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# Aleksitimija i njezini potencijalni prediktori dobiveni na uzorku oboljelih od anksioznih i psihosomatskih poremećaja

## */ Alexithymia and Its Potential Predictors Obtained from a Sample of Patients with Anxiety and Psychosomatic Disorders*

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Aleksitimija je konstrukt s nedvojbenim učinkom na zdravlje i nošenje s bolešću i procesom liječenja. Istraživanje o toj bolesti bilo je provedeno na klinikama za psihijatriju i internu medicinu KBC-a Rijeka na uzorku od 100 ispitanika podijeljenih u dvije skupine: oboljelih od anksioznih i oboljelih od psihosomatskih poremećaja. Glavni cilj ovog rada bio je ispitati potencijalne prediktore aleksitimije pri čemu su u razmatranje uzeti sljedeći parametri: lokus kontrole zdravlja, stupnjevi anksioznosti i depresivnosti, te pojedina sociodemografska obilježja. Specifični se ciljevi odnose na ispitivanje povezanosti stupnja izraženosti aleksitimije sa stupnjem izraženosti svakog pojedinog prediktora. Ispitan je i stupanj aktivacije simpatikusa u ispitivanim skupinama. Korišten je sljedeći instrumentarij: Sociodemografska anketa, Torontska ljestvica aleksitimije - 26, Hopkins - 25 ljestvica simptoma i Uпитnik za ispitivanje percipiranog izvora kontrole zdravlja. Za potrebe mjerenja tlaka koristio se manualni tlakomjer i stetoskop, srčana frekvencija mjerila se pulsni oksimetrom, a frekvencija disanja neposrednim opažanjem istraživača. Sukladno ciljevima, ustanovljeno je da postoji statistički značajna pozitivna povezanost aleksitimije, vanjskog lokusa kontrole zdravlja, anksioznosti i depresivnosti. Pojedinci s višim stupnjem aleksitimije pokazali su očuvan autonomni emocionalni odgovor. Utvrđeno je da su niža stručna sprema, viši stupnjevi depresivnosti i anksioznosti te prisutnost izraženijeg vanjskog lokusa kontrole zdravlja objektivni prediktori aleksitimije.

*/ Alexithymia is a construct that has an undeniable effect on health and on coping with a disease and the treatment process. A study of this condition was conducted at the Departments of Psychiatry and Internal Medicine at the Clinical Hospital Center Rijeka, on a sample of 100 respondents divided into two groups: patients with anxiety disorders and patients with psychosomatic disorders. The main objective of this paper was to examine the potential predictors of alexithymia, taking into consideration the following parameters: the health locus of control, degrees of anxiety and depression, and individual sociodemographic characteristics. The specific goals refer to examining the association between the degree of alexithymia expression and the degree of expression of each individual predictor. The degree of sympathetic nervous system activation in the test groups was also examined. The following instruments were used:*

the Sociodemographic Survey, the Toronto Alexithymia Scale-26, the Hopkins Symptom Checklist-25 and the Perceived Source of Health Control Questionnaire. A manual blood pressure monitor and stethoscope were used for blood pressure measurement, heart rate was measured with a pulse oximeter, while respiratory rate was measured by direct observation of the researchers. Consistent with the objectives, a statistically significant positive association was found between alexithymia, the external health locus of control, anxiety and depression. Individuals with a higher degree of alexithymia displayed a preserved autonomic emotional response. It was determined that lower education, higher degrees of depression and anxiety, and the presence of a more pronounced external health locus of control are objective indicators of alexithymia.

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## UVOD

Suočavanje s kroničnom bolešću i njeno prihvaćanje psihički je veoma zahtjevno. Kako bi u tome bio uspješan, potrebno je da pojedinac posjeduje sposobnost prepoznavanja i regulacije vlastitih emocija. Osobe sa značajkama aleksitimije imaju problema upravo s potonjim.

U ovome će se radu istraživati aleksitimija u odnosu na lokus kontrole zdravlja i druge potencijalne psihološke odrednice. Istraživanje će biti provedeno na uzorku bolesnika s određenim psihičkim poremećajima iz anksioznog spektra (generalizirani anksiozni poremećaj - GAD, panični poremećaj, mješoviti anksiozno-depresivni poremećaj) i određenim psihosomatskim bolestima (esencijalna arterijska hipertenzija, ulcerozni kolitis).

Pojam aleksitimija prvi je upotrijebio Peter Emanuel Sifneos 1973. godine povezujući ga sa psihosomatskim bolesnicima (1). Aleksitimija je obilježena deficitom u prepoznavanju,

## INTRODUCTION

Coping with a chronic illness and accepting the illness are mentally very challenging. In order to succeed in doing so, an individual needs to have the ability to recognize and regulate their own emotions. The latter represents a problem for individuals with signs of alexithymia.

This paper will focus on alexithymia and its relation to the health locus of control and other potential psychological determinants. The study will be conducted on a sample of patients displaying particular mental disorders from the anxiety spectrum (generalized anxiety disorder - GAD, panic disorder, mixed anxiety-depressive disorder) and particular psychosomatic disorders (essential arterial hypertension, ulcerative colitis).

The term alexithymia was first used in 1973 by Peter Emanuel Sifneos, who associated it with psychosomatic patients (1). Alexithymia is characterized by a deficit in identifying, processing and expressing emotions, and distinguishing emotions from bodily sensations, with a cognitive deficit in the form of a concrete, logical, ex-

procesuiranju i izražavanju emocija te razlikovanju emocija od tjelesnih osjeta uz kognitivni deficit u obliku konkretnog, logičnog, ekster-naliziranog procesa mišljenja s odsutnošću fantazija i simbolike (1-4). Aleksitimija se di-jeli na primarnu (koja se kao osobina ličnosti formira u djetinjstvu posljedično infantilnoj traumi ili genetskoj sklonosti) i sekundarnu (posljedica je oštećenja mozga ili pokušaja pri-lagodbe na stresne događaje) (5). Aleksitimija nije zaseban klinički entitet u okviru važećih dijagnostičkih priručnika (6,7). Stupanj njene ekspresije varira u različitim osoba, a mjerni instrument koji se najviše koristi je *Toronto Alexithymia Scale* (TAS-20) koji mjeri tri di-menzije: teškoće u identifikaciji i opisivanju osjećaja te ekster-nalizaciju mišljenja (8,9). Napravljena je i njegova verzija na hrvatskom jeziku uz validaciju u hrvatskoj populaciji – TAS-26 (10). Prevalencija aleksitimije u općoj populaciji kreće se oko 10 % (11). Podatci iz literature ukazuju na oprečna istraživanja s obzirom na spol i dob (12-14). Etiologija alek-sitimije je heterogena i još uvijek nedovoljno istražena. Dosadašnja istraživanja ukazuju na abnormalnosti u građi i funkciji određenih anatomskih struktura mozga uključenih u ela-boraciju i objedinjavanje misaono-afektivnih iskustava (15-17), genetsku predispoziciju (polimorfizmi za neurotropni faktor BDNF, dopaminski receptor i enzime njegova meta-bolizma te serotonininski receptor i transporter) (18-20) te na utjecaj psiholoških čimbenika. Za liječenje aleksitimije korisne su različite vrste psihoterapije (suportivna psihoterapija, ko-gnitivno-bihevioralna psihoterapija, individu-alna/grupna psihoterapija) te autogeni trening i *biofeedback* (22,23).

Lokus kontrole je pojam u okviru teorije so-cijalnog učenja, a jedna je dimenzija ličnosti, odnosno koncept povezan s percepcijom osobne odgovornosti pojedinca za različite ishode u životu (24,25). Može biti unutrašnji (osoba vjeruje da su ishodi povezani s njezi-

ternalized thinking process with no fantasies and symbolism (1-4). Alexithymia is classified into primary (which as a personality trait is formed in childhood as a result of infantile trauma or a genetic predisposition) and secondary (a conse-quence of brain trauma or attempts to cope with stressful events) (5). Alexithymia is not a separate clinical entity in terms of the current diagnostic manuals (6, 7). The degree of its expression varies in different individuals, and the instrument most widely used for its measurement is the Toronto Alexithymia Scale (TAS-20) which measures three dimensions: difficulty identifying and describing feelings, and externally oriented thinking (8, 9). A Croatian version has also been created with validation in the Croatian population – TAS-26 (10). The prevalence of alexithymia in the gener-al population is around 10% (11). Literature data point to conflicting studies with regard to gender and age (12-14). The etiology of alexithymia is heterogeneous and still insufficiently researched. Previous studies point to abnormalities in the structure and function of certain anatomical structures of the brain involved in the elaboration and unification of thought-affective experiences (15-17), genetic predisposition (polymorphisms for neurotropic factor BDNF, dopamine receptor and its metabolism enzymes, as well as serotonin receptor and transporter) (18-20), and the effect of psychological factors. Various types of psycho-therapy are useful in the treatment of alexithymia (supportive psychotherapy, cognitive-behavioral psychotherapy, individual/group psychotherapy), as well as autogenic training and biofeedback (22, 23).

The locus of control is a concept within the social learning theory, and constitutes one of the per-sonality dimensions, i.e. it is a concept associated with the perception of an individual's personal re-sponsibility for different outcomes in life (24, 25). It can be internal (the individual believes that the outcomes are associated with their behavior and decisions), external (the individual believes that the outcomes depend on chance, fate or signifi-cant others) or combined (different locus in dif-ferent spheres of life) (24, 26). In our country, the

nim ponašanjem i odlukama), vanjski (osoba vjeruje da ishodi ovise o slučajnosti, sudbini ili važnim drugima) ili kombinirani (različiti lokus u različitim sferama života) (24,26). Za potrebe mjerenja zdravstvenog lokusa kod nas se uglavnom koristi Upitnik za ispitivanje percipiranog izvora kontrole zdravlja ZLK-90 (27). Lokus kontrole zdravlja nedvojbeno utječe na obrasce zdravstvenih ponašanja koja se reflektiraju u očuvanju zdravlja ili pojavi bolesti, tijeku i ishodima liječenja. Većina istraživanja polazi od pretpostavke da je unutrašnji lokus kontrole povezan s poželjnim, a vanjski lokus kontrole s negativnim ishodima (29,30). Postoji niz studija koje su istraživale odnos aleksitimije i lokusa kontrole u općoj (31-33) i kliničkoj populaciji (34-36). Wise i suradnici (37) smatraju da je naizgled značajna pozitivna korelacija između aleksitimije i vanjskog lokusa kontrole zdravlja posredovana neuroticizmom, dok druge studije odnos tih dvaju fenomena ne dovode u pitanje (38).

Iz recentne literature razvidni su postojeći doprinosi razumijevanju povezanosti aleksitimije i anksioznih poremećaja (38-42). Značajke aleksitimije su nađene u 43,4 % anksioznih i 51,5 % depresivnih bolesnika (41). Aleksitimija se povezuje s težim simptomima, češćim komorbiditetima i funkcionalnim oštećenjima u okviru anksioznih poremećaja te u osoba s depresivnim simptomima (43,44).

