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MENTAL HEALTH IN SERBIA:

ASSESSMENT OF NEEDS, RISK FACTORS AND BARRIERS TO RECEIVING PROFESSIONAL HELP

RESULTS OF THE STUDY
Belgrade, 2022

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For the publisher:
Dr Stephan Heieck

Authors of the study:
Dr Marko Živanović, scientific associate
Institute of Psychology, Faculty of Philosophy, University in Belgrade and PIN - Psychosocial Innovation Network

Dr Maša Vukčević Marković, scientific associate
Department of Psychology, Faculty of Philosophy, University in Belgrade and PIN - Psychosocial Innovation Network

Jana Dimoski
PIN – Psychosocial Innovation Network and Laboratory for Research of Individual Differences, Faculty of Philosophy, Belgrade University

Matija Gvozden
Laboratory for Research of Individual Differences, Faculty of Philosophy, University in Belgrade and PIN - Psychosocial Innovation Network

Editor:
Irena Stojadinović

Design and prepress:
Aleksandra Nicović, Dušan Antonijević

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Deep Dive doo

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SUMMARY

This report is a presentation of the study on mental health of population of Serbia. The study included mental health screening through screening of symptoms of the following nine mental disorders: depression, anxiety, suicidality, obsessive-compulsive symptomatology, somatizations, eating disorders, post-traumatic stress disorder (PTSD), psychotic spectrum symptomatology and dissociative symptomatology. The study also focused on evaluation of wide groups of risk factors for the abovementioned symptomatology. Additionally, the study gives information about the need for professional support in case of mental health difficulties experienced by people in Serbia, about the extent in which persons with mental health difficulties ask for help, who do they contact and what are their experiences, as well as the reasons why some individuals that need support do not ask for help. The study was conducted on representative sample of 1000 citizens of Serbia of both sexes. The results showed that approximately one third of population of Serbia can be considered psychologically vulnerable. 15.6% of population shows symptoms of depression, 7.2% symptoms of anxiety, while 1.6% has high risk of suicide.

Furthermore, 2.9% of people reported being hospitalized due to mental health difficulties at least once during their life, 8.1% people of Serbia reported being diagnosed with mental health disorder during their lifetime, while 11.8% reported they took drugs for their mental health difficulties during the last 7 days. Risk factors for some of the mental health difficulties are female gender, younger age, urban environment and lower socio-economic status. Higher number of stressful and traumatic experiences, as well as lack of social support are also seen as risk factors for certain difficulties. Finally, avoidance coping, emotion-based coping, as well as lack of psychological resilience are also risk factors for certain mental health difficulties. The results of the study showed that at least every third person had close experience with a person having mental health difficulties, as well as that there was a pronounced stigma surrounding persons with mental health disorders in Serbia.

The results also showed that there was a high percentage of people who did not ask for help, although they were experiencing significant mental health difficulties. We also found that the decision of a person to ask for help was significantly influenced by his/her adverse financial status, as well as self-stigma, meaning the tendency of people to view asking for professional help as a personal failure. Based on the results of the study we made recommendations for future interventions that would lead to improvement of mental health of people in Serbia and which mostly referred to improved availability of support through development of free community-based services focused on mental health, as well as program for reducing the stigma related to mental health difficulties, strengthening of resiliency and reducing the use of maladaptive coping styles.

Introduction

There were only a few studies of mental health in Serbia that were carried out on representative samples and they primarily focused on assessment of depression in population, while the first epidemiological study of mental disorders was conducted in 2021-2022 (https://cov2soul.rs/). Results of the studies conducted on representative samples in Serbia showed that the percentage of people with registered significant depression related difficulties before the pandemic was 3% (Boričić et al.204; Milić et al. 2019), and that it doubled during the pandemic, reaching 6% (Marić et al. 2022). The incidence of depression in other European countries before the pandemic was 6.6% (Hapke et al. 2019), while the study conducted during the pandemic in several European countries showed that an average percentage of persons with depression related difficulties was 26.6% (Hajek et al., 2021), leading to a conclusion that citizens of Serbia had lower prevalence of depression related difficulties compared to other European countries.

Since timely and reliable information on the needs of population of Serbia are necessary to plan an adequate support, the aim of this study was to use a representative sample to examine the main mental health difficulties of the people of Serbia and their intensity. Additionally, the study aimed to examine protective and risk factors for mental health difficulties. Finally, the aim of the study was to assess the need for professional support in case of mental health difficulties and the main barriers to receiving such support.

The study was conducted on a sample of 1000 citizens, age 18 to 65 (*M* = 42.27, *SD* = 13.44). The sample was representative of the population of Serbia in terms of gender, age, type of settlement (urban/rural) and geographical regions (Belgrade, Vojvodina, Šumadija and West Serbia, South and East Serbia). The respondents of age 18 to 54 completed online questionnaires, while respondents of age 55 to 65 completed the questionnaires with the help of trained interviewers. All instruments used in the study are listed in Appendix 1. The study was approved by the Ethics Committee of the Psychology Department, Faculty of Philosophy, University of Belgrade (protocol no. #2021-88). Before the study all respondents gave informed consent for participation. After the study, the respondents received information on where and how they can get professional help, if they think they need it.

The results of the study are presented below, organized in several topics:

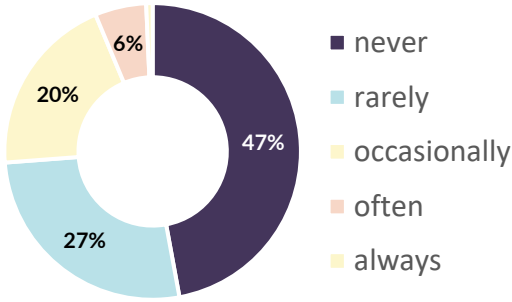
1. Need for professional help due to mental health difficulties;
2. Barriers to seeking and receiving professional help;
3. Mental health screening of population of Serbia;
4. Risk factors and protective factors for mental health difficulties;
5. Predictors for seeking professional help due to mental health difficulties

SEEKING PROFESSIONAL HELP: NEEDS AND EXPERIENCES

HOW OFTEN DO WE NEED PROFESSIONAL HELP FOR MENTAL HEALTH DIFFICULTIES?

One quarter of population of Serbia experienced the need for professional help due to mental health difficulties, out of which 6% of population reported that due to mental health difficulties they needed professional help often or all the time, while 20% stated that they needed this type of help occasionally at some point in their life (Chart 1). Women, on average, reported having more frequent need for professional help than men (t = 6.18, p < .001). Additionally, compared to rural population urban population estimated they needed professional help more often (t = 3.72, p < .001).

Chart 1. Citizens' estimation of how often they needed proffesional help due to psychological difficulties

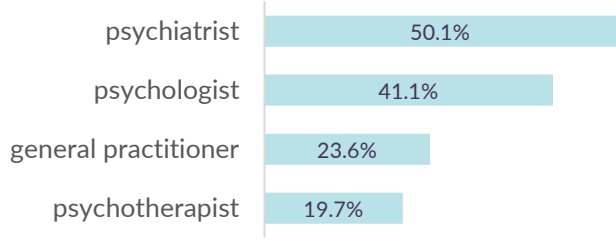


Almost one third of citizens (29.6%) stated that at some point in their life they sought professional help, where women (37.0%) more frequently stated they asked for help of a mental health professional than man (22.2%) (χ = 26.78, p < .001). Moreover, 6.3% of citizens reported they have contacted a professional during the previous month, where no differences between genders has been observed (women 6.0%, men 6.6%).

WHERE WE SEEK PROFESSIONAL HELP AND WHAT ARE OUR EXPERIENCES?

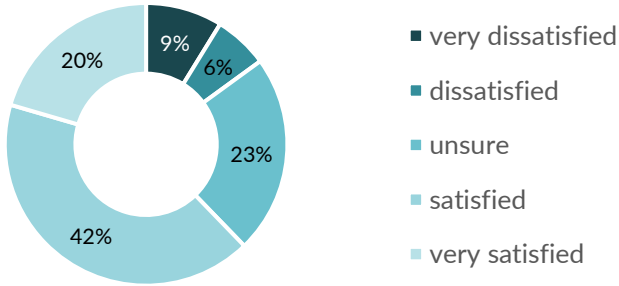
When they seek help for mental health difficulties, the citizens most often contact a psychiatrist, then a psychologist, and much less often they seek help from general practitioner. Approximately just one fifth of citizens that have ever decided to seek professional help contacted a psychotherapist (Chart 2).

Chart 2. *Who do citizens contact the most often when seeking help for their mental health difficulties?*



Among individuals that sought professional help at any point in their life there were 62.3% that stated they were mostly satisfied, while 15.0% stated they were mostly dissatisfied with the services provided (Chart 3). The study shows that on average women are more satisfied with mental health services than men ($t(294) = 2.67$, $p = .008$).

Chart 3. *Satisfaction with the provided services*



WHAT ARE THE PROBLEMS WE NEED THE MOST HELP WITH?

Citizens were asked to list the most common problems which persons from their immediate surroundings (family, friends, neighbours and other close persons) face and for which professional help would be the most relevant. The results are shown below.

