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Mental Health Attitudes in Bosnia and Herzegovina

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ABSTRACT. Mental health is not openly discussed in Bosnia and Herzegovina and there is a dearth of research on this topic, particularly related to general mental well-being. A convenience sample recruited online of 281 people from urban, suburban, and rural areas in Bosnia and Herzegovina reported their attitudes and knowledge about mental health and illness. Despite mental health being a publicly taboo topic to discuss, participants had fairly positive attitudes about mental health and illness. These findings differed by religion ($\eta_p^2 = .06$) and nationality ($\eta_p^2 = .14$). Participants who identified as agnostic or Muslim (as opposed to Catholic or Orthodox) had more positive attitudes toward people with mental health. Additionally, Serbian participants (versus Bosnian or Croats) expressed the least positive attitudes about mental health issues. Finally, younger people and more educated people had more positive attitudes about mental health ($R^2_{Adj} = .10$). This suggests cultural and religious differences in the ways that mental health is conceptualized and acknowledged.

Keywords: mental health attitudes, religion and educational correlates, Bosnia & Herzegovina

Diversity badge earned for conducting research focusing on aspects of diversity.

САЖЕТАК. Ментално здравље се у Босни и Херцеговини не дискутује отворено, што доводи до недостатка истраживања на ову тему, посебно у вези са општим менталним благостањем. Погодан узорак од 281 особе из урбаних, приградских и руралних подручја Босне и Херцеговине, регрутован путем интернета, изразио је своје ставове и знање о менталном здрављу и болести. Иако је ментално здравље табу тема јавне дискусије, испитаници су имали прилично позитивне ставове о менталном здрављу и болести. Резултати показују разлике у зависности од религије ($\eta_p^2 = 0.06$) и националности ($\eta_p^2 = 0.14$). Испитаници који су се идентификовали као агностици или Муслимани (за разлику од Католика или Православаца) су имали позитивније ставове према менталном здрављу и болести. Додатно, српски испитаници (у односу на Бошњаке и Хрвате) су изразили најмање позитивне ставове о проблемима менталног здравља. Коначно, млађи људи и образованији људи су имали позитивније ставове о менталном здрављу ($R^2_{Adj} = .10$). Ово указује на културолошке и религијске разлике у начинима на које се ментално здравље концептуализује и признаје.

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Mental health issues are among the leading causes of disability and suicide in the world. Globally, one in eight people live with a mental disorder, and it is estimated that about 5% of adults suffer from depression (WHO, 2021). These rates vary geographically due to past and current national struggles. War-affected communities in former Yugoslavian countries report anxiety disorder prevalence rates between 15.6% to 41.8%, 12.1% to 47.6% for mood disorders, and 0.6% to 9.0% for substance use disorders (Priebe et al., 2010). Despite large numbers of people being affected, mental health and illness is not frequently discussed publicly (Winkler et al., 2017) and is rarely researched aside from the effects of war. Indeed, mental health is rarely discussed across most of Eastern Europe, where one study found that Christians who need help tend to turn first to their family and friends, then to pastors, and almost never to mental health professionals (Ellens et al., 2000). There is currently no published research on attitudes about mental health in Bosnia and Herzegovina; therefore, for the current study, we sought to begin to fill in this gap.

Bosnia and Herzegovina (sometimes called Bosnia–Herzegovina) is a country in the Balkans. From 1945–1991, it was a part of the Socialist Federal Republic of Yugoslavia. The collapse of communism in Yugoslavia happened in 1991. In the territory of Bosnia and Herzegovina, war started in 1992, and it ended with the signing of the Dayton agreement in 1995 (BBC News, 2018). The war in Yugoslavia began as a quest for independence by many groups. The war itself lasted four years, and thousands of people on all sides died. The topic of the war is still very delicate, and today, six former Yugoslavian countries exist: Bosnia & Herzegovina, Serbia, Montenegro, Macedonia, Slovenia, and Croatia. Although the current study focuses on Bosnia and Herzegovina, ethnically, this country is made up of primarily Bosniaks, Serbs, and Croats.

The war had many effects on politics, the population, and the economy, and one of the main consequences for mental health was posttraumatic stress disorder. Additionally, the war in Yugoslavia focused subsequent mental health research on the effects of trauma (Hasanović et al., 2006). For example, researchers examined the effects on children whose parents survived the war (Krešić et al., 2016), rates of particular disorders, such as depression and anxiety (Hasanović & Herenda, 2008), and effectiveness of a trauma/grief-focused group intervention (Cox et al., 2007).