Osobe sa značajkama aleksitimije zbog narušene interoceptivne svjesnosti naginju somatosenzornoj amplifikaciji pa uobičajene fizičke simptome emocionalne uzbuđenosti mogu tumačiti kao znak tjelesne bolesti i učestalo se medicinski pregledavati (46). Brojna istraživanja povezuju aleksitimiju i psihosomatske bolesti (arterijsku hipertenziju i upalne bolesti crijeva) (47-50). Učestaliju pojavu aleksitimije u osoba oboljelih od esencijalne arterijske hipertenzije podržali su rezultati niza istraživanja (46-51). Međutim, neki autori ukazuju na

Perceived Source of Health Control Questionnaire ZLK-90 is predominantly used for the purpose of measuring the health locus (27). The health locus of control undoubtedly affects the health-related behavioral patterns reflected in the maintenance of health or the occurrence of diseases, as well as the course and outcomes of treatment. Most of the research is based on the assumption that the internal locus of control is associated with desirable outcomes, while the external locus of control is associated with negative outcomes (29, 30). Numerous studies have researched the connection between alexithymia and the locus of control in the general (31-33) and clinical populations (34-36). Wise et al. (37) believe that the seemingly significant positive correlation between alexithymia and the external health locus of control is mediated by neuroticism, while other studies do not dispute the correlation between these two phenomena (38).

Recent literature clearly presents the existing contributions to the understanding of the connection between alexithymia and anxiety disorders (38-42). Characteristics of alexithymia were observed in 43.4% of patients with anxiety and 51.5% of patients with depression (41). Alexithymia is associated with more severe symptoms, more frequent comorbidities and functional impairments within anxiety disorders, and is observed in persons with depressive symptoms (43, 44).

Due to impaired interoceptive awareness, individuals displaying signs of alexithymia are prone to somatosensory amplification, therefore they may interpret common physical symptoms of emotional excitement as a sign of physical illness and may undergo frequent medical examinations (46). A connection between alexithymia and psychosomatic disorders (arterial hypertension and inflammatory bowel diseases) has been recorded in numerous studies (47-50). The results of a series of studies have confirmed that there is a higher incidence of alexithymia in patients suffering from essential arterial hypertension (46-51). Some authors, however, refer to a weak, almost non-existent association between alexithymia and blood pressure (52).

slabu, gotovo nikakvu povezanost aleksitimije i krvnog tlaka (52).

Češća pojavnost aleksitimije (79-81) i njezin negativan utjecaj na tijek, ishod bolesti i kvalitetu života bolesnika (54,55) utvrđeni su u osoba oboljelih od ulceroznog kolitisa. No, neka istraživanja nisu našla značajnu vezu aleksitimije s dužinom trajanja i težinom kliničke slike te bolesti (56,57). Prevalencija anksioznosti i depresije je visoka u osoba oboljelih od ulceroznog kolitisa (58). Pregledom recentne literature razvidne su brojne oprečne studije o uzročno-posljedičnoj vezi anksioznosti/depresije i ulceroznog kolitisa (59,60). No, ne nalaze se istraživanja koja anksioznost i depresiju promatraju u kontekstu osoba sa značajkama aleksitimije koje ujedno boluju od ulceroznog kolitisa.

## CILJEVI ISTRAŽIVANJA

Glavni cilj istraživanja bio je ispitati objektivne prediktore aleksitimije pri čemu su u razmatranje uzeti sljedeći parametri: lokus kontrole zdravlja, stupnjevi anksioznosti i depresivnosti te određena sociodemografska obilježja poput dobi, spola, stručne spreme i postojanja partnerske emotivne veze.

Prvi istraživački problem bio je ispitati odnose pojedinih prediktora aleksitimije sa stupnjem njezine izraženosti u pojedinim skupinama ispitanika. Sukladno tome, u skupini ispitanika s anksioznim (G1 skupina) i psihosomatskim (G2 skupina) poremećajima je ispitivana povezanost stupnja aleksitimije sa stupnjem anksioznosti, povezanost stupnja aleksitimije sa stupnjem depresivnosti te povezanost stupnja aleksitimije sa stupnjem izraženosti unutarnjeg ili vanjskog lokusa kontrole zdravlja. Drugi istraživački problem bio je ispitati stupanj aktivacije simpatikusa u obje ispitivane skupine (G1 i G2) mjerenjem pokazatelja kao što su arterijski tlak, frekvencija pulsa i frekvencija disanja.

A higher incidence of alexithymia (79-81) and its negative effects on the course and outcome of a disease, as well as the patient's quality of life (54, 55), have been observed in individuals suffering from ulcerative colitis. On the other hand, there are studies that have not found a significant correlation between alexithymia and the duration and severity of the clinical picture of this disease (56, 57). The prevalence of anxiety and depression is high in individuals suffering from ulcerative colitis (58). A review of recent literature reveals numerous conflicting studies examining the cause and effect relationship between anxiety/depression and ulcerative colitis (59, 60). However, no studies have been found that view anxiety and depression within the context of individuals displaying signs of alexithymia who are also suffering from ulcerative colitis.

## AIMS

The main aim of this study was to examine the objective predictors of alexithymia, taking into consideration the following parameters: the health locus of control, degrees of anxiety and depression, and certain sociodemographic characteristics such as age, gender, professional qualifications and the existence of an emotional connection between partners.

The first research problem was to examine the relationships between individual predictors of alexithymia and the degree of its expression in certain groups of respondents. Accordingly, in the groups of respondents with anxiety (group G1) and psychosomatic (group G2) disorders, we examined the connection between the degree of alexithymia and the degree of anxiety, the connection between the degree of alexithymia and the degree of depression, as well as the connection between the degree of alexithymia and the degree of expression of the internal or external health locus of control. Another research problem was to examine the degree of sympathetic nervous system activation in both test groups (G1 and G2) by

## HIPOTEZE ISTRAŽIVANJA

Temeljem kliničkih opažanja postavljene su sljedeće hipoteze:

1. Kod ispitanika s anksioznim poremećajima (G1 skupina) očekuje se niži stupanj aleksitimije u odnosu na ispitanike sa psihosomatskim poremećajima (G2 skupina).
2. Kod ispitanika s anksioznim poremećajima (G1 skupina) očekuje se unutrašnji lokus kontrole zdravlja, dok se kod ispitanika sa psihosomatskim poremećajima (G2 skupina) očekuje vanjski lokus kontrole zdravlja.
3. Kod ispitanika sa psihosomatskim poremećajima (G2 skupina) očekuje se jača aktivacija simpatikusa (porast arterijskog krvnog tlaka, frekvencije pulsa i frekvencije disanja) u odnosu na ispitanike s anksioznim poremećajima (G1 skupina).
4. Očekuje se da će se kao pozitivni prediktori aleksitimije pokazati vanjski lokus kontrole zdravlja, viši stupanj depresivnosti i viši stupanj anksioznosti, dok se kao negativni prediktori aleksitimije očekuju unutrašnji lokus kontrole zdravlja, niži stupanj depresivnosti i niži stupanj anksioznosti.

## ISPITANICI

U istraživanje je bilo uključeno 100 ispitanika koji su bili razdijeljeni u dvije skupine. G1 skupinu sačinjavali su ispitanici s anksioznim poremećajima ( $N=60$ ), a G2 skupinu ispitanici sa psihosomatskim poremećajima ( $N=40$ ).

Kriteriji uključivanja za obje skupine bili su životna dob od 20 do 65 godina, muškarci i žene te osobe koje mogu dati informirani pristanak. Kriteriji uključivanja za skupinu G1 i G2 razlikovali su se ovisno o postavljenoj dijagnozi prema klasifikaciji MKB 10: kriterij uključivanja za G1 skupinu bila je postavljena dijagnoza iz skupine anksioznih poremećaja: panični poremećaj, generalizirani anksiozni poremećaj,

measuring the indicators such as arterial blood pressure, pulse rate and respiratory rate.

## STUDY HYPOTHESES

Based on clinical observations, the following hypotheses were put forward:

1. Respondents suffering from anxiety disorders (group G1) are expected to have a lower degree of alexithymia compared to respondents suffering from psychosomatic disorders (group G2).
2. Respondents suffering from anxiety disorders (group G1) are expected to have an internal health locus of control, whereas respondents suffering from psychosomatic disorders (group G2) are expected to have an external health locus of control.
3. Respondents suffering from psychosomatic disorders (group G2) are expected to experience a stronger sympathetic nervous system activation (increase in arterial blood pressure, pulse rate and respiratory rate) compared to respondents suffering from anxiety disorders (group G1).
4. An external health locus of control, a higher degree of depression and a higher degree of anxiety are expected to be positive predictors of alexithymia, while an internal health locus of control, a lower degree of depression and a lower degree of anxiety are expected to be negative predictors of alexithymia.

## RESPONDENTS

A total of 100 respondents took part in the study, and they were divided into two groups. Group G1 included respondents suffering from anxiety disorders ( $N=60$ ), while group G2 included respondents suffering from psychosomatic disorders ( $N=40$ ).

Inclusion criteria for both groups included age between 20 and 65 years, both men or women, and individuals who are able to give informed consent. Inclusion criteria for groups G1 and G2 dif-



mješoviti anksiozni i depresivni poremećaj, dok je kriterij uključivanja za G2 skupinu bila jedna od dviju bolesti: esencijalna hipertenzija ili ulcerozni kolitis.

Kriteriji isključivanja za obje skupine bili su: osobe koje boluju od teških psihičkih poremećaja (psihoze, organski sumanutu poremećaj), dementne osobe, osobe koje su teško tjelesno kompromitirane u trenutku provođenja istraživanja (prema bodovnom sustavu Karnofsky).

## METODE

Istraživanje se provodilo u Kliničkom bolničkom centru Rijeka (KBC Rijeka), na Klinici za psihijatriju i Klinici za internu medicinu (lokaliteti Rijeka i Sušak), u razdoblju od listopada 2019. do ožujka 2020. godine kada je obustavljeno zbog pandemije virusa SARS-CoV-2. Podatke je prikupljao istraživač osobno i to primjenom klasične forme samoprocjenskih anketnih upitnika (papira i olovke) te mjerenjem tlaka, frekvencije pulsa i disanja.

Ispitanici koji su kontaktirani u okviru navedenih klinika bili su hospitalizirani ili su bili uključeni u dnevno-bolničke programe te ambulatne preglede.

Sudjelovanje u istraživanju bilo je isključivo dobrovoljno i provodilo se nakon svih pojašnjenja i potpisivanja Informiranog pristanka. Sudionici su bili informirani da u svakom trenutku mogu odustati od sudjelovanja u istraživanju.

Prije nego bi započeo s popunjavanjem upitnika, svakom je ispitaniku izmjeren tlak (manualnim tlakomjerom i stetoskopom) te frekvencija pulsa (pulsnim oksimetrom) i disanja (neposrednim opažanjem). Isti taj postupak ponovio bi se i nakon završetka popunjavanja upitnika. Maksimalno predviđeno vrijeme za susret s jednim ispitanikom bilo je sat i trideset minuta.

Istraživanje se provodilo u skladu s Osnovama dobre kliničke prakse. Osiguralo se poštivanje

fered depending on the set diagnosis according to the MKB-10 classification: the inclusion criterion for group G1 consisted of a diagnosis from the group of anxiety disorders: panic disorder, generalized anxiety disorder and mixed anxiety-depressive disorder, while the inclusion criterion for the G2 group consisted of one of two diseases: essential hypertension or ulcerative colitis.

The exclusion criteria for both groups were the following: individuals suffering from severe mental disorders (psychoses, organic delusional disorder), persons with dementia, and persons who were severely physically compromised at the time when the study was conducted (according to the Karnofsky Performance Scale).

## METHODS

The study was conducted at the Clinical Hospital Center Rijeka (CHC Rijeka), the Departments of Psychiatry and Internal Medicine (Rijeka and Sušak locations), in the period from October 2019 to March 2020, when it was suspended due to the SARS-CoV-2 pandemic. The data were personally collected by the researcher, using the classic form of self-assessment questionnaires (paper and pencil) and measuring the blood pressure, pulse rate and respiratory rate.