The most common problems and difficulties that persons from immediate surroundings (family, friends, neighbours and other close people) most often face and for which a help of a psychologist would be the most relevant are:

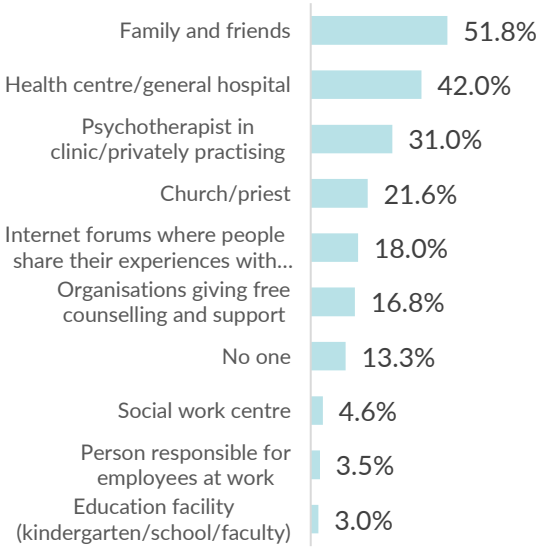
- **Financial problems**
- **Depression**
- **Anxiety**
- **Death of a close person**
- **Loneliness**
- **Stress**
- **COVID-19 and other illnesses**
- **Violence**
- **Problems with a partner**

WHERE OTHERS SEEK HELP?

Citizens on average believe that approximately 19.2% of Serbian population never sought help from a mental health professional in their lifetime, which is somewhat lower than the actual number registered during this study (29.6%).

The citizens also shared their thoughts about who people from their surroundings (family members, friends, neighbours) reached out for when they had mental health difficulties (Graph 5). In their opinion, when facing mental health difficulties most people reach out for close ones from their immediate surroundings, i.e. family and friends, but also for doctors from health centres/general hospitals. Almost one third of respondents thinks that people who experience mental health difficulties seek help from psychotherapists. Interestingly enough, approximately 20% of citizens believe that persons with mental health difficulties seek help from the church, i.e. their priest. However, the data that is concerning is that as much as 13.3% of people believe that persons from their surroundings do not seek help from anyone when they have mental health difficulties.

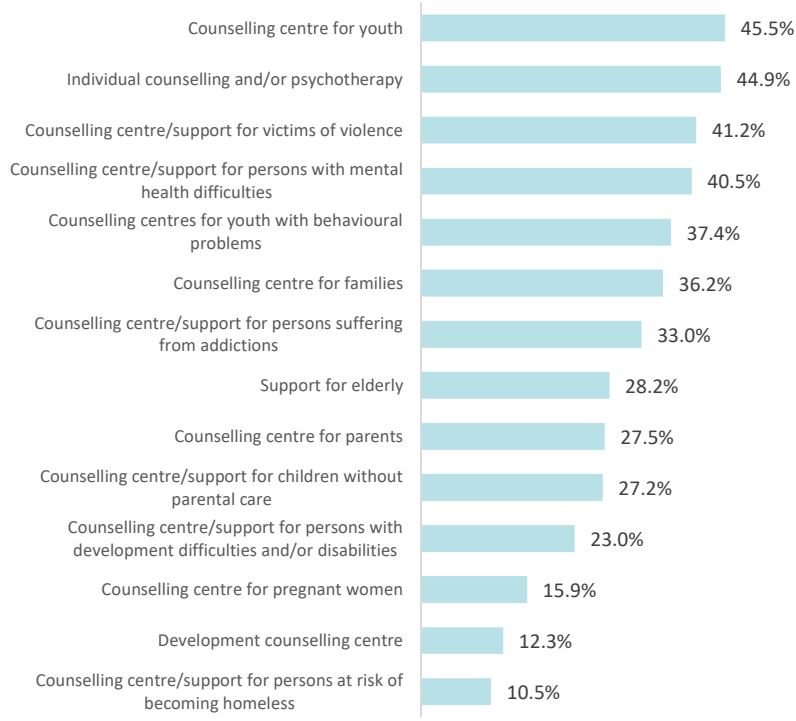
Chart 5 *Who do people from your surroundings (family/friends/neighbours) most commonly reach out for when they have mental health difficulties?*



WHAT SERVICE FOCUSED ON MENTAL HEALTH ARE THE MOST NECESSARY?

When asked what services focused on mental health and psychosocial support would be the most necessary and of the greatest importance for their local community more than 40% of citizens mention youth counselling centre, individual counselling/psychotherapy, support for victims of violence and support for persons with mental health difficulties. On the other hand, citizens less frequently mention counselling centres for pregnant women, development counselling centres and support for persons at risk of becoming homeless as the services with priority for their local community (Chart 6).

Chart 6. *Perceived importance of different services focused on mental health and psychosocial support in local community*



SEEKING PROFESSIONAL HELP: BARRIERS

WHAT PREVENTS US FROM GETTING PROFESSIONAL HELP WHEN WE NEED IT?

The barriers to seeking professional help may be various and include physical barriers (e.g. living at distant location, lack of transportation), lack of information about where help can be found, as well as psychological barriers such as fear of judgement and stigmatization by the community, but also personal views on persons with mental health difficulties and mental disorders, in general. Finally, barriers may be of socioeconomical nature (e.g. lack of money or free time).

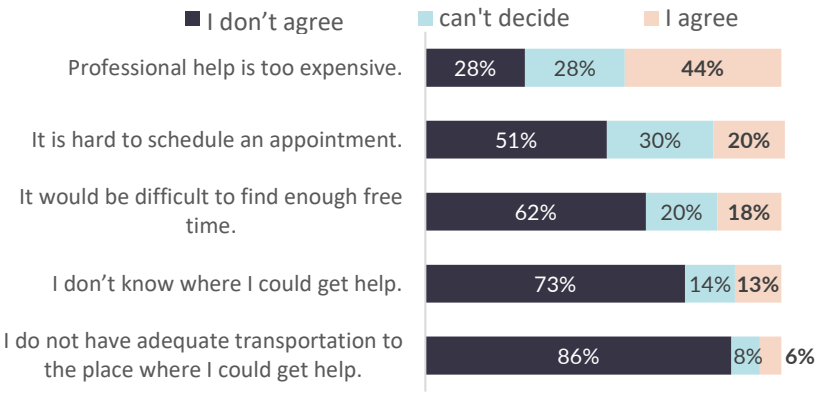
Behaviour of an individual and his views on persons with mental health difficulties may depend on his/her previous experiences and contacts with persons with such problems. These experiences may then influence the views on persons with mental health difficulties, as well as the stance on mental disorders, in general, and therefore impact one's intention to seek professional help. In other words, in order to understand these views, it is necessary to take in consideration not only personal experiences of individuals with mental disorders, but also a direct contact and experiences with persons with mental health difficulties in individual's surroundings.

PHYSICAL AND SOCIO-ECONOMICAL BARRIERS

In order to better understand what citizens of Serbia see as the predominant barriers to seeking psychological help we asked them to list possible physical and socio-economical barriers that could influence their decision to seek help of mental health professional (e.g. psychologist) if they were to have a psychological problem (e.g. stress or emotional problems, such as depression or anxiety) (Chart 7).

At global level, the biggest barrier to seeking professional help is the belief that this type of service is too expensive. On the other hand, most of citizens state that they have enough information about where they could get help, as well as that they have adequate transportation to that location.

Chart 7 *Physical and socio-economic barriers to seeking professional help*

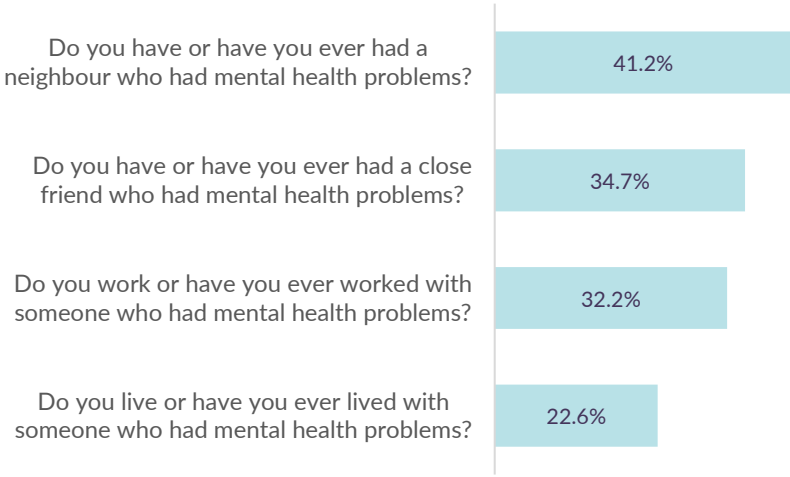


While worries about price of services focused on mental health, scheduling of appointment and possible lack of free time are common issues for citizens from both urban and rural environments, there are considerable differences in terms of being informed about where help is available, as well as having adequate transportation to that place. Namely, it has been observed that, contrary to people living in urban environments, people from rural environments are significantly less informed about where exactly they can seek help if they are experiencing mental health difficulties (t = 3.15, p = . 002). Similarly, people from rural environments more often than those from urban environments report having problem finding adequate transportation to the place where they could receive the help they need (t = 4.19, p < . 001). Lack of adequate transportation is slightly more often seen as a barrier in all regions of Serbia compared to Belgrade. On the other hand, as expected considering citizens' income, money (F = 9.42, p < . 001) is much more often seen as possible obstacle on the road to receiving professional help in Šumadija and West Serbia, South and East Serbia than in Belgrade and Vojvodina (p < .011 - .011).

EXPERIENCES WITH PERSONS WITH MENTAL HEALTH DIFFICULTIES

Chart 8 shows prevalence of behaviour in Serbian population in four contexts that include persons with mental health difficulties – experience of living close to such persons, living with such person, working with such person and continued friendship with persons that have mental health difficulties. Most citizens state that they have lived in the vicinity of a person with mental health difficulties, approximately one third states they have or have had a friend and/or used to work with a person with mental health difficulties, while slightly more than 20% has an experience of living with a person that has or has had difficulties in the domain of mental health. Overall the results show that at least every third person had a close experience with a person with difficulties in the mental health domain.