A thorough review of the research indexed in PsycINFO, SocAbstracts, and Google Scholar revealed that, to date, no research has attempted to understand more recent public perceptions of mental health and illness, which might be less directly affected by the war. Specifically, no research has focused on mental health attitudes, and no research has examined common understanding of pharmaceutical treatments of mental illness. Treating mental health with medications has not yet been broadly researched in Bosnia and Herzegovina, outside of treating PTSD and anxiety (Hasanović & Herenda, 2008).

More broadly speaking, mental health and mental health issues are not commonly discussed topics in Bosnia and Herzegovina. For example, a brief review of current online newspapers and publications revealed few references to mental health issues. Researchers in neighboring countries have begun exploring how much their populations understand mental health and attitudes about people with mental illness. A study undertaken in Serbia showed statistically significant differences in attitudes about mental health problems by place of residence, history of psychiatric disease, and religion (Marotić et al., 2010.) In this study, high school students from an urban and midsize town reported that participants from urban areas showed higher levels of stigma towards people with mental illness and were less willing to see the mentally ill as equal members of the community. The goal from a study from another neighboring country, Croatia, was to address, stress, and support mutual understanding and creative cooperation between religions and nations in promotion of public and global mental health. They examined important issues from the global and public mental health perspectives, such as radicalism, malignant nationalism, and pathological religiosity, and found that these are huge sources of hate, violence, poverty, and suffering that are also associated with global mental health problems. However, healthy spirituality and religiosity may significantly contribute to public and global mental health (Jakovljević et al., 2019). Researchers from one country in the region, Serbia, began to research the effects of promoting positive mental health via television (Milošević, 2011), but Bosnia and Herzegovina does not have similar intervention research.

Given this backdrop, anecdotal evidence suggests that many people struggle with talking about mental health issues, despite perhaps experiencing them. An examination of prescription drug sales in Bosnia and Herzegovina suggests that pharmaceutical use for mental health is increasing. The Agency for Drugs and Medication of Bosnia and Herzegovina publishes compiled data about the yearly medications sales (Agencija za Lijekove i Medicinska Sredstva BiH, 2011, 2021). The authors of this article compared prescription sales for drugs in the nervous system category across 2010 and 2020 (the most recently published data). Over this time period, nervous system drug sales significantly increased, suggesting that more people might be aware of mental health issues and, accordingly, taking medications to

boost their mental health. Because people might be experiencing mental health problems, and because there is a cultural reluctance to discuss mental health issues openly. The current study surveyed participants living in Bosnia and Herzegovina about their general attitudes toward mental health issues and knowledge about mental illness.

Research Question

The overall purpose of this study was to gauge the attitudes toward mental health issues and knowledge about mental health in Bosnia and Herzegovina, and to understand correlates of those variables.

Method

Data were collected online to understand how Bosnia and Herzegovina nationals view mental health, and if differences exist by religion, age, nationality, and educational level. The study was approved in May, 2022 by the Lake Forest College Human Subjects Review Committee, and data were collected in Summer 2022. As with most studies on delicate topics, there are ethical considerations. Because these topics are not often discussed in Bosnia and Herzegovina, extra care was taken to alert participants that they could skip any question at any time and could exit the survey at any time. The informed consent also normalized these experiences. Special attention was paid so that participants knew this was part of an academic research study and was not sponsored by any government or religious organization.

TABLE 1

Sample Demographics

Gender	Man	180
	Woman	99
	Not reported	2
Nationality	Serb	261
	Bosnian	10
	Croat	5
	Other	2
	Not reported	3
Education	University degree	151
	Secondary degree	104
	Postgraduate degree	23
	Primary school	1
	Not reported	2
Area of living	Midsize town	175
	Urban area	62
	Rural area	40
	Not reported	4
Religion	Orthodox Christians	255
	Muslims	10
	Atheists/Agnostics	9
	Catholics	3
	Not reported	4
Relationship status	Married	154
	Single	56
	Dating someone/In a relationship	50
	Divorced/Widowed	20
	Not reported	1

Participants

Adults from Bosnia and Herzegovina completed an online survey via Qualtrics. This convenience sample was recruited via social media (Facebook, Instagram, Twitter, Gmail) and via personal communication of the first author. Four hundred thirteen people attempted the survey, and 281 (180 men, 99 women) fully consented and completed the survey (two people did not indicate their gender). The highest number of participants were Serbs ($n = 261$), followed by 10 Bosnians, 5 Croats, and 2 people of other nationalities, while 3 people did not choose any listed option. The sample was well-educated: 151 people held university degrees, 104 people earned secondary degrees, and 23 people reported having postgraduate degrees. (Two people did not report their level of education, while one person attended primary school). Out of 281 people, 175 lived in midsize towns, 62 lived in urban areas, 40 in rural areas, and four people did not report their area of living. Most participants ($n = 255$) declared themselves as Orthodox Christians, 10 as Muslims, 9 as Atheists/Agnostics, 4 people did not choose any listed option, and 3 people declared as Catholics. One fifty-four participants were married, 56 participants were single, 50 were dating someone/in a relationship, 20 participants were divorced/widowed, and 1 participant did not report their relationship status. See Table 1.