The respondents who were contacted within the above-mentioned departments were hospitalized or included in day-hospital programs and outpatient examinations.

Participation in the study was entirely voluntary, it was conducted after providing thorough explanations and upon signing the Informed Consent document. The participants were informed that they could withdraw from participating in the study at any moment.

The blood pressure (using a manual blood pressure monitor and stethoscope), pulse rate (using a pulse oximeter) and respiratory rate (by means of direct observation) of each respondent were measured before filling in the questionnaire. The same procedure was repeated after the question-

temeljnih bio/etičkih načela autonomnosti, neškodljivosti, dobročinstva i pravednosti, a sve sukladno Nürnberškom kodeksu i najnovijoj reviziji Helsinške deklaracije. Istraživanje je odobrilo Etičko povjerenstvo KBC-a Rijeka. Troškove istraživanja pokriveni su vlastitim sredstvima istraživača.

## INSTRUMENTARIJ

U svrhu istraživanja korišten je sljedeći instrumentarij: Sociodemografska anketa, Torontska ljestvica aleksitimije - 26, Ljestvica simptoma Hopkins - 25 i Upitnik za ispitivanje percipiranog izvora kontrole zdravlja. Za potrebe mjerenja tlaka koristio se manualni tlakomjer i stetoskop, srčana frekvencija mjerila se pulsним oksimetrom, a frekvencija disanja neposrednim opažanjem istraživača.

Opći upitnik naziva „Sociodemografska anketa”; konstruiran za potrebe ovoga rada, služio je prikupljanju podataka o dobi, spolu, bračnom/partnerskom statusu, obrazovanju i materijalnom statusu.

Torontska ljestvica aleksitimije (*Toronto alexithymia scale*, tj. TAS-26) je upitnik kojim se mjeri postojanje aleksitimije u pojedinaca (10). TAS-26 se sastoji od 26 stavki svrstanih u četiri facete (F): F1 - poteškoće u identifikaciji i razlikovanju emocija od tjelesnih osjeta, F2 - poteškoće opisivanja osjećaja, F3 - osiromašeno sanjarenje i F4 – eksteralizirano razmišljanje (14). Ispitanik odgovara zaokruživanjem brojeva u rasponu od 1 do 5, što znači: 1 „uopće se ne slažem”, 2 „djelomično se ne slažem”, 3 „niti se ne slažem, niti se slažem”, 4 „umjereno se slažem”; i 5 „jako se slažem” (10). Rezultat se dobije tako što se svakom odgovoru ispitanika dodijeli određeni broj bodova, nakon čega se svi bodovi zbrajaju. Maksimalna vrijednost koju je moguće postići na testu iznosi 130, a minimalna 26. Vrijednosti od 74 i više karakteristične su za sobe sa značajkama aleksitimije, dok vri-

naire had been filled in. The maximum allotted time for meeting one respondent was an hour and thirty minutes.

The study was conducted in accordance with the basics of good clinical practice. Compliance with the basic bio/ethical principles of autonomy, non-maleficence, beneficence and justice was ensured, all in accordance with the Nuremberg Code and the latest revision of the Declaration of Helsinki. The study was approved by the Ethics Committee of the CHC Rijeka. The costs of the study were covered from the researcher's own funds.

## INSTRUMENTS

The following instruments were used for research purposes: the Sociodemographic Survey, the Toronto Alexithymia Scale-26, the Hopkins Symptom Checklist-25 and the Perceived Source of Health Control Questionnaire. A manual blood pressure monitor and stethoscope were used for blood pressure measurement, heart rate was measured with a pulse oximeter, while respiratory rate was measured by direct observation of the researcher.

A general questionnaire entitled “Sociodemographic Survey”, constructed for the purposes of this study, was used for the collection of data regarding the age, gender, marital/partnership status, education and material status.

The Toronto Alexithymia Scale (TAS-26) is a questionnaire used to measure the existence of alexithymia in individuals (10). TAS-26 consists of 26 items grouped into four facets (F): F1 - difficulty to identify and distinguish between feelings and bodily sensations, F2 - difficulty to describe feelings, F3 - reduced daydreaming, and F4 - externally oriented thinking (14). The respondents replied to each item by circling numbers ranging from 1 to 5, with the following meanings: 1 “strongly disagree”, 2 “moderately disagree”, 3 “neither disagree nor agree”, 4 “moderately agree”, and 5 “strongly agree” (10). The result was obtained by assigning a specific amount of points to each response provided by the respondent, after which all the points were added up. The maximum value achievable in

jednosti od 62 i niže ukazuju na osobe bez tih značajki (20). Osim zbirno, rezultati se mogu rastaviti i promatrati u okviru triju podljestvica, tj. čestica: teškoće u prepoznavanju emocija, teškoće u njihovoj verbalizaciji i eksternalizirano mišljenje (61). U ovom istraživanju korišten je samo zbirni rezultat dobiven upitnikom.

Ljestvica simptoma Hopkins 25 je instrument koji se koristi u procjeni simptoma anksioznosti i depresije (62). Sastoji se od 25 izjavnih rečenica: prvi dio sadrži 10 rečenica koje ispituju simptome anksioznosti, a drugi dio 15 rečenica za simptome depresije (62). Za svaku izjavnu rečenicu ispitanik zaokružuje jedan od četiri moguća odgovora („uopće ne”, „malo”; „prilično”; ili „jako”) kojim označuje koliko se pojedina tvrdnja odnosi na njega. Potom se odgovori ocjenjuju bodovima od 1 do 4 (1 bod za odgovor „uopće ne”, 2 „malo”, 3 „prilično” i 4 boda za „jako”) i izračunavaju dvije ocjene: ukupni rezultat je prosjek svih 25 stavki, dok je ocjena anksioznosti i depresije prosjek od 15 stavki anksioznosti, tj. depresije (62).

Upitnik za ispitivanje percipiranog izvora kontrole zdravlja (ZLK-90-2) služi za ispitivanje stavova o vlastitom zdravlju i čimbenicima koji na njega djeluju (63). Upitnik se sastoji od 4 ljestvice i 32 pitanja (po 8 u jednoj ljestvici) na koja ispitanici odgovaraju označavanjem jednog od četiri ponuđena odgovora („u potpunosti vjerujem”, „uglavnom vjerujem”, „uglavnom ne vjerujem”, „uopće ne vjerujem”) koji se vrednuju bodovima od 1 do 4 (63). Tri ljestvice ispituju eksternalni/vanjski lokus kontrole, tj. vjerovanja ispitanika o pojedinim vanjskim faktorima koji potencijalno mogu djelovati na zdravlje: 1. utjecaj važnih osoba kao što su zdravstveno osoblje, obitelj, prijatelji, mediji, 2. utjecaj slučajnosti, sudbine, više sile ili Boga i 3. utjecaj vanjskih čimbenika i situacija (63). Četvrta ljestvica ispituje internalni/unutrašnji lokus kontrole, tj. vjerovanja o vlastitim čimbenicima o kojima može ovisiti zdravlje (npr. stavovi spram zdravstveno odgo-

the test was 130 points, while the minimum value was 26. Values of 74 and above are characteristic of individuals with features of alexithymia, while values of 62 and below indicate individuals without such features (20). In addition to the aggregate, the results can be broken down into three subscales, i.e. items: difficulty to identify feelings, difficulty to describe feelings, and externally oriented thinking (61). Only the aggregate results obtained via the questionnaire were used in this study.

The Hopkins Symptom Checklist-25 is an instrument used for the evaluation of anxiety and depression symptoms (62). It includes 25 statements: the first part consists of 10 statements assessing anxiety symptoms, while the second part consists of 15 statements relating to depressive symptoms (62). The respondents circled one of the four possible answers relating to each statement (“not at all,” “a little,” “quite a bit,” or “extremely”), indicating the extent to which a particular statement applied to them. The responses were then rated with points from 1 to 4 (1 point for “not at all”, 2 points for “a little”, 3 points for “quite a bit” and 4 points for “extremely”) and two scores were calculated: the total score was the average of all 25 items, while the anxiety and depression score was the average of the 15 anxiety, i.e. depression items (62).

The Perceived Source of Health Control Questionnaire (ZLK-90-2) is used for assessing the attitudes towards one’s own health and the factors influencing it (63). The questionnaire consists of four scales and 32 questions (eight in each scale) and the respondents had to select one of the four offered answers (“I completely believe”, “I mostly believe”, “I mostly do not believe”, “I do not believe at all”) which were scored with points from 1 to 4 (63). Three scales assess the external locus of control, i.e. the extent to which the respondents believe certain external factors could potentially affect their health: 1. the influence of important individuals such as healthcare professionals, family, friends, the media, 2. the influence of chance, fate, a higher power or God, and 3. the influence of external factors and situations (63). The fourth scale assesses the internal locus of control, i.e. the beliefs regarding one’s own factors which could

vornog ponašanja, sistematskih pregleda, redovitih kontrola liječnika, prehrane i sl.) (63). Svaka se ljestvica boduje posebno, a rezultat se interpretira kao izraženost unutrašnjih (jedna ljestvica) i vanjskih faktora (zbroj preostale tri ljestvice) (63). Ispitanici zaokružuju jedan od predloženih odgovora koji reflektira njihov stupanj vjerovanja u pojedinu tvrdnju. Sukladno odgovoru dodjeljuje se od jedan do četiri boda, a rezultat se izračunava zasebno za sve ljestvice kao zbroj bodova (63). Teorijski raspon rezultata za internalnu, tj. I-ljestvicu iznosi od 8 do 32, a za eksternalne ljestvice zbirno, tj. E-ljestvicu od 24 do 96.

## STATISTIČKE METODE

Sakupljeni podaci su statistički obrađeni pomoću statističkog programa Statistica (IBM). Pri analizi skupina ispitanika korištene su osnovne deskriptivne metode te su prikazane aritmetička sredina ( $\bar{X}$ ), standardna devijacija (SD) ili broj (N) i postotak (%) pojedinih odgovora ovisno o mjernoj ljestvici. Normalnosti raspodjele podataka za pojedinu skupinu provjerene su Kolmogorov-Smirnovljevim testom, te je dobivena normalna raspodjela za sve varijable osim za ljestvicu depresivnosti u skupini G2. Za ispitivanje razlika između skupina korišten je t-test ili hi-kvadrat ovisno o mjernoj ljestvici. Za varijablu depresivnost je uz t-test primijenjen i Mann-Whitneyev test. Međutim oba testa pokazuju podjednaku značajnost, te su prikazane vrijednosti za t-test. T-test za zavisne uzorke primijenjen je za usporedbu rezultata na podljestvicama (unutrašnjeg i vanjskog) lokusa kontrole unutar svake skupine (G1 i G2) zasebno kako bi se utvrdilo koji se lokus kontrole više koristi u pojedinoj skupini te je li razlika rezultata na promatrane dvije ljestvice unutar jedne te iste skupine ispitanika statistički značajna. Za ispitivanje povezanosti između varijabli korišten je Pearsonov koeficijent korelacije, odnosno Spearmanov koeficijent za

influence health (e.g. attitudes towards responsible health behavior, physical examinations, regular doctor check-ups, nutrition etc.) (63). The points from each scale were counted separately, and the result was interpreted as the expression of internal (one scale) and external factors (sum of the remaining three scales) (63). The respondents circled one of the suggested answers, which reflected the degree to which they believed in a particular statement. In line with the answer, one to four points were assigned, and the results were calculated separately for all scales as the sum of points (63). The theoretical range of results for the internal, i.e. I-scale was between 8 and 32, while for the external scales it was aggregate, i.e. for the E-scale it was between 24 and 96.