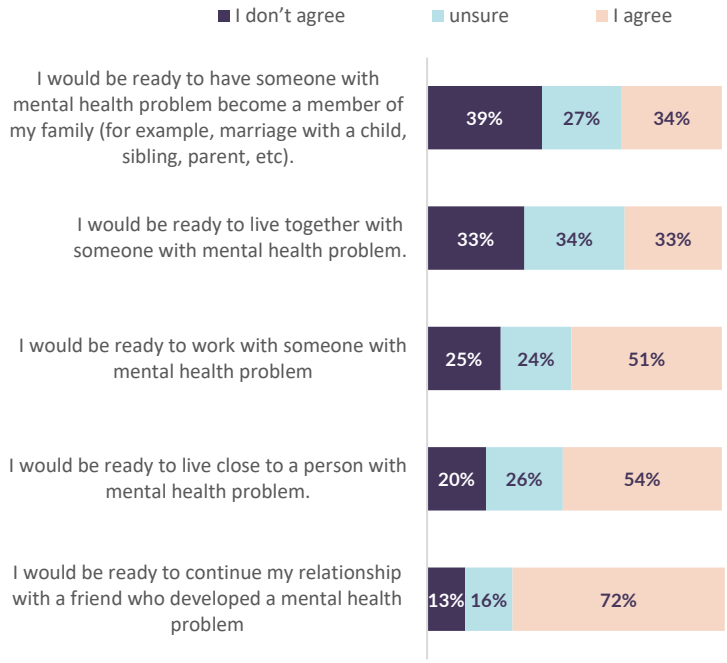
Chart 8. *Experiences with persons with mental health problems*



ATTITUDE TOWARDS PERSONS WITH MENTAL HEALTH DIFFICULTIES

Data shows that in Serbia there is a distinct stigmatization of persons with mental health difficulties. Namely, speaking in terms of **social distance** towards persons with mental health problems, i.e. preferred distance to this group (Chart 9), as expected, we observed that distance towards these persons grows with the closeness of relationship – the lowest distance is towards neighbours and the highest for the family context. There is an exception when it comes to friendship which derived from formulation of the question, where the emphasis was put on continuing a friendship and not on starting a new friendship.

Chart 9. *Social distance towards persons with mental health problems*



Most citizens (39%) would not accept someone with mental health problems becoming member of their family, while one third would be ready to live with a person with mental health problems. Every fourth person would not be ready to work with a person that has this type of problems, while every fifth person would not be ready to live close to a person with this type of problem. The highest level of acceptance of persons with mental health difficulties was observed regarding friendship with a person who developed a mental health problem, where more than two thirds of citizens believed they would continue such relationship.

An interesting find is that people from rural environments are more prone to continue a friendship with a person who develops a mental health problem (t = 2.22, p = . 027), but less ready to accept such person as a family member (t = 2.03, p = . 043) than persons from urban environments.

Overall the results show that on average social distance towards persons with mental health problems is less prominent in women than men (t = 2.51, p = . 012), as well as in younger people in Serbia (r = .259, p < .001) compared to the older people.

STIGMA OF MENTAL HEALTH DIFFICULTIES

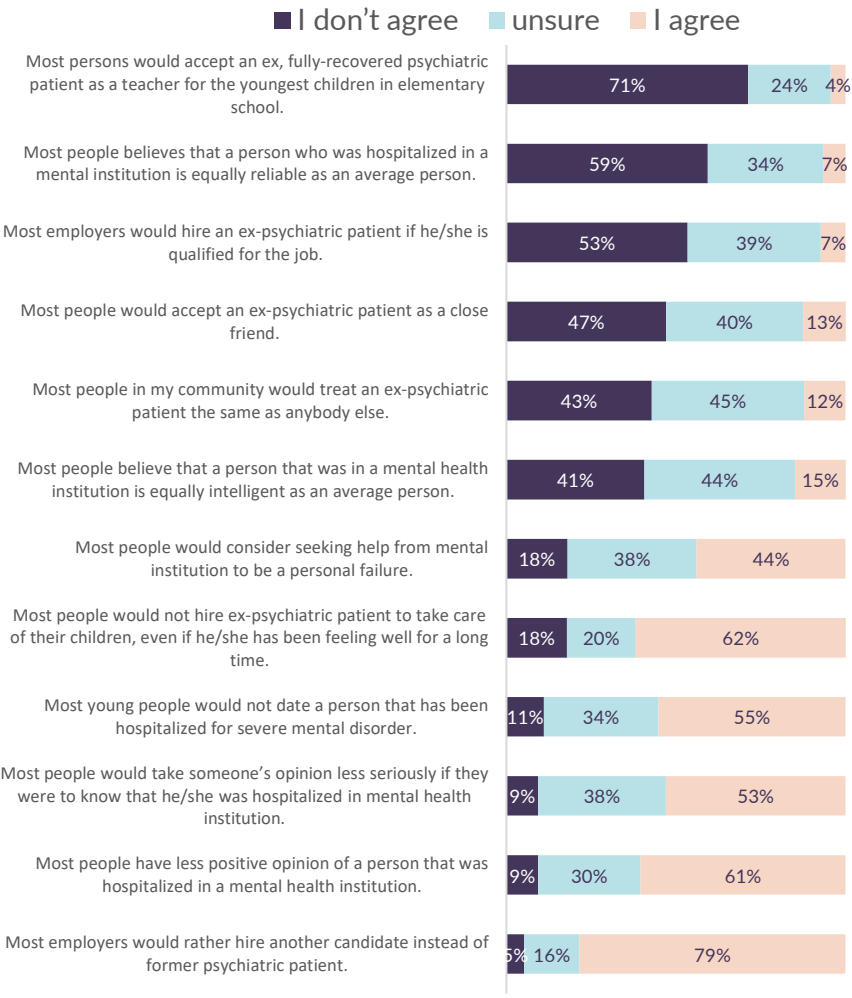
Besides objective barriers to seeking professional help and social distance towards people with mental health difficulties, readiness to seek professional help may also be shaped by perceived social stigma of persons with mental health difficulties in certain environment, as well as stigma of mental disorders, overall, leading to consequent internalisation of these beliefs by individuals. In other words, negative attitudes of the society towards mental health disorders can become so distinct and common that even a person experiencing symptoms of mental health disorders begins to accept such attitudes and consequently sees him/herself and his/her mental disorder as unwanted, dangerous or something to be ashamed of. In accordance with that, the observed social stigma, as well as self-stigma can represent significant psychological barriers to intention to seek professional help.

Perceived public or social stigma is the extent in which individuals believe that other people will devaluate or discriminate someone with mental disorder. The more common this belief is in an environment, it is to presume that there is a major devaluation and/or discrimination of persons with mental disorders in such environment.

The study results show that there is no connection between social stigma of persons with mental disorders and age, i.e. both young and older persons equally believe that social environment stigmatizes such persons. Moreover, it has been observed that when it comes to perceived stigmatization of persons with mental disorders, there are no difference between men and women. Similarly, the differences in detected social stigma have not been observed between urban and rural environments, with exception of higher resistance of people from rural environments when it comes to hiring persons who underwent psychiatric treatment to take care of children ($t = 2.38$, $p = .017$). Similar difference at trend level has been observed in terms of accepting former psychiatric patient as a close friend ($t = 1.93$, $p = .057$).

Chart 10 shows percentage of agreement with items that measure observed devaluation and discrimination of persons who received psychiatric treatment

Chart 10. *Observed social stigma of persons with mental disorders*



Contrary to public stigma, internalised stigma of mental health difficulties – **self-stigma** is in positive correlation with age (r = .201, p < .001), meaning older people are more prone to self-stigma than young people. Additionally, the results show that men are more prone to self-stigma than women (t = 7.23, p < . 001).

As expected, it has been observed that the decrease in social distance, primarily, but the extent of self-stigma, as well, depend on the experience one had with persons with mental health difficulties. Namely, in citizens with close experience with persons who had mental health difficulties social distance is less prominent (r = -.253, p < .001) and are therefore less prone to self-stigma regarding the need for seeking professional help in case of possible mental health difficulties (r = -.142, p < .001) than those who never had such experience. However, we observed that exactly the opposite happens when it comes to social stigma. Citizens that had prolonged and close contact with a person having mental health difficulties more often perceive public and social stigma of these persons (r = -.084, p = .008).

MENTAL HEALTH SCREENING OF POPULATION OF SERBIA

As a part of the study we conducted a mental health screening of citizens of Serbia. In order to shed a light on the incidence of clinically significant mental health difficulties the citizens most commonly face, we screened the symptoms of the following nine disorders: depression, anxiety, suicidality, obsessive-compulsive symptomatology, somatization, eating disorders, post-traumatic stress disorder (PTSD), psychotic spectrum symptomatology and dissociative symptomatology.

To assess the intensity of symptoms of the abovementioned disorders in general population we used standardized clinical instruments with cut-off scores. A list of all instruments with relevant cut-off scores can be found in Appendix 1. When asked to report on presence and intensity of symptoms the respondents, depending on the instrument used, have been instructed to use a period of seven days, two weeks or a month as a reference (except in case of traumatic events scale where respondents reported on the lifetime experience of trauma).