Variables

All measures were translated from English to Bosnian, Serbian, and Croatian by the first author and another native speaker of all four languages. Participants took the survey in their preferred language.

Mental Health Attitudes and Knowledge. Attitudes toward mental health and mental health issues were measured with a modified teacher mental health attitudes scale (Bella et al., 2011). The scale was developed in Nigeria to understand teachers' opinions and attitudes about mental health and mental health issues. Participants answered 27 items about their attitudes toward people with mental health problems, their own attitudes about

mental health problems, and general knowledge about people with mental illness. Example items included, "There is no difference between mental illness and mental health problem" and "I would be disturbed to discover an adult with a mental health problem at my workplace." Per the original scale, participants indicated their responses on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Sixteen items were reverse coded, and item scores were summed so that high scores indicated more correct knowledge about mental health and more compassion for people with mental health problems. Internal consistency for this scale was good (Cronbach's $\alpha = .79$).

Demographics. At the end of the survey, participants answered the following demographic questions: age, gender, level of education, area of habitation, current country of residence, if they have ever lived abroad, religion, nationality, relationship status, if they have any current or past experience with counseling/therapy, and if they currently (or if they have ever) taken medication for mental health.

Procedure. Participants were recruited online via social media and personal communication. The first page of the survey was translated into three languages, and asked participants to choose their preferred language for the survey. Participants could choose between three official languages in Bosnia and Herzegovina: Bosnian, Serbian, and Croatian. The informed consent, questionnaire, and debriefing were translated by the first author and another native speaker. Participants took seven minutes to complete the survey, on average. Participants were debriefed at the end of the survey.

Data Analysis

All data were analyzed using SPSS version 26. Mental health attitudes scores were normally distributed.

Results

First, we compared attitudes between the three Bosnia and Herzegovina nationality groups. A one-way analysis of variance (ANOVA) revealed medium significant differences in levels of attitudes by nationality, $F(3, 267) = 5.86$, $p = .001$, $\eta_p^2 = .06$, where post-hoc tests revealed that Croats have the most positive mental health attitudes ($M = 108.75$, $SD = 4.79$), significantly higher than Serbs ($M = 92.89$, $SD = 9.32$), who have the least positive mental health attitudes. Bosnian's attitudes ($M = 100.50$, $SD = 12.05$) were not significantly different from either group. These comparisons are exploratory, as there were only four Croats in that group.

A second ANOVA compared attitudes by religion. Again, there were large significant differences in attitudes between groups, $F(3, 266) = 14.40$, $p < .001$, $\eta_p^2 = .14$. Post-hoc tests showed that, when compared by religion, Atheists/Agnostics had the most positive mental health attitudes ($M = 109.56$, $SD = 7.26$), whereas Orthodox Christians had the least positive mental health attitudes ($M = 92.45$, $SD = 8.95$). Orthodox Christians also had significantly less positive attitudes about mental health and illness than Muslims ($M = 100.70$, $SD = 11.00$). Finally, the two Catholic respondents were not significantly different ($M = 107.00$, $SD = 5.66$) from any other group, probably due to the small sample size.

Next, we examined a series of correlations to understand the relationships between attitudes toward mental health and age and education. There was a medium-small significant negative relationship between age and attitudes, $r(267) = -.24$, $p < .001$, meaning that older participants had less positive mental health attitudes, and younger participants had more positive mental health attitudes. A medium-small significant positive relationship was also found between attitudes and education, $r_s(273) = .23$, $p < .001$. Finally, we ran a linear regression using these variables and substantiated the findings above, where age and education explained a significant proportion of variance in attitudes, $F(2, 263) = 14.10$, $p < .001$, $R^2_{Adj} = .09$.