## STATISTICAL METHODS

The obtained data were statistically processed using the statistical program Statistica (IBM). Basic descriptive methods were used for the analysis of respondent groups, and the arithmetic mean ( $\bar{X}$ ), standard deviation (SD) or number (N) and percentage (%) of individual answers depending on the measuring scale, were presented. The normality of data distribution for each group was checked using the Kolmogorov-Smirnov test, and normal distribution was obtained for all variables except for the depression scale in group G2. The t-test or the chi-square test were used to examine the differences between the groups, depending on the measuring scale. In addition to the t-test, the Mann-Whitney test was also used for the depression variable. Both tests, however, showed equal significance and the t-test values were presented. The t-test for dependent samples was applied for the purpose of comparing the results on the (internal and external) locus of control subscales within each group (G1 and G2) separately, in order to determine which locus of control is used more in which group and whether the difference in results in the two observed scales within one and the same group of respondents is statistically significant. The Pearson correlation coefficient was used for the purpose of assessing the correlation between

ispitivanje povezanosti sa spolom, partnerskim statusom i stručnom spremom.

Za ispitivanje doprinosa prediktornih varijabli u objašnjenju varijance aleksitimije učinjena je hijerarhijska regresijska analiza pri čemu je ukupni rezultat na ljestvici TAS kriterijska varijabla. Kako bi kontrolirali kovarijantne varijable, u prvom koraku/modelu uključene su sociodemografske varijable (dob, spol, stručna sprema, partnerski status), u drugom koraku/modelu uvrštene su varijable zdravstvenog lokusa kontrole, a u trećem koraku/modelu depresivnost i anksioznost. Razina značajnosti određena je na 5 %.

Tekst rada obrađen je u programu Word, Microsoft Office 2019.

the variables, while the Spearman coefficient was used for assessing the correlation with gender, partnership status and professional qualifications.

Hierarchical regression analysis was carried out for the purpose of examining the contribution of predictor variables in the explanation of alexithymia variance, whereby the total score on the TAS scale was a criterion variable. In order to control the covariate variables, the sociodemographic variables (age, gender, professional qualifications, partnership status) were included in the first step/model, the health locus of control variables were included in the second step/model, and depression and anxiety were included in the third step/model. The materiality level was set to 5%.

The text of the paper was processed in the program Word, Microsoft Office 2019.

## REZULTATI ISTRAŽIVANJA

### Sociodemografska obilježja ispitanika

U istraživanju je ukupno sudjelovalo 100 ispitanika prosječne dobi od 49,2 godine od čega najmlađi ispitanik ima 21, a najstariji 65 godina. U ukupnom uzorku 62 ih je ženskog spola, većina ima srednjoškolsko obrazovanje (64 %) i većina je udana/oženjena (59 %). Njih 60 boluje od nekog od anksioznih, a 40 od nekog od psihosomatskih poremećaja. Sociodemografska obilježja za ukupan uzorak te prema ispitnoj skupini prikazana su u tablici 1.

Prema podacima prikazanim u tablici, vidljivo je da se skupine ispitanika statistički značajno razlikuju s obzirom na dob i s obzirom na bračni status. Ispitanici koji boluju od anksioznih poremećaja u prosjeku imaju 46,5 godina i šest su godina mlađi od ispitanika koji boluju od psihosomatskih poremećaja koji u prosjeku imaju 53,2 godine. Ispitanici koji boluju od psihosomatskih poremećaja statistički su značajno češće u braku ili izvanbračnoj zajednici u odnosu na oboljele od anksioznih poremećaja.

## STUDY RESULTS

### Sociodemographic characteristics of respondents

A total of 100 respondents with the average age of 49.2 years took part in the study, wherein the youngest respondent was 21 and the oldest was 65 years old. In the total sample, 62 respondents were female, most had secondary school education (64%) and the majority were married (59%). A total of 60 respondents suffered from an anxiety disorder, while 40 suffered from a psychosomatic disorder. The sociodemographic characteristics of the total sample, as well as according to the test groups, are presented in Table 1.

It can be observed from the data presented in the table that the groups of respondents significantly differ in terms of age and marital status. The average age of respondents suffering from anxiety disorders was 46.5, and they were six years younger than the respondents suffering from psychosomatic disorders, who were on average 53.2 years old. The respondents suffering from psychosomatic disorders were statistically significantly more likely to be married or in an extramarital relationship, compared to those suffering from anxiety disorders.

**TABLICA 1.** Sociodemografske karakteristike cjelokupnog uzorka te usporedba između skupina (G1 = skupina s anksioznim poremećajem, G2 = skupina sa psihosomatskim poremećajem)

**TABLE 1.** Sociodemographic characteristics of the total sample and comparison between groups (G1 = group with anxiety disorder, G2 = group with psychosomatic disorder)

	Ukupno / Total n=100	G1 n=60	G2 n=40		
	X (SD)	X (SD)	X (SD)	t	p
<b>Dob / Age</b>	49,2 (12,34)	46,5 (11,54)	53,2 (12,52)	-2,762	0,007
	N (%)	N (%)	N (%)	$\chi^2$	P
<b>SPOL / GENDER</b>					
– Muški / Male	38 (38 %)	21 (55,3 %)	17 (44,7 %)	8,152	0,004
– Ženski / Female	62 (62 %)	38 (61,3 %)	24 (38,7 %)		
<b>STRUČNA SPREMA / PROFESSIONAL QUALIFICATIONS</b>					
– Niža stručna sprema / Lower professional qualification	10 (10 %)	7 (11,7 %)	3 (7,5 %)	4,651	0,098
– Srednja stručna sprema / Secondary professional qualification	64 (64 %)	42 (70 %)	22 (55 %)		
– Viša i visoka stručna sprema / Higher professional qualification or university degree	26 (26 %)	11 (18,3 %)	15 (37,5 %)		
<b>BRAČNI STATUS / MARITAL STATUS</b>					
– U braku/izvanbračnoj zajednici / Married/in an extramarital relationship	63 (63 %)	30 (50 %)	33 (82,5 %)		
– Neudana/neoženjen / Single	14 (14 %)	12 (20 %)	2 (5 %)		
– Razveden / Divorced	14 (14 %)	12 (20 %)	2 (5 %)	12,113	0,017
– Udovac / Widowed	5 (5 %)	3 (5 %)	2 (5 %)		
– Ostalo / Other	4 (4 %)	3 (5 %)	1 (2,5%)		

Izvor: izrada autora / Source: Author's calculation

## Usporedba ispitanih skupina obzirom na stupanj aleksitimije, anksioznosti, depresivnosti i lokus kontrole zdravlja

Skupine su uspoređene u odnosu na stupanj aleksitimije, anksioznosti, depresivnosti, te u odnosu na zdravstveni lokus kontrole. Prosječne vrijednosti za ispitne skupine G1 i G2, te njihova usporedba prikazani su u tablici 2.

Ispitanici koji boluju od anksioznih poremećaja imaju statistički značajno veći stupanj aleksitimije, anksioznosti i depresivnosti u odnosu na ispitanike sa psihosomatskim poremećajima. Oboljeli od anksioznih i od psihosomatskih bolesti ne razlikuju se značajno u unutrašnjem zdravstvenom lokusu kontrole, međutim razlika je značajna u vanjskom zdravstvenom lokusu kontrole. Naime, oboljeli od

## Comparison of test groups with regard to the degree of alexithymia, anxiety, depression and health locus of control

The groups were compared based on the degree of alexithymia, anxiety, depression and the health locus of control. The average values of test groups G1 and G2, as well as their comparison, are presented in Table 2.

Respondents suffering from anxiety disorders have a statistically significantly higher degree of alexithymia, anxiety and depression compared to the respondents with psychosomatic disorders. There are no significant differences between those suffering from anxiety and psychosomatic disorders in terms of the internal health locus of control, however, the difference in their external health locus of control is significant. Namely,

**TABLICA 2.** Usporedba ispitanih skupina s obzirom na stupanj aleksitimije, anksioznosti, depresivnosti i na zdravstveni lokus kontrole (G1 = skupina s anksioznim poremećajem, G2 = skupina sa psihosomatskim poremećajem)**TABLE 2.** Comparison of the test groups according to the degree of alexithymia, anxiety, depression and health locus of control (G1 = group with anxiety disorder, G2 = group with psychosomatic disorder)

	G1 n=60		G2 n=40		t	p
	raspon / range	X (SD)	raspon / range	X (SD)		
<b>ALEKSITIMIJA / ALEXITHYMIA</b>	46-101	71,3 (13,05)	34-83	62,7 (10,72)	3,420	0,001
<b>ANKSIOZNOST / ANXIETY</b>	1-3,9	2,1 (0,66)	1-3,7	1,67 (0,56)	3,634	<0,001
<b>DEPRESIVNOST / DEPRESSION</b>	1-3,53	2,1 (0,66)	1-3,3	1,7 (0,58)	3,205	0,002
<b>LOKUS KONTROLE ZDRAVLJA / HEALTH LOCUS OF CONTROL</b>						
<b>Unutrašnji / Internal</b>	18-27	20,9 (1,59)	18-24	21 (1,42)	-0,241	0,810
<b>Vanjski / External</b>	45-67	56,2 (4,68)	49-71	58,8 (4,52)	-2,784	0,006

Izvor: izrada autora / Source: Author's calculation

psihosomatskih poremećaja postižu veći rezultat na ljestvici vanjskog zdravstvenog lokusa kontrole.

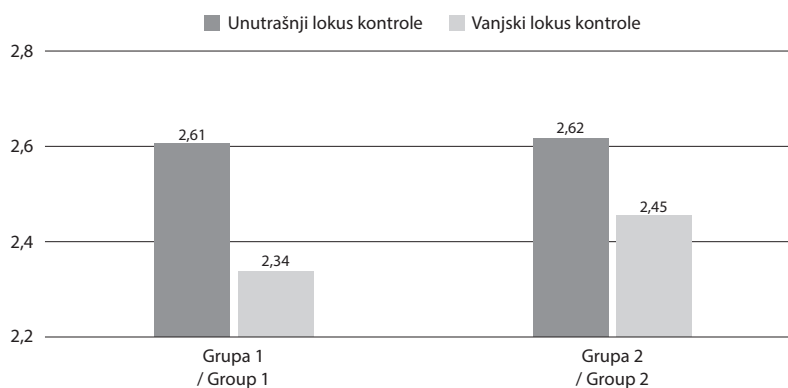
S ciljem otkrivanja predominantnog lokusa kontrole unutar ispitanih skupina istražen je odnos između prosječnih vrijednosti dobivenih na podljestvicama unutrašnjeg i vanjskog lokusa kontrole (slika 1).

Za potrebe usporedbe, ukupan skor dobiven na svakoj podljestvici podijeljen je s brojem čestica na podljestvici. Maksimalni mogući rezultat na svakoj ljestvici je 4. Prosječne vrijednosti prikazane su na slici 1. Ispitanici u obje skupine postižu veći rezultat na ljestvici unutrašnjeg u odnosu na vanjski lokus kontrole. Obje skupine ispitanika imaju prosječan rezultat od 2,60 na unutrašnjem lokusu kontrole. Na ljestvici vanjskog lokusa oboljeli od anksioznih poremećaja postižu nešto niži prosječni rezultat od 2,34 nego oboljeli od psihosomatskih poremećaja s rezultatom 2,45. Premda su razlike unutar skupina u postignutim rezultatima male, one su ujedno i statistički značajne, tj. i ispitanici oboljeli od anksioznih poremećaja ( $t=7,561$ ,  $p$  manji od 0,001) i oboljeli od psihosomatskih poremećaja ( $t=4,456$ ,  $p$  manji od 0,001) postižu značajno veći rezultat na ljestvici internalnog

those suffering from psychosomatic disorders achieve higher scores on the external health locus of control scale.