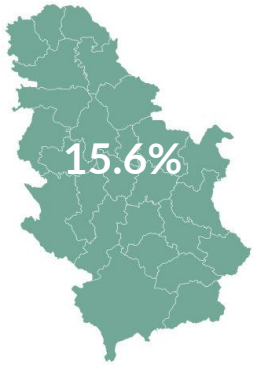
Short description of each disorder that has been examined is given in the following chapters, along with the percentage of citizens of Serbia that screened positive on the clinical instruments. The results shown should be seen as incidence of clinically significant difficulties associated with each disorder, i.e. a percentage of citizens of Serbia who could be considered at risk of developing such disorder due to intensity of symptoms**.** Therefore, considering that the results of this study are based on respondents self-reporting on the degree and intensity of symptoms and not on clinical interview, the results shown below should not be interpreted as prevalence of mental disorders in Serbia.

For each disorder we presented prevalence of clinically significant symptoms, separately for men and women, followed by connection between intensity of symptoms and age, as well as the intensity of symptoms and the type of environment in which person lives (urban vs rural enviroment).

Finally, in order to determine the extent in which citizens are ready to seek professional help when they need it, for sub-samples consisting of persons with significant clinical symptoms, we presented a percentage of people who sought professional help both over the last month, as a time period during which symptoms have been experiences, and during any other period of life.

DEPRESSIVE SYMPTOMATOLOGY

Depression is a mood disorder characterized by prolonged feeling of sadness, lack of will, worthlessness, excessive guilt and hopelessness, as well as suicidal thoughts and lost of interest for activities that were once enjoyed. Besides these, typical signs of depression include feeling of low energy, changes of appetite caused by low affect, as well as difficulties with concentration.



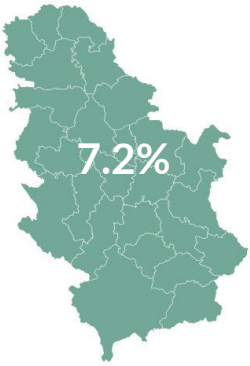
58.8% of citizens of Serbia show no symptoms of depression, while 25.7% show mild symptoms of depression. Moderate depression symptoms are present in 10.1% citizens, while severe symptoms are present in 3.2% of population. Very severe symptoms were observed in 2.3% of citizens.

Severe (9.8%) or extreme (1.2%) functional damages or difficulties, such as impaired everyday, social or work functioning were observed in 11.0% of population, while minor difficulties of this type were observed in 35.8% of population.

The screening showed that clinically significant symptoms of depression appear almost twice more frequently in women than in men. The results also show that younger persons are more inclined towards depressive mood (r = -.146, p < .001), while on average there was no difference in terms of intensity of symptoms considering the place of living (urban vs rural environment).

Almost half of citizens (42.9%) with observed severe depressive symptomatology reported they have never sought professional help for mental health difficulties, while as much as 83.9% persons with acute clinically significant symptoms of depression have not sought professional help over the last month.

ANXIETY SYMPTOMATOLOGY



Basic indicator of generalized anxiety is a prolonged general dread that may come in the form of "free-floating anxiety", i.e. feeling of fear that is not focused on a specific content or excessive worrying focused on several different everyday events and contents, usually related to family, health, finances, school or job.

This excess worrying is accompanied by muscle tension or motoric agitation, excessive activation of sympathetic nervous system, subjective experience of nervousness, difficulties in maintaining concentration, irritability or sleep disorder.

70.9% of citizens of Serbia show a complete lack of anxiety symptoms, while mild anxiety symptoms were observed in 22.0% of respondents. Moderately severe (5.4%) or very severe anxiety symptoms (1.8%) were observed in a total of 7.2% of citizens of Serbia.

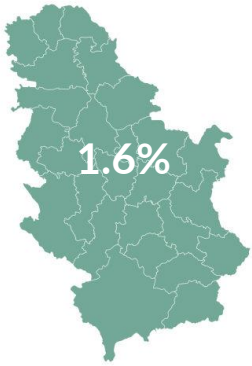
We observed severe (7.4%) or extreme (2.3%) damages or difficulties, such as functional damages in everyday activities in 9.7% of population, while minor difficulties of this type were present in every third citizen of Serbia (33.4%).

The screening showed that more serious signs of anxiety appear approximately two and a half times more frequently in women than in men. We also recorded a negative correlation between the degree of anxiety and age, meaning that anxiety symptoms were more intense in younger than in older population (r = -.118, p < .001). Additionally, anxiety symptoms at trend level were slightly more intense in people living in urban compared to rural environments (t = 1.89, p = . 059).

In total 19.7% of citizens with detected moderate to very severe anxiety report they have never sought professional help for mental health difficulties, and as much as 71.8% persons with current clinically indicative symptoms of anxiety have not sought help over the last month.

SUICIDAL THOUGHTS

Suicidal ideation or suicidal thoughts are ideas and thoughts of self-harm which are characterized by conscious deliberation or planning of possible techniques for causing own death.

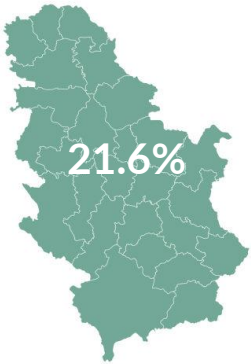


The results show that even as much as 7.5% of citizens of Serbia have at least once over the last month thought about harming themselves, while 1.4% stated that these thoughts significantly affected their ability to perform everyday activities. Approximately every 100th person in Serbia (1.1%) reported that over the last month it came close to attempting suicide.

Very high risk of suicide has been identified in 1.6% citizens of Serbia. All cases with identified high risk of suicide also showed severe levels of depression, i.e. screen positive values of severe depressive symptoms. Compared to women, men showed three times higher chance of having high risk of suicide. It has also been found that suicidal ideation is more common in younger than older people (r = -.085, p = . 007). Namely, almost all cases with high risk of suicide were younger people (age category 25 to 34). Additionally, suicidal ideation is on average more common in people living in rural, rather than in urban environments (t = 2.19, p = . 029).

Although most citizens with suicidal thoughts reported that they have sought professional help at least once during their life (81.3%), as much as one quarter of them (25.0%) have not sought professional help over the last month, in spite of their acute difficulties and high risk of suicide.

OBSESSIVE-COMPULSIVE SYMPTOMATOLOGY



The obsessive-compulsive symptomatology is characterized by presence of persistent obsessions or compulsions and most commonly presence of both groups of symptoms. The obsessions are recurring and persistent thoughts, images or impulses and/or instincts that are intrusive, unwanted and often related to anxiety.

Compulsions, on the other hand, are behaviours and mental acts, i.e. actions that are repeated and serve to neutralize obsessive thoughts or impulses. In other words, a person tries to ignore or supress the obsessions or to neutralize them in a way by performing compulsive actions.

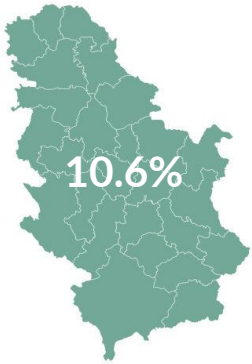
Approximately every fifth citizen of Serbia shows more severe symptomatology from obsessive-compulsive spectrum.

The study showed that more intense obsessive-compulsive symptoms occur more frequently in women than in men. It has also been observed that obsessive-compulsive symptomatology is not correlated to age and no differences were found between urban and rural environments.

In accordance with the fact that obsessive-compulsive symptoms often remain undetected, just 39.8% of those with identified indicative level of symptomatology sought professional help, while as much as 91.7% did not seek help over the last month.

SOMATIZATION

Somatization is characterized by significant focus on physical symptoms, such as pain (headache, back pain, stomach pain, etc.), low energy, feeling weak or having short breath, accompanied with high levels of stress and/or problems in functioning, while person experiences excessive thinking, feelings and behaviour related to physical symptoms. These difficulties can be mild, moderate and severe.



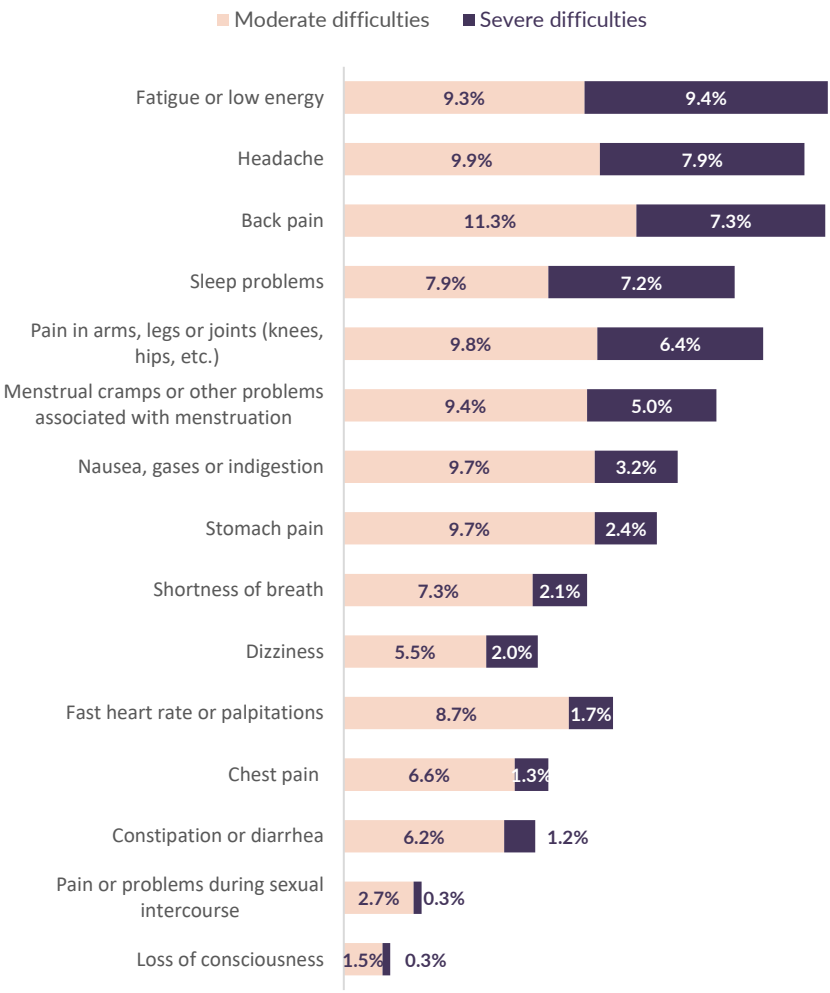
Lack of any significant symptomatology related to somatizations has been recorded in 79.7% citizens, mild symptomatology was observed in 9.7%, moderate in 6.6% citizens, while severe symptomatology was identified in approximately 4.0% citizens.