Discussion

Summary of Findings

This study was the first to examine current attitudes and knowledge about mental health issues in Bosnia and Herzegovina. Overall, participants' scores suggest they have a fair understanding and attitudes toward mental health issues, but that the range of knowledge is wide. Croats had the most positive mental health attitudes, followed by Bosnians and Serbs, who had the most negative attitudes about mental health in this country. This matches the comparison by religion, because Serbs are most likely to be Orthodox Christians, and this religious group had the most negative mental health attitudes. Perhaps in Orthodox Christian culture, leaders discuss mental health less than Muslim (Bosnians) or Catholic (Croats) cultures. Generally speaking, mental health and mental health issues are not discussed in the media, meaning that people in Bosnia and Herzegovina are not exposed to questions about mental health in their everyday life. Generally speaking, people in Bosnia and Herzegovina do not endorse the efficacy of therapy, there are few therapists per capita (WHO, 2022), and therefore a low number of people seek mental health care. Psychology, especially mental health issues, is something that is considered as a "taboo topic" in Bosnia and Herzegovina. All of these factors might contribute to varying levels of knowledge about mental health and differential tolerance for mental illness.

We noticed that education was negatively correlated with attitudes toward mental health, which confirms

that more negative mental health attitudes could be a consequence of a less education in a psychological field. A psychological science course was introduced in secondary schools in Bosnia and Herzegovina only in the 2000s, meaning that older generations did not have any exposure to this science through their education.

Meaning and Implications of Findings

There is a clear gap in the overall understanding of mental health in Bosnia and Herzegovina (WHO, 2022). As mentioned earlier, none of the published articles have focused on general mental health attitudes in Bosnia and Herzegovina, because research has, necessarily, focused on the effects of war and on survivors and their children (Hasanović et al., 2006; Krešić et al., 2016). However, participants in the current study still showed more compassion toward mentally ill people than anticipated. As this topic is not common in discussions, media, and research, it is almost impossible to find a paper or article on this topic. Therefore, this study can be a base for future studies and research related to mental health attitudes, as well as a base for different projects that would work on promotion and education of mental health and mental health issues.

Attitudes about mental health were measured using a modified teacher mental health attitudes scale that was developed for the Nigerian population (Bella et al., 2011). Attitudes about mental health in Nigeria are fairly well known, in that people do not have favorable or informed ideas about mental health and mental health issues (Labinjo et al., 2020). People in Bosnia and Herzegovina might think similarly to people in Nigeria in terms of mental health attitudes. Other European-based measures are similar to USA-based measures, and they do not capture the lack of knowledge behind mental health beliefs. That is, they assume the participant is more sophisticated about mental health than the common person in Bosnia and Herzegovina. Thus, we needed a measure that allowed for "non-politically correct, more colloquial" terms and attitudes. This measure fit those needs, and had already been used in published research, so we wanted to re-apply it in this context. All this being said, we want to emphasize that future research should explore attitudes in Bosnia and Herzegovina much more and develop a new culture specific measure that would be a better fit for the population in this country.

Weaknesses of the Present Research

Several methodological issues might have affected the results. The mental health attitudes measure was not developed for the general population, nor was it developed for Bosnia and Herzegovina culture. Although the current measure did demonstrate good internal validity, future research should focus on scale development within a culturally relevant context. The convenience sample skewed toward married Orthodox Serbians residing in midsize towns. These demographics are not representative of the full diversity of the country, and importantly, such characteristics might influence one's perceptions and knowledge about mental health. Therefore, additional research is needed to understand the nuanced variations in attitudes across the country and within each demographic group, preferably through a stratified random sampling strategy. This study relied on a convenience sample which gathered unequal, and possibly unrepresentative, numbers of people from different religious and ethnic groups. Perhaps the people who participated in the study had particularly strong attitudes about mental illness and health. A stratified random sample might better capture the full variation in people's attitudes. Additionally, this study suggested potential religious and cultural influences on mental health attitudes. That particular religions or national identities might have specific ideas about what it means to be mentally ill suggests that socially desirable responding might differentially affect responses. Again, random sampling will help in this regard. Finally, future research should assess the presence of socially desirable responses in the Bosnia and Herzegovinian context. What is socially desirable in Bosnia and Herzegovina might differ from traditional constructs measured on widely used socially desirable responding measures in the United States. This should be explored by future research.

Suggestions for Future Research

The first suggestion is to have a more representative sample that would be based on population. If the research is to be based on self-reported surveys again, the survey should contain questions about participants' own mental health and socially desirable responses.

Furthermore, future research should focus more on how to educate people more on mental health. The question that arises is how it would be culturally and religiously appropriate to do this, without degradation of people, their opinions, and attitudes about mental health. Because Bosnia and Herzegovina was formerly the country of Yugoslavia, it would be interesting to see the influence of communism on generational differences, understanding of mental health and education. Furthermore, because religious practice was not a common thing in the time of communism, it would be interesting to examine why different religious groups in this country have various levels of mental health attitudes.

Understanding how postwar generations view mental health differently from those who lived through war is an important next step. As cultures change due to

internal conflict and outside influence, continued research can identify new challenges for citizens' mental health. This study was an important first step.

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