In order to discover the predominant locus of control within the test groups, the relationship between average values obtained in the internal and external locus of control subscales was explored (Figure 1).

For comparison purposes, the total score obtained in each subscale was divided by the number of items in the subscale. The maximum achievable result in each scale was 4. The average values are presented in Figure 1. Respondents in both groups achieved higher results on the internal locus of control scale compared to the external locus of control. Both groups of respondents achieved an average score of 2.60 in terms of the internal locus of control. As regards the external locus of control scale, those suffering from anxiety disorders achieved a somewhat lower average result of 2.34, compared to those suffering from psychosomatic disorders, who achieved the result of 2.45. Although differences within the groups in terms of the results achieved were slight, they were also statistically relevant, i.e. the respondents suffering from anxiety disorders ( $t=7.561$ ,  $p$  lower than 0.001) and those suffering from psychosomatic disorders ( $t=4.456$ ,  $p$  lower than 0,001) achieved significantly higher scores on



**SLIKA 1.** Prosječne vrijednosti na podljestvicama unutrašnjeg i vanjskog lokusa kontrole prema ispitanim skupinama (Grupa 1 = skupina s anksioznim poremećajem, Grupa 2 = skupina sa psihosomatskim poremećajem). Izvor: izrada autora

**FIGURE 1.** Average values on internal and external locus of control subscales per groups tested (Group 1 = group with anxiety disorder, Group 2 = group with psychosomatic disorder). Source: Author's calculation

lokusa kontrole. Kako bismo ispitali postoje li statistički značajne razlike u vrijednostima na podljestvicama unutar skupina primijenjeni su t zavisni t-testovi.

## Usporedba ispitanih skupina s obzirom na mjere aktivacije simpatikusa

Kako bi se odgovorilo na drugi istraživački problem, u tablici 3. su prikazane prosječne vrijednosti mjera aktivacije simpatikusa, te usporedba između skupina i mjerenja.

Prema ispitivanim mjerama aktivacije simpatikusa ispitne skupine se statistički značajno razlikuju samo u frekvenciji pulsa na prvom mjerenju (tablica 3). Ispitanici koji boluju od anksioznih poremećaja su u prvom mjerenju imali značajno veću frekvenciju srca u odnosu na oboljele od psihosomatskih poremećaja. Ispitano je postoji li značajna razlika u mjerama aktivacije simpatikusa između dva mjerenja unutar pojedine ispitne skupine. Oboljeli od anksioznih poremećaja su na drugom mjerenju imali značajno manji sistolički tlak i frekvenciju pulsa. Kod oboljelih od psihosomatskih poremećaja nije dobivena značajna razlika u mjerama aktivacije simpatikusa između dva mjerenja.

the internal locus of control scale. In order to examine whether there are statistically significant differences in subscale values within groups, t-dependent t-tests were applied.

## Comparison of test groups according to the measures of sympathetic nervous system activation

In order to provide an answer to the second research problem, the average values of measures of sympathetic nervous system activation are presented in Table 3, as well as a comparison of the groups and measurements.

According to the tested measures of sympathetic nervous system activation, there is a statistically significant difference between the test groups only in terms of pulse rate during the first measurement (Table 3). The respondents suffering from anxiety disorders had a considerably higher heart rate during the first measurement, compared to those suffering from psychosomatic disorders. Assessments were made to observe whether there is a significant difference in the measures of sympathetic nervous system activation between the two measurements within an individual test group. Patients suffering from anxiety disorders had a considerably lower systolic blood pressure and pulse rate in the second



**TABLICA 3.** Usporedba ispitanih skupina izabranim mjerama aktivacije simpatikusa (G1 = skupina s anksioznim poremećajem, G2 = skupina sa psihosomatskim poremećajem)

**TABLE 3.** Comparison of test groups with according to the selected measures of sympathetic nervous system activation (G1 = group with anxiety disorder, G2 = group with psychosomatic disorder)

	G1 n=60	G2 n=40		
	X (SD)	X (SD)	t	P
<b>1. MJERENJE / 1st MEASUREMENT</b>				
Sistolički tlak / Systolic blood pressure	127,9 (23,40)	132,3 (21,18)	-0,942	0,349
Dijastolički tlak / Diastolic blood pressure	81,8 (12,45)	80,6 (11,9)	0,471	0,639
Frekvencija pulsa / Pulse rate	79,4 (13,90)	72,85 (12,14)	2,407	0,018
Frekvencija disanja / Respiratory rate	16,60 (4,32)	17,50 (4,83)	-0,973	0,333
<b>2. MJERENJE / 2nd MEASUREMENT</b>				
Sistolički tlak / Systolic blood pressure	124,5 (23,70)	132,4 (19,92)	-1,743	0,084
Dijastolički tlak / Diastolic blood pressure	81,08 (12,25)	82,5 (9,86)	-0,611	0,543
Frekvencija pulsa / Pulse rate	77,6 (12,15)	73,3 (12,58)	-1,321	0,190
Frekvencija disanja / Respiratory rate	16,1 (4,13)	16,7 (4,59)	1,713	0,090
Sistolički tlak* / Systolic blood pressure*	t=2,912; p=0,005	t=-0,090; p=0,929		
Dijastolički tlak* / Diastolic blood pressure*	t=0,970; p=0,336	t=-1,512; p=0,139		
Puls* / Pulse*	t=2,052; p=0,045	t=0,685; p=0,497		
Disanje* / Respiration*	t=1,532; p=0,131	t=1,637; p=0,110		

\* t-test između prvog i drugog mjerenja unutar skupine / t-test between the first and second measurement within the group  
Izvor: izrada autora / Source: Author's calculation

## Korelacije ispitivanih varijabli

U tablici 4. prikazani su koeficijenti korelacija između ispitivanih varijabli na ukupnom uzorku. Aleksitimija je statistički značajno pozitivno povezana s anksioznosti i depresijom te negativno povezana s dobi i stručnom spremom. Ispitanici koji imaju veći rezultat na ljestvici aleksitimije ujedno imaju i veći rezultat na ljestvici anksioznosti i depresivnosti te su mlađe životne dobi i niže stručne spreme. Unutrašnji lokus zdravstvene kontrole je u statistički značajnoj negativnoj korelaciji s partnerskim statusom, odnosno ispitanici koji imaju veći stupanj unutrašnjeg lokusa kontrole ujedno su vjerojatnije u vezi. Vanjski lokus kontrole statistički je značajno povezan s depresivnošću, dobi i stručnom spremom. Ispitanici s većim vanjskim lokusom kontrole su vjerojatnije manje depresivni, mlađe životne dobi i niže stručne spreme. Anksioznost je u statistički značajnoj pozitivnoj

measurement. No significant difference was observed among the patients suffering from psychosomatic disorders in terms of measures of sympathetic nervous system activation between the two measurements.

## Correlations of the variables examined

The correlation coefficients of the variables examined on the total sample are presented in Table 4. Alexithymia has a statistically significant positive correlation with anxiety and depression, and a negative correlation with age and professional qualifications. The respondents who achieved higher scores on the alexithymia scale also achieved higher scores on the anxiety and depression scale, and were younger in age and had lower professional qualifications. There was a statistically significant negative correlation between the internal health locus of control and the partnership

**TABLICA 4.** Koeficijenti korelacije ispitivanih varijabli**TABLE 4.** Correlation coefficients of the variables examined

		2	3	4	5	6	7	8	9
1	Aleksitimija / Alexithymia	-,06	,13	,56**	,52**	-,20*	-,21*	-,12	,03
2	ZLK unutrašnji / HLC internal		,04	-,06	,06	,19	-,10	-,01	-,23*
3	ZLK vanjski / HLC external			-,19	-,25*	-,27**	-,23*	,15	-,13
4	Anksioznost / Anxiety				,72**	-,23*	-,02	-,19	-,04
5	Depresija / Depression					-,21*	,08	-,23*	,13
6	Dob / Age						-,20*	,02	-,36**
7	Stručna sprema / Professional qualifications							-,01	,01
8	Spol / Gender								,08
9	Partnerska veza / Partnership status								

\* $p < 0,05$ ; \*\* $p < 0,01$ 

Izvor: izrada autora / Source: Author's calculation

korelaciji s depresijom i negativnoj korelaciji s dobi. Dobiveni rezultati u prilog su činjenici da ispitanici s visokim rezultatom na ljestici anksioznosti postižu i visok rezultat na ljestici depresivnosti, te da oni koji postižu visok rezultat na ljestvici anksioznosti su ujedno i mlađi ispitanici. Depresivnost je statistički značajno negativno povezana s dobi. Mlađi ispitanici češće postižu viši rezultat na ljestvici depresivnosti. Dob ispitanika je statistički značajno povezana sa stručnom spremom i partnerskim statusom. Stariji ispitanici vjerojatnije imaju nižu stručnu spremu i rjeđe su u vezi.

## Hijerarhijska regresijska analiza za razinu aleksitimije

Kako bimo ispitali objektivne pokazatelje aleksitimije, izračunata je hijerarhijska regresijska analiza na ukupnom uzorku (tablica 5). Putem hijerarhijske regresijske analize kontroliran je učinak dobi i spola po kojoj se ispitanici dviju skupina statistički značajno razlikuju. U prvom koraku su uvrštena sociodemografska obilježja kao što su dob, spol, stručna sprema i partnerska veza koja je određena kao „u vezi”; ili „nije u vezi”. U drugom koraku uvršteni su unutrašnji i vanjski lokus kontrole, te u posljednjem trećem koraku anksioznost i depresivnost. Prvi model koji uključuje sociodemografska obilježja objaš-

status, that is, the respondents who had a higher degree of internal locus of control were also more likely to be involved in a relationship. There was a statistically significant correlation between the external locus of control and depression, age and professional qualifications. Respondents with a higher external locus of control were more likely to be less depressed, younger and with lower professional qualifications. Anxiety had a statistically significant positive correlation with depression, and a negative correlation with age. The obtained results supported the fact that respondents with high scores on the anxiety scale also achieved high scores on the depression scale, while those who achieved high scores on the anxiety scale were also of a younger age. There was a statistically significant negative correlation between depression and age. Younger respondents more often achieved higher scores on the depression scale. The age of respondents had a statistically significant correlation with professional qualifications and partnership status. Older respondents were more likely to have lower professional qualifications and were less likely to be in a relationship.