It has been determined that more intense somatic symptoms appear more frequently in women than in men. On the other hand, it appears that there is no connection between intensity of this symptomatology and age, meaning that these difficulties affect persons of all ages equally. Also, there have been no significant differences found in intensity of somatic difficulties depending on the place of residence (urban vs rural environment).

67.0% of citizens with moderate to severe symptoms of somatization state that they have sought professional help for mental health difficulties at least once during their life. However, just 23.6% of them state they have sought professional help over the last month despite experiencing acute somatic issues. This is particularly important, because visit to a doctor is necessary to establish a difference between somatic problems of mental and somatic origin.

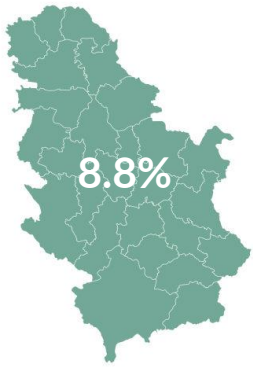
SOMATIZATION

Chart 11. *The most frequent somatic problems*



EATING DISORDERS SYMPTOMATOLOGY

Eating disorders are a class of mental disorders characterized by abnormal behaviour in relation to food, which negatively affects physical and mental health of individual. Eating disorders include: *binge eating* i.e. taking very large quantities of food over a short period of time, *anorexia nervosa* characterized by intense fear of gaining weight and resulting in restricted intake of food or excessive exercising in an attempt to control this fear, *bulimia nervosa* characterized by episodes of binge eating followed by compensatory activities aimed at getting rid of the food from the body (e.g. vomiting, taking laxatives, etc.), as well as other disorders.

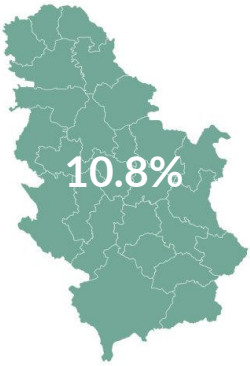


The results show that 8.8% of citizens of Serbia have a level of eating disorders symptomatology that may be considered clinically significant, while these symptoms are more frequently observed in women than in men. It has also been determined that symptoms of eating disorders are more intense in younger than in older population (r = -.140, p < .001). Additionally, this symptomatology is more frequent in urban than in rural environments (t = 2.91, p = .004).

Almost one half (46.1%) of those identified as being at risk of developing an eating disorder state they have never sought professional help, while the same trend was recorded in both men and women. Namely, 45.8% of men and 46.9% of women identified as being at risk of developing an eating disorder had never contacted a professional regarding their mental health difficulties. As much as 88.6% of individuals with severe symptoms that are characteristic for eating disorders have not sought help over the last month.

4.9% **12.8%**

TRAUMATIC EXPERIENCES AND POST-TRAUMATIC STRESS DISORDER



The post-traumatic stress disorder (PTSD) may develop after being exposed to isolated, extremely dangerous or threatening event or series of events.

Symptomatology of PTSD comprises:

1) Reliving the traumatic event in the present in the form of intrusive memories, flashbacks or nightmares. This unwanted and intrusive thoughts are, as a general rule, accompanied by intense fear and physical sensations;

2) Avoiding thoughts and memories of the traumatic experience or avoiding activities, situations or people reminiscent of the experience;

3) Negative changes in cognition and mood that started after the traumatic event, such as difficulties with remembering details of traumatic event, persistent negative beliefs about oneself, other and the world, persistent feeling of fear, anger, guilt, shame, depressive mood, inability to experience positive emotions and feeling of detachment from others; and

4) Increased vigilance in the form of impulsive and self-destructive behaviour, exaggerated feeling of threat in the form of hypervigilance or twitching at unexpected noises, problems with concentration and sleep.

The symptoms last at least several weeks and cause significant damage to personal, social, educational, professional and other important areas of functioning.

51.6% of citizens of Serbia stated that over the course of their life they experienced at least one traumatic event, while 46.2% reported that during their life they witnessed at least one traumatic event that happened to another person, 59.4% of citizens report that at least one of traumatic events happened to a person close to them (Chart 12).

The results show that 10.8% of citizens have clinically significant level of PTSD. More intense PTSD symptomatology is slightly more frequent in women than in men. The study also showed that PTSD symptoms are slightly more intense in younger than in older population (r = -.108, p = .001). Average differences in symptomatology of people living in urban and rural environments have not been observed.

Although most of the citizens with clinically significant symptoms of PTSD (69.4%) reported that they sought professional help during their lifetime, almost one third of them (30.6%) never did, and as much as 76.9% of them never sought professional help over the last month despite experiencing acute PTSD symptoms.

Chart 12. *Frequency of traumatic events*

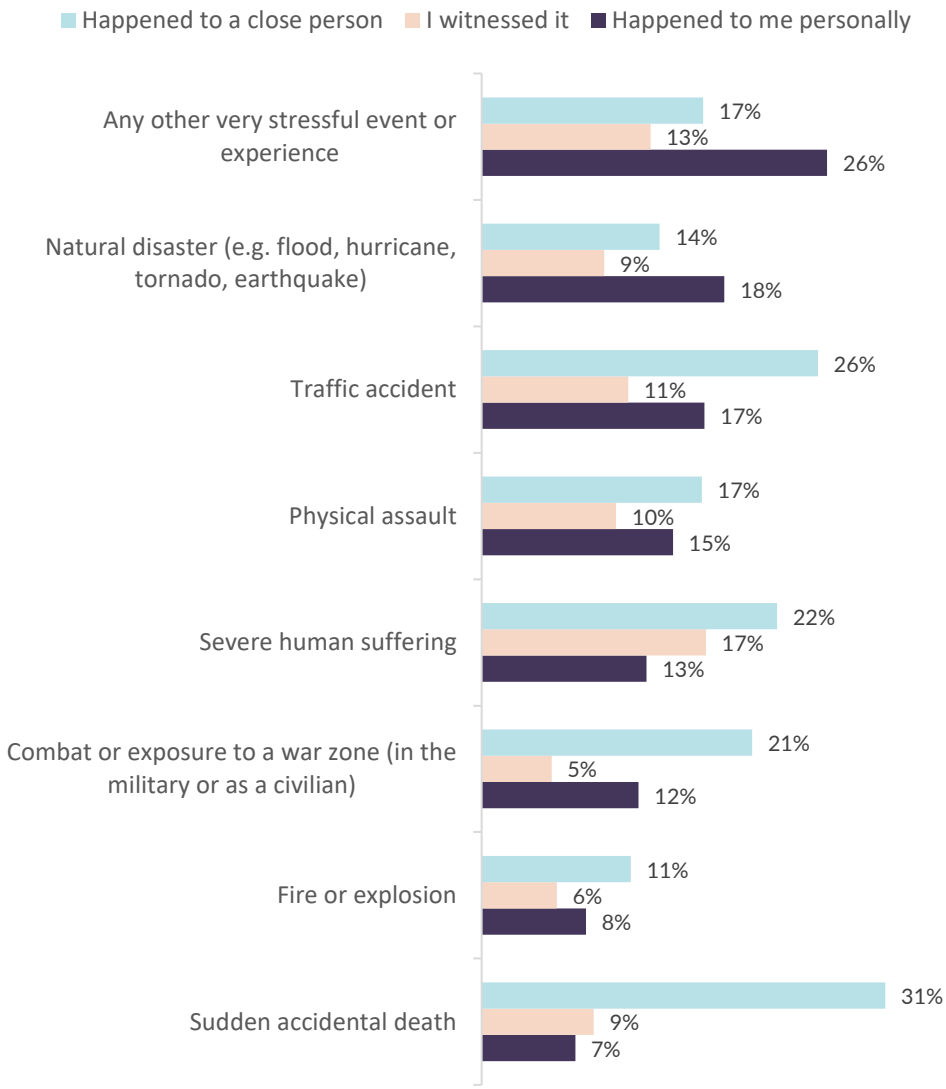
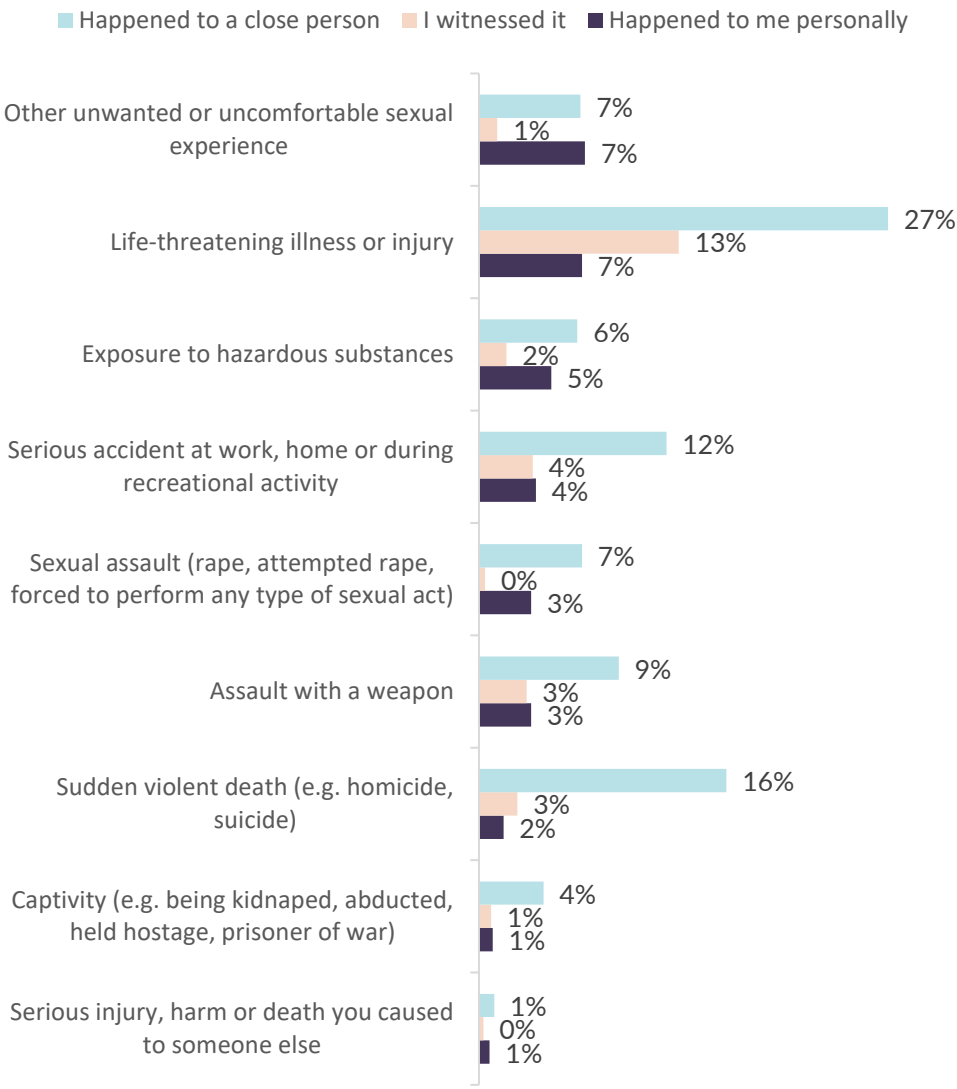
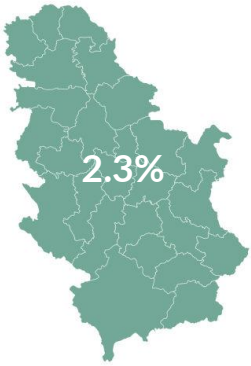


