41.4%	39.4%
50 years and older	40.7%	42.5%	33.1%	38.8%

In case of visual materials (e.g. figures, graphs), the number of the figure/graph should first be given in italic, and, in the same line, the title of the figure/graph and its short description are given in normal font (see the example of the graph below). These elements should be provided below the respective graph/figure. A reference to each table, figure or picture should be made in the text.

Graph 1. Changes in the valuing of autonomy. The graph shows the increasing valuing of autonomy in each age cohort with time.

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The denomination of the used statistical tests should be given in italics (e.g. *F*, *t*, *p*), except in cases when the Greek alphabet symbols are used (e.g. χ^2 , α). The results of statistical tests should be provided in the following form: $F(1,8) = 19.53$; $p < .01$ and similar for other tests, e.g. $\chi^2(3) = 3.55$, $p < .01$ or $t(253) = 2.06$, $p < .05$. Lower number of conventional *p* levels should be stated (e.g.: .05, .01, .001).

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Appendix should include only descriptions of material that may be useful for readers to understand, evaluate or repeat the research.

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