## Hierarchical regression analysis for determining alexithymia levels

A hierarchical regression analysis was performed on the total sample (Table 5) in order to examine the objective indicators of alexithymia. Hierarchi-

**TABLICA 5.** Hijerarhijska regresijska analiza za razinu aleksitimije na ukupnom uzorku**TABLE 5.** Hierarchical regression analysis for alexithymia levels in the total sample

	1. KORAK / 1st STEP		2. KORAK / 2nd STEP		3. KORAK / 3rd STEP	
	B	B	B	$\beta$	B	B
Dob / Age	-0,26	-0,25*	-0,29	-0,28*	-0,17	-0,17
Spol / Gender	-2,9	-0,11*	-3,57	-0,14	-0,02	-0,00
Stručna sprema / Professional qualifications	-3,14	-0,22*	-2,72	-0,19	-3,12	-0,21**
Partnerska veza / Partnership status	-1,51	-,06	-1,49	-0,06	-2,27	-0,09
ZLK unutrašnji / HLC internal			-0,44	-0,05	-0,77	-0,09
ZLK vanjski / HLC external			0,44	0,16	0,69	0,26**
Depresivnost / Depression					7,50	0,39**
Anksioznost / Anxiety					5,74	0,30*
R <sup>2</sup>	0,10	df1=4	0,13	df1=2	0,47	df1=2
F	2,57*	df2=94	2,24	df2=92	10,02**	df2=90
$\Delta R^2$			0,03		0,34	
$\Delta F$			1,52		29,22	

Izvor: izrada autora / Source: Author's calculation

njava 10 % varijance aleksitimije pri čemu je statistički značajan utjecaj dobi i stručne spreme. Drugi model objašnjava 13 % varijance aleksitimije pri čemu inkrementalna vrijednost ( $\Delta R^2 = 0,03$ ) ukazuje da dodavanjem (unutrašnjeg i vanjskog) lokusa kontrole nije postignut značajniji doprinos dodatnom objašnjenju varijance aleksitimije u odnosu na prvi korak. Tek je u trećem koraku dodavanjem dodatnih varijabli anksioznosti i depresivnosti postignut značajniji doprinos njezinom objašnjenju ( $\Delta R^2 = 0,34$ ), tj. objašnjeno je ukupno 47 % varijance pri čemu statistički značajan individualan doprinos objašnjenju aleksitimije imaju stručna sprema, anksioznost, depresivnost i vanjski lokus kontrole zdravlja. Dakle, ispitanici koji imaju nižu stručnu spremu, viši stupanj anksioznosti i depresivnosti te veći rezultat na vanjskom lokusu kontrole zdravlja imaju i veći stupanj aleksitimije.

## DISKUSIJA

Rezultati istraživanja pokazali su da skupina ispitanika s anksioznim poremećajima (G1) u prosjeku postiže viši rezultat na ljestvici alek-

cal regression analysis was performed for the purpose of controlling the effects of age and gender, the aspects in which the two groups had significant differences. Sociodemographic characteristics such as age, gender, professional qualifications and partnership status, which was expressed as “in a relationship” or “not in a relationship”, were included in the first step. The internal and external locus of control were included in the second step, while anxiety and depression were included in the third and final step. The first model, which includes sociodemographic characteristics, explains 10% of alexithymia variance, whereby age and professional qualifications have a statistically significant influence. The second model explains 13% of alexithymia variance, whereby the incremental value ( $\Delta R^2 = 0.03$ ) indicates that by adding a locus of control (internal and external) no significant contribution was made which would provide an additional explanation of alexithymia variance when compared to the first step. A more significant contribution to its explanation ( $\Delta R^2 = 0.34$ ) was achieved only in the third step by adding the additional variables of anxiety and depression, i.e. a total of 47% of variance was explained and professional qualifications, anxiety, depression and external locus of control had a statistically significant contribution to the explanation

sitimije TAS-26 nego li (G2) skupina ispitanika sa psihosomatskim poremećajima. Sukladno tumačenju rezultata ljestvice TAS-26 (20), jasno je da se ispitanici obje ispitivane skupine u prosjeku nalaze u graničnoj kategoriji iskazujući samo neke osobine aleksitimije, time da G1 skupina postiže statistički značajno više vrijednosti nego G2 skupina. Takvi rezultati nisu u skladu s prvom postavljenom hipotezom koja je pretpostavila upravo suprotno, tj. veći stupanj aleksitimije u skupini G2. Dosađanja istraživanja već su potvrdila da među oboljelima od anksioznih poremećaja postoji velik udio onih koji ujedno iskazuju značajke aleksitimije (41,27) te da postoji mogućnost sekundarnog javljanja aleksitimije kao posljedice tih poremećaja (28). Ispitanici s anksioznim poremećajima su u istraživanju Yildirim i suradnika (41), te Onur i suradnika (64) na ljestvici TAS-20 također u prosjeku postizali granične rezultate. No, suprotno očekivanju, viši stupanj aleksitimije dobiven je u skupini bolesnika s anksioznim poremećajima. Pretragom recentne literature nije nađen niti jedan rad koji istražuje i objašnjava postojanje predmetnih razlika. Međutim, posrednim zaključivanjem moguće je doći do potencijalnog odgovora, koji se krije u odnosu između aleksitimije te anksioznosti i depresivnosti. Upravo se u okviru prvog istraživačkog problema teži ispitati povezanost aleksitimije sa stupnjem anksioznosti i depresivnosti. Naime, G1 skupina (s višim rezultatom na ljestvici TAS-26) pokazala je identične stupnjeve anksioznosti i depresivnosti koji su viši u odnosu na rezultate koje su postigli ispitanici iz skupine G2. Li i suradnici (43) navode kako je prema nekim longitudinalnim studijama ublažavanje simptoma anksioznosti i depresije rezultiralo manje izraženim stupnjem aleksitimije. Iz navedenog se može zaključiti da izraženost simptoma anksioznosti i depresivnosti pozitivno korelira s izraženošću stupnja aleksitimije. U ovom istraživanju spomenute psihološke dimenzije statistički značajno visoko pozitivno

of alexithymia. Therefore, the respondents with lower professional qualifications, a higher degree of anxiety and depression, and higher scores in terms of external health locus of control, also had a higher degree of alexithymia.

## DISCUSSION

The results of the study have shown that the group of respondents suffering from anxiety disorders (G1) had a higher average score on the alexithymia scale TAS-26 compared to the (G2) group of respondents suffering from psychosomatic disorders. In accordance with the interpretation of the results obtained from the TAS-26 scale (20), it is clear that on average the respondents from both test groups were in the borderline category, presenting only some symptoms of alexithymia, with group G1 also achieving statistically significantly higher values than group G2. Such results are inconsistent with the first hypothesis, which assumes exactly the opposite, i.e. that group G2 would display a higher degree of alexithymia. Previous studies have already confirmed that among those suffering from anxiety disorders there is a large share of individuals who also display signs of alexithymia (41, 27), and that there is a possibility of a secondary onset of alexithymia as a consequence of such disorders (28). In studies conducted by Yildirim et al. (41) and Onur et al. (64), respondents with anxiety disorders on average achieved borderline results on the TAS-20 scale as well. However, contrary to expectations, a higher degree of alexithymia was obtained in the group of patients suffering from anxiety disorders. Upon reviewing recent literature, no papers were found that examined and explained the existence of such differences. Nevertheless, indirect reasoning might provide a potential answer, which lies in the relationship between alexithymia and anxiety and depression. It is within the framework of the first research problem that attempts are made to examine the connection between alexithymia and the degree of anxiety and depression. In fact, group G1 (with a higher score on the TAS-26 scale) presented identical degrees of anxiety and depression which are higher than the results achieved by the

koreliraju, kako međusobno ( $r = 0,72$ ) tako i sa stupnjem aleksitimije ( $r = 0,56$  i  $0,52$ ), što je u skladu s prethodnim zaključkom i dosadašnjim istraživanjima (44). Stoga, budući da je skupina G1 ostvarila klinički i statistički relevantan rezultat na ljestvici anksioznosti i depresije HSCL-25 (za razliku od skupine G2), to potencijalno objašnjava i više stupnjeve aleksitimije u toj skupini. Aleksitimija, anksioznost i depresivnost će se vjerojatnije naći u mlađih osoba ( $r = 0,20$ ) i onih niže stručne spreme ( $r = 0,21$ ). Kako je već ranije navedeno, dosadašnje studije dale su oprečne rezultate o povezanosti aleksitimije i dobi. Tako jedne upućuju na njihovu slabiju povezanost (64), a druge na višu prevalenciju aleksitimije u određenim dobnim skupinama. Vezano za niži stupanj formalnog obrazovanja, rezultati ovog istraživanja poklapaju se s rezultatima Mattila i suradnika (3).

Za prvi istraživački problem veže se i druga hipoteza koja je predmnijevala unutrašnji lokus kontrole zdravlja u G1 skupini, a vanjski lokus kontrole zdravlja u skupini G2. Rezultati istraživanja pokazali su da je u obje skupine ispitanika predominantni unutrašnji lokus kontrole zdravlja (slika 1). Unutrašnji lokus kontrole ne pokazuje značajne razlike između G1 i G2 skupine, dok su vrijednosti vanjskog lokusa minimalno (ali statistički značajno) veće u skupini G2. Međutim, važno je naglasiti kako su razlike u postignutim vrijednostima na unutrašnjem i vanjskom lokusu veoma male. Prema Kardum i suradnicima (26) moguće je da, u određenim okolnostima i životnim situacijama, tj. prema potrebi, jedna te ista osoba manifestira unutrašnji, a u drugima vanjski lokus kontrole. Stoga, minimalna statistička prednost koju unutrašnji lokus kontrole u ovom istraživanju ostvaruje nad vanjskim, u praktičnom je smislu beznačajna jer ispitanici u stvarnosti očigledno podjednako i prema potrebi koriste oba lokusa. Dvojni lokus kontrole zdravlja je zapravo i najpoželjniji jer osigura-

respondents in group G2. Li et al. (43) state that according to some longitudinal studies, an alleviation of anxiety and depression symptoms resulted in a less pronounced degree of alexithymia. It can be concluded from the above that the severity of anxiety and depression symptoms has a positive correlation with the severity of alexithymia symptoms. The psychological dimensions referred to in this study have a significantly high positive statistical correlation both with each other ( $r=0.72$ ) and with the degree of alexithymia ( $r=0.56$  and  $0.52$ ), which is consistent with the previous conclusion and with the studies conducted so far (44). Therefore, since group G1 achieved a clinically and statistically relevant result on the HSCL-25 anxiety and depression questionnaire (as opposed to group G2), this also potentially explains the higher degrees of alexithymia in this group. Alexithymia, anxiety and depression are more likely to be diagnosed in younger individuals ( $r=0.20$ ) and those with lower professional qualifications ( $r=0.21$ ). As discussed above, previous studies have produced conflicting results when it comes to the connection between alexithymia and age. On the one hand, some suggest a weak link between them (64), while others indicate a higher prevalence of alexithymia in certain age groups. In terms of a lower degree of formal education, the results of this study are consistent with the results presented by Mattila et al. (3).

The first research problem is also associated with the second hypothesis which presumes that group G1 has an internal health locus of control, and that group G2 has an external health locus of control. Study results have shown that the internal health locus of control is predominant in both groups of respondents (Figure 1). There were no significant differences between groups G1 and G2 in terms of the internal locus of control, while the values of the external locus of control were higher by a minimal (but statistically significant) difference in group G2. It is, however, important to note that the observed differences in achieved values between the internal and external locus of control were very slight. According to Kardum et al. (26), it is possible that under certain circumstances and in certain situations, i.e. when necessary, a single

va najbolju psihološku prilagodbu i strategije suočavanja (29). Dvojni lokus u obje ispitane skupine navodi na zaključak da u pojedinaca blaže izraženih značajki (potencijalne) aleksitimije nije moguće predvidjeti koegzistenciju određenog tipa lokusa kontrole zdravlja. Kako je već navedeno, nezavisnost ovih dviju dimenzija ličnosti utvrdili su Wise i suradnici (65), no postoje i oni koji su došli do drugačijih zaključaka (38). Budući da u ispitanim skupinama nije nađena uvjerljiva dominacija, kao ni korelacija jednog tipa zdravstvenog lokusa kontrole s aleksitimijom, za pretpostaviti je da oni neće značajnije doprinijeti objašnjenju konstrukta aleksitimije.