Chart 12. *Frequency of traumatic events (continued)*



PSYCHOTIC SPECTRUM SYMPTOMATOLOGY



The full form of psychotic disorders is characterized by significantly damaged reality testing, as well as changes in behaviour that are manifested through so-called positive symptoms, such as delusions and unusual thought content, hallucinations, disorganized thoughts and speech, and negative symptoms such as flat affect and psychomotor disturbances.

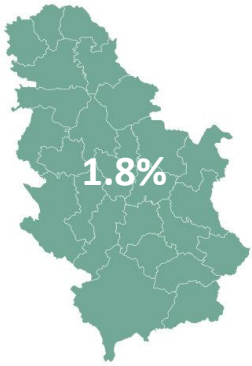
When these symptoms appear they significantly deviate from expected cultural norms and behaviours typical for certain environment. The prodromal phase is the initial phase in development of a psychotic disorder and represents the period during which an individual experiences change of emotions, thoughts, perception and behaviour, but still not experiencing psychotic symptoms, such as hallucinations, delusions etc.

The results show that based on the intensity of symptoms 2.3% of citizens of Serbia can be classified in the group of high risk of psychotic disorder, where higher incidence of clinically significant symptomatology has been observed in men than in women. As expected, the results show that these experiences are more commonly found at younger age (r = -.061, p = .049). It has also been established that these symptoms are more intense in individuals that live in more urban environments (t = 3.06, p = .002).

Approximately one third of citizens (34.8%) that have been identified as being at high risk of developing psychotic disorder have never sought professional help for mental health difficulties, while 82.6% of those with clinically significant symptoms from the psychotic spectrum reported they haven't sought professional help over the last month.

DISSOCIATIVE SYMPTOMATOLOGY

Dissociative disorders are characterized by incoherence and lack of continuity and/or integration of thoughts, memories, actions and identity, as well as a control over body movements or behaviour. This interruption of continuity may be complete, but is commonly partial and may vary day by day or hour by hour.



The results show that clinically significant levels of intensity of dissociative symptomatology are observed in 1.8% of citizens. The study showed that dissociative symptoms were much more frequent in women than in men. Also, the intensity of dissociative symptoms is slightly higher in younger individuals (r = -.090, p = .004). On the other hand, no connection has been found between the environment in which a person lives (urban vs rural enviroment) and intensity of dissociative symptomatology.

One third of citizens (33.3%) with intensive dissociative difficulties report they have never sought professional help for mental health difficulties, and as much as 88.9% of individuals with intensive dissociative symptoms haven't decided to seek professional help over the last month.

Mental health screening showed that a total of 35.4% citizens has clinically significant difficulties that may be linked to symptoms of at least one disorder, while 18.4% has symptomatology that is clinically indicative for two or more disorders.

31.9% of those with clinically significant symptoms of at least one mental disorder have never been diagnosed with any mental disorder.

11.8% of citizens report that due to mental health difficulties they took medicines in the last 7 days.

8.1% of citizens of Serbia report that they have been diagnosed with mental disorder during their life.

2.9% of citizens report that they have been hospitalized because of mental health difficulties at least once during their life.

PREDICTORS OF MENTAL HEALTH DIFFICULTIES

WHAT FACTORS CONTRIBUTE TO MENTAL HEALTH DIFFICULTIES?

There are many factors that can contribute to mental health difficulties. Besides various personal factors, such as: personality structure, resilience or coping mechanisms, as well as previous experiences, stress and traumatic events to which the person has been exposed, it is also important to understand the way in which different social factors contribute to psychological vulnerability. Understanding of wide groups of factors that contribute to mental health allows for development of interventions that will not only be focused on individuals, but will also impact different social factors, thus creating a favourable climate to preserve mental health and psychological welfare.

This study examined five wide groups of possible predictors of mental health difficulties, while social factors were selected based on the model of social determinants of mental health (Lund et al., 2018):

Demographic factors – gender, age, place of residence (urban vs rural environment);

Economic factors – income per household member, self-assessed socio-economic status and living conditions (square meters of apartment/house per household members, settled housing situation);

Stressful environmental events – number of traumatic experiences during life, number of threatening experiences over the previous year, stressful experiences caused by COVID-19 pandemic, as well severe clinical picture caused by COVID-19;

Social factors – level of education, degree of social support received from close persons, living alone vs living in a community;

Personal factors – coping mechanisms and psychological resilience

Table 1 gives overview of predictors of all groups of symptoms that were covered by this study.

The results showed that when it comes to **demographic factors**, gender stands out as the most prominent independent predictor of mental health difficulties. It shows that female gender is linked with higher intensity of all groups of symptoms except suicidality, which is more closely linked with male gender. On the other hand, the study showed that more intense symptomatology of depression, anxiety, suicidality, eating disorders and PTSD is typical for younger people, but speaking of other disorders no distinct connection has been found with age. The study showed that urban environment is a risk factor for anxiety and psychotic symptomatology, while rural environment was observed at trend level as risk factor for suicidality.