Drugi istraživački problem bio je ispitati stupanj aktivacije simpatikusa u ispitivanih skupina. U tu svrhu su se obavila dva mjerenja arterijskog tlaka, frekvencije pulsa i disanja (prije i poslije ispunjavanja upitnika). S ovim je ciljem povezana treća hipoteza koja je pretpostavila da će se u skupini G2 pokazati jača aktivacija simpatikusa u odnosu na skupinu G1. To se nije pokazalo točnim ni u jednom mjerenju. Kao jedina statistički značajno viša mjera aktivacije simpatikusa, u prvom se mjerenju pokazala frekvencija pulsa, ali suprotno od očekivanog - u skupini G1. Kako je sudjelovanje u istraživanju potencijalno emocionalno zahtjevna/stresna situacija, jasno je da može rezultirati simpatičkim pobuđivanjem, posebno kod pojedinaca sklonih stresu (npr. skupina G1). U drugom su mjerenju dobivene vrijednosti gotovo identične onima iz prvog mjerenja. No, u skupini G1 detektiran je statistički značajan pad vrijednosti sistoličkog tlaka i srčane frekvencije što se može tumačiti kao smirivanje autonomnog emocionalnog odgovora na završetku testiranja. Dakle, u ovome je istraživanju skupina G1 pokazala da je, unatoč višem stupnju izraženosti značajki potencijalne aleksitimije, njihov autonomni emocionalni odgovor ostao netaknut, što se podudara s istraživanjem koje su proveli Walter i suradnici (19).

person can manifest the internal locus of control, while in other situations they will manifest the external locus of control. Therefore, the minimal statistical advantage achieved by the internal locus of control over the external one in this study is in practical sense insignificant because, in reality, the respondents obviously use both loci in equal amounts, depending on the need. A dual health locus of control is actually the most desirable, since it ensures the best psychological adaptation and coping strategies (29). A dual locus in both test groups leads to the conclusion that when it comes to individuals with mild (potential) alexithymia symptoms it is not possible to predict the coexistence of a certain type of health locus of control. As previously stated, an independence of these two personality dimensions was observed by Wise et al. (65), however some other researchers have reached different conclusions (38). Since no conclusive dominance or a correlation of one type of health locus of control with alexithymia were found in the groups tested, it is to be presumed that they will not significantly contribute to the explanation of the construct of alexithymia.

The other research problem was to examine the degree of sympathetic nervous system activation in the test groups. Two measurements of the arterial blood pressure, pulse rate and respiratory rate were performed for this purpose (before and after filling in the questionnaire). The third hypothesis is associated with this goal, which assumed that sympathetic nervous system activation would be stronger in group G2 than in G1. This did not prove to be correct in any measurement. The pulse rate in the first measurement proved to be the only statistically higher measure of sympathetic nervous system activation, but contrary to expectations - it was in group G1. Since participation in the study represented a potentially emotionally demanding/stressful situation, it is clear that it could result in sympathetic excitation, especially in individuals prone to stress (e.g. group G1). The values obtained in the second measurement were almost identical to those from the first measurement. However, a statistically significant drop in systolic blood pressure and heart rate was detected in group G1, which could be interpreted as the calming of autonomic

Kako bi se provjerila istinitost prethodnih zaključaka, ispitani su objektivni prediktori aleksitimije tj. njihovi međuodnosi, u skladu s glavnim ciljem i četvrtom hipotezom istraživanja, napravljena je hijerarhijska regresijska analiza (tablica 5). Njeni su rezultati pokazali da unutrašnji lokus kontrole zdravlja pojedinačno doista ne doprinosi značajno objašnjenju aleksitimije. Međutim, suprotan je rezultat dobio za vanjski lokus kontrole zdravlja. Wise i suradnici (62) su pronašli naizgled značajnu korelaciju između aleksitimije i vanjskog zdravstvenog lokusa kontrole. No, kako je taj odnos posredovan povezanošću obih varijabli s neuroticizmom, smatraju da se zapravo radi o dva nezavisna fenomena (36). Budući da je u ispitanika ovog istraživanja pronađena značajna pozitivna korelacija između stupnja aleksitimije te stupnja anksioznosti i depresivnosti, moguće je da su dobiveni rezultati također posredovani sklonošću ispitanika neuroticizmu. Preostali rezultati dobiveni regresijskom analizom u skladu su s već danim pojašnjenjima pa su zapravo kratki pregled najbitnijih zaključaka. Ukupni model koji uključuje sociodemografska obilježja, zdravstveni lokus kontrole te anksioznost i depresivnost objašnjava 47 % varijance aleksitimije. Značajni pojedinačni prediktori aleksitimije su stručna sprema, vanjski lokus kontrole, te anksioznost i depresivnost koje zajedno u najvećoj mjeri objašnjavaju varijancu aleksitimije (34 %). Veći stupanj aleksitimije imat će osobe niže stručne spreme, s višim stupnjem anksioznosti i depresivnosti te izraženijim vanjskim lokusom kontrole zdravlja. Budući da je aleksitimija rizični faktor za osjećanje životnog nezadovoljstva (3), a povezana je i s korištenjem medicinskih usluga i ishodišta liječenja (66), veoma je važno prepoznati pojedince s potencijalnim osobinama aleksitimije kako bi im se mogla pružiti adekvatna pomoć.

Ovo istraživanje ima nekoliko ograničenja. Prvo, uzorak je relativno malen. Drugo, nije se

emotional response once the testing was completed. Furthermore, this test has shown that despite displaying a higher degree of potential signs of alexithymia, the autonomic emotional response of group G1 remained unaffected, which is consistent with the study conducted by Walter et al. (19).

In order to verify the accuracy of the conclusions presented above, objective predictors of alexithymia, i.e. their correlations, were examined, and in accordance with the main objective and the fourth hypothesis of the study, a hierarchical regression analysis was performed (table 5). Its results have shown that the internal health locus of control in fact does not individually significantly contribute to the explanation of alexithymia. However, when it comes to the external health locus of control, the obtained result was opposite. Wise et al. (62) observed a seemingly significant correlation between alexithymia and the external health locus of control. However, since this relationship is mediated by the connection of both variables with neuroticism, they believe that it actually represents two independent phenomena (36). Considering that a significant positive correlation between the degree of alexithymia and the degree of anxiety and depression was observed among the respondents taking part in this study, it is possible that the obtained results are also mediated by the respondents' tendency towards neuroticism. The remaining results obtained by means of regression analysis are in line with the explanations already provided, therefore they are a brief overview of the most important conclusions. The overall model which includes sociodemographic characteristics, health locus of control, and anxiety and depression, explains 47% of the alexithymia variance. Significant individual predictors of alexithymia include professional qualifications, external locus of control, and anxiety and depression, which all together explain the alexithymia variance to the greatest extent (34%). Individuals with lower professional qualifications, a higher degree of anxiety and depression, and more pronounced external health locus of control will also display a higher degree of alexithymia. Since alexithymia represents a risk factor for experiencing dissatisfaction with life

obraćala pažnja na to uzimaju li ispitanici koji boluju od esencijalne arterijske hipertenzije terapiju i je li njome postignuta regulacija krvnog tlaka. To je zasigurno utjecalo na dobivene vrijednosti aktivacije simpatikusa. Nadalje, nije se razmatralo ni uzimaju li ispitanici skupine G1 kroničnu terapiju i/ili su uključeni u neki oblik psihoterapije što vjerojatno ima utjecaja na rezultate modulacijom njihovog psihičkog stanja. Nadalje, nije se uzelo u obzir fazu bolesti (remisija, egzacerbacija) što može utjecati na ispitivane varijable.

Sugestija budućim istraživačima je da se u istraživanje uključe zdravi ispitanici kao kontrolna skupina, te da se uzročno posljedične veze aleksitimije i njenih objektivnih pokazatelja objasne longitudinalnim istraživanjem. Nadalje, trebalo bi pobliže ispitati kakva je uloga sklonosti neuroticizmu spram dinamike odnosa vanjskog lokusa kontrole i aleksitimije. Za one ispitanike u kojih se pronađu značajke aleksitimije, može se pokušati odrediti radi li se o primarno ili sekundarno nastaloj aleksitimiji.

Ran(ij)om detekcijom osoba sa značajkama aleksitimije na osnovi utvrđenih objektivnih pokazatelja, mogla bi im se ponuditi i pružiti pravovremena podrška u obliku psihijatrijskog (psihoterapijskog) tretmana koji bi im pomogao u smanjivanju stupnja izraženosti aleksitimije.

## ZAKLJUČAK

Ispitanici obje ispitivane skupine u prosjeku su ostvarili granične vrijednosti na ljestvici TAS-26, s time da su ispitanici skupine G1 (oboljeli od anksioznih poremećaja) ostvarili statistički značajno viši rezultat u odnosu na ispitanike skupine G2 (oboljeli od psihosomatskih poremećaja). Stupanj aleksitimije u ispitanika obih skupina u statistički je značajnoj pozitivnoj korelaciji sa stupnjem anksio-

(3) and it is also associated with the use of medical services and treatment outcomes (66), it is of utmost importance to recognize the individuals displaying potential signs of alexithymia so that they could be provided with adequate assistance.

There were several limitations to this study. First, the examined sample was relatively small. Second, it was not checked whether the respondents suffering from essential arterial hypertension were taking medications and whether these medications successfully regulated their blood pressure. This fact must have had an effect on the sympathetic nervous system activation values obtained. Furthermore, it was not considered whether the respondents from group G1 were taking chronic therapy and/or were included into some form of psychotherapy, which, by modulating their mental state, probably had an effect on the results. Moreover, the phase of the illness was not taken into account (remission, exacerbation), which could have affected the variables tested.

We suggest that the future researchers include healthy respondents into their research, so as to serve as a control group, and that the causal links between alexithymia and its objective indicators be explained by means of longitudinal research. The role of tendency towards neuroticism as opposed to the dynamics of the connection between the external locus of control and alexithymia should be further examined. For the respondents observed to display signs alexithymia, attempts could be made to determine whether they are suffering from primary or secondary alexithymia.

An early (earlier) detection of individuals with signs of alexithymia based on determined objective indicators could ensure that they are offered and provided with timely support in the form of psychiatric (psychotherapeutic) treatments which would help reduce the degree of alexithymia.

## CONCLUSION

On average, the respondents in both test groups achieved borderline results on the TAS-26 scale, with respondents from group G1 (suffering from



znosti i depresivnosti. U pojedinaca s višim stupnjem aleksitimije očekuje se i viši stupanj vanjskog lokusa kontrole zdravlja. Aktivaciju (i smirivanje) znakova aktivacije simpatikusa pokazali su samo ispitanici skupine G1, koji unatoč višem stupnju izraženosti aleksitimije imaju očuvan autonomni emocionalni odgovor. Značajni individualni doprinos objašnjenju aleksitimije daju sljedeći objektivni prediktori: stručna sprema, vanjski lokus kontrole, anksioznost i depresivnost. Veći stupanj aleksitimije imat će osobe niže stručne spreme, višeg stupnja anksioznosti i depresivnosti te izraženijeg vanjskog lokusa kontrole zdravlja.

anxiety disorders) achieving significantly higher results in comparison to the respondents from group G2 (suffering from psychosomatic disorders). The degree of alexithymia in respondents from both groups had a statistically significant positive correlation with the degree of anxiety and depression. In the case of individuals with a higher degree of alexithymia, a higher degree of external health locus of control is also expected. Only the respondents from group G1, who despite displaying a higher degree of alexithymia had a preserved autonomic emotional response, displayed sympathetic nervous system activation (and its calming). The following objective predictors have a significant individual contribution to the explanation of alexithymia: professional qualifications, external locus of control, anxiety and depression. Individuals with lower professional qualifications, a higher degree of anxiety and depression, and a more pronounced external health locus of control will also display a higher degree of alexithymia.