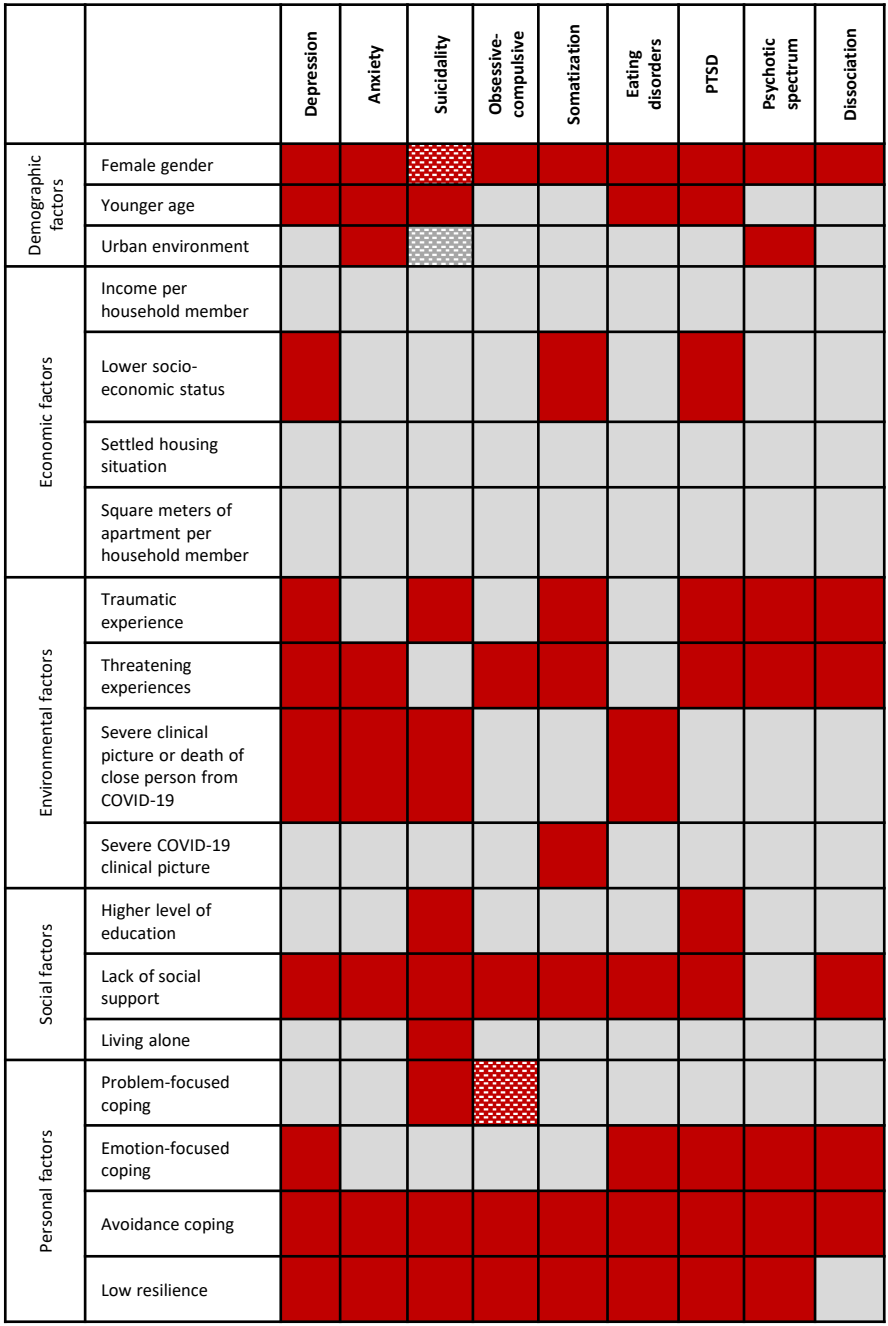
In terms of economic factors, the study showed that lower socio-economic status is a risk factor for symptomatology of depression, somatization and PTSD. It is interesting that other indicators of financial situation did not prove to be predictive for any group of mental health difficulties.

As expected, the results showed that stressful and traumatic events are one of the most prominent predictors of mental health difficulties. Namely, threatening experiences that occurred over the past year, such as serious illness, injury or assault, illness, injury or assault of a family member, death of a family member or close friend, breakup of stable relationship etc. proved to be predictive for all groups of mental health difficulties except eating disorders and suicidality, which were mostly connected with lifetime experience of trauma. Similarly, the study showed that symptomatology of almost all disorders is accompanied by traumatic events. Stressful experiences related to COVID-19, such as severe clinical picture and/or death of close friend/family member caused by COVID-19 are accompanied by more intense symptoms of depression, anxiety, suicidal ideation, as well as eating disorders. The experience of having a severe form of COVID-19 (pneumonia and/or hospitalization) proved to be predictive only for somatization symptoms, which can probably be linked to long COVID. Correlations of individual stressful and traumatic experiences with symptomatology of different disorders, as well as relative frequency of these experiences is shown in Appendix 2.

Among **social factors**, perceived social support by close persons overall proved to be one of the strongest predictors of mental health. In other words, the less social support and assistance network is available to a person, he/she experiences more intense symptomatology. This regularity has been observed in all disorders covered by this study, except psychotic symptomatology, in case of which no statistically significant effect was found. It is interesting that suicidal ideation and PTSD symptoms were slightly more often identified in individuals with higher education.

Finally, among **personal factors**, the most consistent predictors of mental health difficulties from different spectrums were avoidance coping, characterized by cognitive and behavioural efforts to deny or reduce significance of stressor or avoiding dealing directly with stress, as well as lack of psychological resilience, i.e. lack of capacities for dealing with stress. The avoidance coping proved to be accompanied with higher intensity symptoms of all disorders. Similar situation occured with reduced resilience which proved to be accompanied with more intense symptoms of all disorders, except dissociation. Emotion-focused coping also proved to be non-adaptive in terms of mental health considering that positive corelation has been found out with depressive symptomatology, symptoms of eating disorders and PTSD, psychotic symptomatology and dissociative symptoms.

Table 1. *Summary of symptomatology predictors*



Note. Statistically significant regression coefficients are marked by red squares; Cross-hatched squares mark relations with direction opposite than specified

The results showed that the defined set of predictors, depending on the type of disorder explains between 20.6% i 44.2% of variance of intensity of symptoms. As expected, the proportion of explained variance of PTSD symptoms is among the highest considering that the main determinants of this symptomatology are of environmental nature. More precisely, existence of isolated or recurring trauma of the same or different type is sine qua non for PTSD, and it was traumatic experiences that formed a part of the predictor. In contrast to that, the lowest proportion of explained variance was for the symptoms from psychotic spectrum, which were certainly significantly less determined by examined groups of predictors considering they are mostly of endogenic origin.

Table 2. *Proportion of symptomatology variance explained by predictor set*

disorder	% of variance explained
Depression	41.7
Anxiety	37.3
Suicidality	22.8
Obsessive-compulsive	23.3
Somatization	23.3
Eating disorders	18.7
PTSD	44.2
Symptoms of psychotic spectrum	20.6
Dissociation	30.0

PREDICTORS OF SEEKING PROFESSIONAL HELP

WHAT FACTORS INFLUENCE A PERSON IN NEED OF SUPPORT TO ACTUALLY SEEK HELP?

The predictors of seeking professional help during the period of experiencing actual symptoms were examined on the sub-sample of respondents whose score on at least one of the clinical instruments indicated they are currently experiencing clinically significant symptoms of any disorder (35.4%). Namely, the fact that persons from this sub-sample over the last month experienced such intensity of mental health difficulties that required professional help and at the same time let us know if they sought professional help or not over the same period, gave us the opportunity to learn which characteristics make person more or less prone to seek professional help when it obviously required it.

The results showed that socio-demographic characteristics explain 6.4% ($p < .001$) of variance of seeking professional help, while **more favourable financial situation** proved to be the only statistically significant predictor ($\beta = .207$, $p < .001$). Physical and psychological barriers explained 2.8% ($p = .012$) of variance of seeking professional help, while **self-stigma** was the only significant negative predictor ($\beta = -.168$, $p = .003$). In other words, persons in adverse financial situation, as well as persons that would think of seeking professional help as personal failure or would feel less valuable because of that were not prone to seek professional help despite the mental health difficulties they were experiencing.

CONCLUSIONS AND RECOMMENDATIONS

SO NOW WHAT?

This study gave us an important insight into mental health difficulties of people in Serbia and large number of risk factors that influence such difficulties. The study also proved that there was a large number of people who, in spite of difficulties they experienced, hesitated seeking help, and that stigma towards mental health difficulties and mental disorders is widespread in Serbia.

The results of the study proved that it is necessary to create and carry out comprehensive interventions, which would be focused on strengths and resilience of individuals, but also at different social factors that would help develop a social climate with favourable effects on mental health of population. There is a large number of interventions and programs that could be recommended, but based on the results of the study the interventions of the highest priority are:

- **Providing free services focused on mental health throughout Serbia**, which would help overcome financial barriers that stand out as an important reason why persons in need, still chose not to seek help.

- **Implementing programs and interventions that would reduce stigma of mental health difficulties and mental disorders**, including social distance towards persons with such difficulties and perceived condemnation and discrimination of society towards persons with such difficulties, but primarily to incite reduction of self-stigma, i.e. the belief that seeking for professional help for mental health difficulties is an indicator of lower personal value or personal failure, which proved to be the second important reason behind refusing to seek help when it was needed.

-Finally, it is also required **to implement programs and interventions that would lead to strengthening resilience and reducing the use of maladaptive coping mechanisms among people of Serbia**, such as avoidance coping style characterized by denial and reduction of stressor importance or avoidance of dealing with stress directly or emotion-focused coping, which proved to significantly contribute to mental health difficulties in the mental health domain and promote more adaptive stress coping styles among the people in Serbia.

APPENDICES

APPENDIX 1

Instruments used in the study

Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001) – α = .89; cut-off ≥ 10

Generalized Anxiety Disorder Screener (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006) – α = .89; cut-off ≥ 10

Suicidal Ideation Attributes Scale (SIDAS; van Spijker et al., 2014) – α = .89; cut-off ≥ 21

Obsessive-Compulsive Inventory-4 (OCI-4; Abramovitch, Abramowitz, & McKay, 2021; Foa et al., 2002) – α = .68; cut-off ≥ 4

Somatic Symptom – Adult Patient (adapted from the Patient Health Questionnaire Physical Symptoms (PHQ-15; Kroenke, Spitzer, & Williams, 2002) – α = .78; cut-off ≥ 10

The Eating Disorder Examination Questionnaire (EDE-QS; Gideon et al., 2016) – α = .85; cut-off ≥ 15

Posttraumatic Stress Disorder Checklist (PCL-5; Weathers, Davis, Witte, & Domino, 2015) – α = .95; cut-off ≥ 33

Life Events Checklist for DSM-5 (LEC-5; Weathers et al., 2013)

The Prodromal Questionnaire – Brief Version (PQ-B; Loewy & Cannon, 2010) – α = .81; cut-off ≥ 8

Brief Dissociative Experiences Scale (DES-B – Modified; Dalenberg & Carlson, 2010) – α = .79; cut-off ≥ 2

Perceived Stigma and Barriers to Care (Britt et al., 2008) – α = .78;

Self Stigma of Seeking Help Scale (SSOSH) (Vogel & Wade, 2006) – α = .87

The Reported and Intended Behaviour Scale (RIBS) (Evans-Lacko et al., 2011) – α = .67, .89

The Perceived Devaluation and Discrimination toward mental illness Scale (PDD; Link, 1987) – α = .83

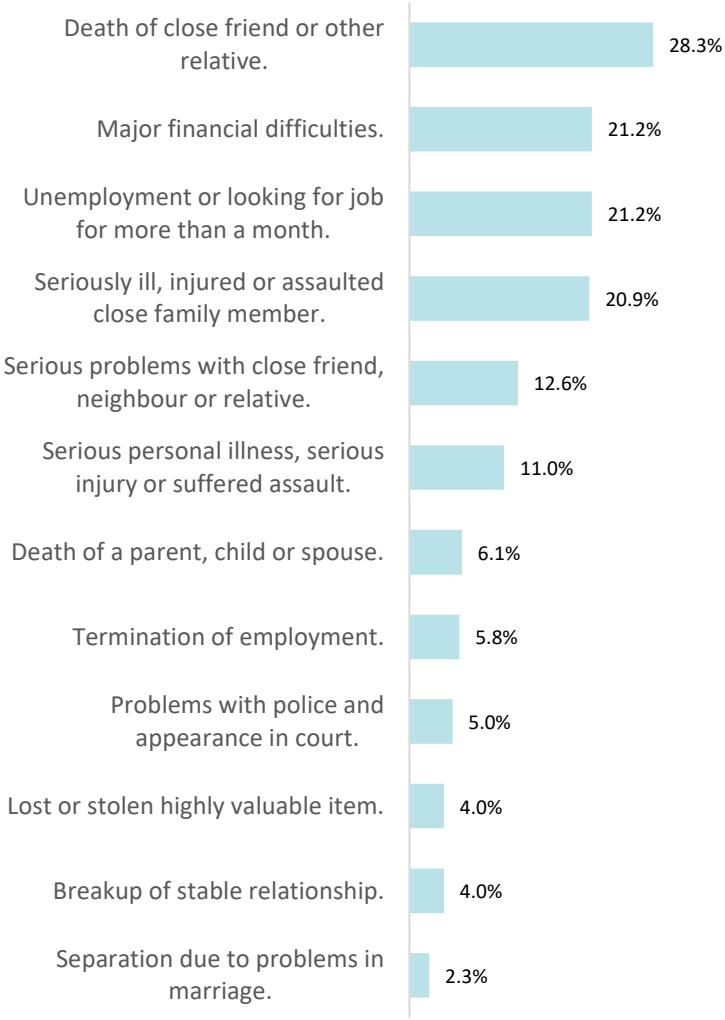
Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988) – α = .95

Brief COPE (Carver, 1997) – α = .70 - .84

The Brief Resilience Scale (Smith et al., 2008) – α = .87

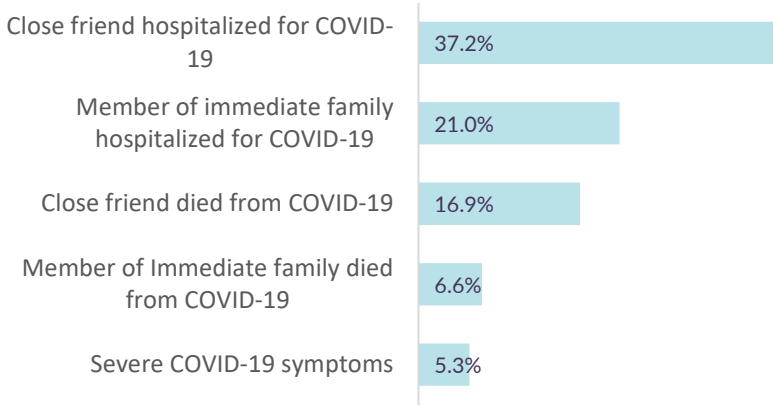
APPENDIX 2

Frequency of stressful or threatening experience over the last 12 months



APPENDIX 3

Frequency of stressful events related to COVID-19 pandemic



APPENDIX 4

Correlations between threatening experiences and severity of symptoms

	1	2	3	4	5	6	7	8	9
Serious personal illness, serious injury or suffered an assault.	**.144**	**.060**	.029	**.121**	**.232**	**.117**	**.179**	**.150**	**.128**
Seriously ill, injured or assaulted close family member	**.109**	**.111**	-.002	.035	**.084**	**.136**	**.158**	**.093**	.015
Death of a parent, child or spouse	**.096**	**.086**	-.042	.017	**.092**	**.068**	**.092**	**.076**	.037
Death of a close friend or other relative	**.177**	**.164**	**.156**	**.064**	**.146**	**.096**	**.220**	**.143**	**.098**
Separation due to problems in marriage	.050	.057	-.008	.056	.019	.037	.034	**.063**	**.083**
Breakup of stable relationship	**.221**	**.188**	**.364**	-.014	**.120**	.005	**.152**	-.003	**.162**
Serious problem with a close friend, neighbour or relative	**.199**	**.194**	.055	**.221**	**.155**	**.113**	**.208**	**.144**	**.221**
Unemployment or looking for job for more than a month.	**.243**	**.206**	**.215**	**.119**	**.161**	**.116**	**.193**	**.077**	**.104**
Termination of employment.	**.084**	**.093**	.008	**.079**	.012	-.007	.060	.046	**.110**
Major financial difficulties.	**.209**	**.181**	.053	**.175**	**.191**	**.066**	**.187**	**.190**	**.147**
Problems with police and appearance in court.	**.253**	**.171**	**.316**	.039	**.177**	**.064**	**.202**	**.147**	**.182**
Lost or stolen highly valuable item.	.041	.000	.028	**.088**	-.004	.010	-.017	.014	**.106**
Close friend hospitalized for COVID-19	**.106**	**.106**	**.128**	.048	**.076**	**.088**	**.155**	.016	.045
Close friend died from COVID-19	**.081**	**.095**	**.162**	.032	**.158**	.057	**.133**	**.096**	.045
Member of immediate family hospitalized for COVID-19	**.139**	**.129**	**.170**	.022	.017	**.093**	**.148**	.001	.015
Member of Immediate family died from COVID-19	**.156**	**.156**	**.258**	-.043	**.093**	**.076**	**.140**	.024	**.071**

Note. 1 – depression; 2 – anxiety; 3 – sucidality; 4 – obsesive compulsive symptomatology; 5 – somatization; 6 – feeding disorder symptoms; 7 – PTSD; 8 – psychotic spectrum symptoms; 9 – dissociative symptoms; Values written in bold letters are statistically significant ($p < .05$)

APPENDIX 5

Corelation between experienced traumatic events and severity of symptoms

	1	2	3	4	5	6	7	8	9
Natural disaster	**.200**	**.165**	**.201**	.061	**.192**	**.112**	**.276**	**.187**	**.101**
Fire or explosion	**.167**	**.117**	**.259**	-.003	**.124**	.031	**.180**	.049	.057
Transportation accident	.026	.011	-.022	.010	-.026	.028	**.063**	-.024	-.036
Serious accident at work, home or during recreational activity	**.067**	.003	-.021	.056	**.154**	.041	**.116**	**.086**	**.088**
Exposure to hazardous substances	-.019	-.021	-.040	.018	**.087**	.009	**.103**	.025	-.021
Physical assault	**.237**	**.174**	**.222**	.019	**.180**	**.080**	**.281**	**.169**	**.148**
Assault with a weapon	**.065**	.025	-.005	-.047	**.073**	.024	.050	.056	.038
Sexual assault	**.266**	**.181**	**.428**	.021	**.211**	**.131**	**.265**	**.106**	**.150**
Other unwanted or uncomfortable sexual experience	**.230**	**.156**	**.325**	.044	**.218**	**.173**	**.296**	**.131**	**.117**
Combat or exposure to a war zone	.018	-.013	**-.063**	-.022	-.029	.006	**.100**	**.070**	**-.063**
Captivity (e.g. being kidnaped, abducted, held hostage, prisoner of war)	**.105**	-.005	.003	**.072**	.007	**.136**	**.106**	.049	**.106**
Life-threatening illness or injury	**.106**	**.087**	-.024	**.073**	**.090**	**.102**	**.146**	**.076**	.035
Severe human suffering	**.297**	**.265**	**.251**	.041	**.264**	**.110**	**.365**	**.110**	**.119**
Sudden violent death (e.g. homicide, suicide)	.020	-.016	-.029	-.007	-.007	.009	.015	**.068**	.029
Sudden accidental death	**.081**	**.064**	-.053	.007	**.138**	.050	**.121**	**.166**	**.073**
Serious injury, harm or death you caused to someone else	.044	.010	-.006	**.083**	-.017	**.089**	**.065**	.051	**.077**

Note. 1 – depression; 2 – anxiety; 3 – sucidality; 4 – obsesive compulsive symptomatology; 5 – somatization; 6 – feeding disorder symptoms; 7 – PTSD; 8 – psychotic spectrum symptoms; 9 – dissociative symptoms; Values written in bold letters are statistically significant ($p < .05$)

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Social services for vulnerable groups
Terazije 23/5th floor
11000 Belgrade, Serbia

E info@giz.de
I www.giz.de/serbia