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# Odnos sekstinga i psihosocijalnog funkcioniranja adolescenata

## */ The Relationship Between Adolescent Sexting and Psychosocial Functioning*

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Porast učestalosti razmjene seksualno eksplicitnog sadržaja među adolescentima utjecao je i na sve veći interes istraživača za proučavanje posljedica ovog ponašanja na psihosocijalno funkcioniranje adolescenata. Cilj rada bio je utvrditi jesu li rod, status intimne veze, te različiti oblici sekstinga prediktori psihosocijalnog funkcioniranja. U istraživanju je sudjelovalo 598 hrvatskih srednjoškolaca u dobi od 16 do 18 godina ( $M = 17,035$ ;  $SD = 0,753$ ). Sudionici su sudjelovali u *online* istraživanju u kojem su ispitane demografske varijable (rod, status intimne veze), varijable sekstinga (slanje, primanje i prosljeđivanje seksualno eksplicitnih sadržaja) te varijable psihosocijalnog funkcioniranja (optimizam i strategije suočavanja, opće psihosocijalno disfunkcioniranje, te problemi u ponašanju i odnosima). Regresijskom analizom utvrđeno je da muški sudionici i oni koji nisu u vezi postižu više rezultate na mjerama psihosocijalnog disfunkcioniranja. Stanje disfunkcioniranja povezano je s višim rezultatima optimizma i strategije suočavanja, općeg psihosocijalnog disfunkcioniranja i problemima u ponašanju. Primanje sekstova povezano je s problemima u ponašanju i odnosima, dok prosljeđivanje nije povezano ni s jednim od ispitivanih aspekata psihosocijalnog funkcioniranja. Dobiveni rezultati mogu biti osnova za različite programe intervencije usmjerene smanjenju negativnih aspekata psihološkog funkcioniranja adolescenata.

*/ The increase in the frequency of sharing sexually explicit content among adolescents has also influenced the increasing interest of researchers to study the consequences of this behavior on the psychosocial functioning of adolescents. The aim of this study was to establish if gender, intimate relationship status and different types of sexting represent predictors of psychosocial functioning. A total of 598 high school students from Croatia took part in this study, all between 16 and 18 years of age ( $M = 17.035$ ;  $SD = 0.753$ ). The participants took part in the online study which examined the demographic variables (gender, intimate relationship status), sexting variables (sending, receiving and forwarding of sexually explicit content), and psychosocial functioning variables (optimism and coping strategies, general psychosocial dysfunction, as well as behavior and relationship problems). The results of regression analysis showed that male participants and those not involved in a relationship score higher on measures of psychosocial dysfunction. Sending sexts is associated with higher scores in terms of optimism and coping strategies, general psychosocial dysfunction and behavior problems. Receiving sexts is associated with behavior and relationship problems, while forwarding them is not associated with any of the examined variables of psychosocial functioning. The obtained results could serve as the basis for various intervention programs aimed at reducing the negative aspects of the psychological functioning of adolescents.*

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## UVOD

Upotreba digitalne tehnologije postala je sastavni dio života adolescenata (1). Mladi često upotrebljavaju svoje elektroničke uređaje kako bi istraživali svoju seksualnost i razmjenjivali seksualno eksplicitni sadržaj, sudjelujući u praksi poznatoj kao seksting (2,3).

Prema recentnoj metaanalizi (4) istraživanja učestalosti sekstinga, 14,8 % adolescenata sudjelovalo je u slanju seksualno eksplicitnog sadržaja, 27,4 % u primanju takvog sadržaja, 12 % u prosljeđivanju takvog sadržaja bez pristanka osobe čiji je sadržaj prosljeđen, te 8,4 % u primanju prosljeđenog sadržaja bez pristanka. Nalazi o učestalosti sekstinga s obzirom na rod sudionika su nekonzistentni. Primjerice, neka istraživanja (5) ističu kako su djevojke sklonije slanju poruka seksualnog sadržaja, dok rezultati drugih istraživanja (6-9) pokazuju da su mladići skloniji slanju, primanju i objavljivanju seksualno eksplicitnih sadržaja, te da

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## INTRODUCTION

The use of digital technology has become an integral part of adolescent life (1). Young people often use their electronic devices to explore their sexuality and exchange sexually explicit content, thereby participating in the practice known as sexting (2, 3).

According to a recent meta-analysis (4) of studies addressing sexting prevalence, 14.8% of adolescents have participated in sending sexually explicit content, 27.4% participated in receiving such content, and 12% participated in forwarding such content without the consent of the person whose content was being forwarded, while 8.4% received forwarded unconsented content. Findings regarding the prevalence of sexting in terms of the gender of participants are inconsistent. For example, some studies (5) point out that girls are more inclined to send sexts, while the results of other studies (6-9) suggest that

su skloniji sudjelovati u nekonzenzualnom sekstingu (10). Postoje i rezultati istraživanja (2,4,11,12) koji ukazuju da ne postoje razlike s obzirom na rod što upućuje na pretpostavku da bi takvo ponašanje zapravo moglo biti uobičajeno i prihvatljivo među mladima (13).

U kontekstu razvojne dobi mladih u kojoj se istraživanje seksualnosti ističe kao temeljno područje, seksting se može smatrati samo jednim od načina na koje to oni mogu ostvariti. U prilog ovome idu istraživanja koja pokazuju da je sudjelovanje u sekstingu uobičajeno kako među mladima u vezama radi ostvarivanja bliskosti i seksualnog uzbuđenja (14), tako i među onima koji nisu u vezama radi potencijalnog ostvarivanja intimne veze, flertovanja, stvaranja veza ili jednostavno doživljavanja seksualnog uzbuđenja (15-17). Ponekad mladi percipiraju sudjelovanje u sekstingu kao pozitivno iskustvo jer dobivaju pozitivnu potvrdu o vlastitom tijelu, ili se zabavljaju kada takve sadržaje dijele s vršnjacima i prijateljima (18). Stoga seksting ne bi trebao nužno biti promatran kao rizično ponašanje, već, kako ističe Naezer (19), sve *online* seksualne aktivnosti trebaju se promatrati kao "avanture" koje donose određeno iskustvo s neizvjesnim ishodima. Takve aktivnosti možemo promatrati na kontinuumu između rizika i njihove povezanosti s negativnim ishodima s jedne, ali i sigurnosti i njihove povezanosti s ugodnim ishodima, s druge strane.

Ako promatramo seksting kao oblik seksualnog ponašanja, iako doprinosi pozitivnim ishodima, ne možemo tvrditi da je nužno siguran, jer ne postoji seksualna aktivnost koja je sama po sebi potpuno sigurna, budući da uvijek nosi određeni rizik. Potencijalni rizici povezani s psihološkim posljedicama prepoznati su kao relevantni u dominantnom diskursu istraživanja sekstinga i često se istražuju. Međutim, nalazi istraživanja su nekonzistentni. Primjerice, transverzalna istraživanja pružaju raznolike uvide u povezanost sekstinga sa psihosocijal-

boys are more inclined to send, receive and post sexually explicit content, and that they are more likely to participate in nonconsensual sexting (10). Some study results (2, 4, 11, 12) also suggest that there are no differences with regard to gender, which leads to an assumption that such behavior might, in fact, be common and acceptable among young people (13).

In the context of the developmental phase of adolescents, in which the exploration of sexuality is emphasized as a fundamental area, sexting can be regarded as one of the ways to achieve this. This notion is supported by studies showing that sexting is common among adolescents involved in intimate relationships so as to achieve intimacy and sexual arousal (14), as well as among adolescents who are not in a relationship for the purpose of achieving an intimate relationship, flirting, engaging in a relationship or simply experiencing sexual arousal (15-17). The young sometimes perceive sexting as a positive experience because they receive validation with regard to their bodies or have fun when sharing such content with peers and friends (18). Sexting should, therefore, not necessarily be viewed as risky behavior, but as presented by Naezer (19), all sexual activities online should be viewed as "adventures" that bring a certain experience with uncertain outcomes. Such activities can be observed on a continuum between risk and their connection with negative outcomes on the one hand, but also safety and their connection with pleasant outcomes on the other.

If we view sexting as a form of sexual behavior, even though it contributes to positive outcomes, we cannot claim that it is necessarily safe because no sexual activity is completely safe in itself, as it always carries some risk. Potential risks associated with psychological consequences have been recognized as relevant in the prevailing discourse of sexting research and are frequently explored. However, the research results are inconsistent. For example, cross-sectional studies have yielded different

nim zdravljem. Nalazi istraživanja upućuju na značajno izražene simptome depresije, pokušaje suicida i samoozljeđivanja kod sudionika koji sudjeluju u sekstingu (14, 20,21). Temple i sur. (22) su utvrdili pozitivnu povezanost između sekstinga i varijabli impulzivnosti, konzumacije štetnih tvari, te i depresije. Međutim, nakon kontroliranja važnih demografskih varijabli i prethodnog seksualnog ponašanja, povezanost između sekstinga i depresije nije bila statistički značajna. Unatoč postojanju pozitivne povezanosti između slanja i primanja poruka seksualno eksplicitnog sadržaja i psiholoških poteškoća ne možemo pouzdano utvrditi uzročnost jer adolescenti koji su sudjelovali u sekstingu mogli su iskusiti negativne društvene posljedice i posljedično lošije psihološki funkcionirati. Isto je tako, moguće da su adolescenti s određenim psihičkim poteškoćama, iz različitih motiva kao što su potreba za ostvarivanjem socijalnih odnosa ili poboljšanje raspoloženja, skloniji sudjelovanju u sekstingu. Nužna su daljnja longitudinalna istraživanja kako bismo provjerili ovaj odnos. Uz to, socijalna anksioznost bila je negativno povezana sa sekstingom, dok su poremećaji u ponašanju bili pozitivno povezani sa sekstingom (23). Međutim, postoje istraživanja (22) koja pokazuju kako sudjelovanje u sekstingu među adolescentima nije nužno bilo pozitivno povezano s mentalnim poteškoćama. Prema nekim nalazima istraživanja samo je nekonsenzualni seksting (seksting pod pritiskom), ali ne i konzensualni, bio pozitivno povezan s psihološkim poteškoćama (10,24). Nekonsenzualni seksting bio je povezan s neprijateljstvom i agresivnim temperamentom. Nadalje, primanje neželjenih seksualnih sadržaja bilo je povezano s višom razinom depresije, anksioznosti, impulzivnosti, neprijateljstva, emocionalne disregulacije i agresivnog temperamenta (24) te sklonosti nesuicidalnom samoranjavanju (10). Slični su rezultati dobiveni i u istraživanju Klettke i sur. (25). Primanje neželjenih seksualnih poruka i slanje seksualnih poruka pod prisilom bilo je povezano s višim

insights into the relationship between sexting and psychosocial health. Study findings suggest that participants involved in sexting show significantly more pronounced depression symptoms, suicide attempts and self-harm behaviors (14, 20, 21). Temple et al. (22) found a positive correlation between sexting and variables such as impulsivity, substance abuse and depression. However, after controlling for important demographic variables and previous sexual behavior, the correlation between sexting and depression was not statistically significant. Despite the existence of a positive correlation between sending and receiving messages with sexually explicit content and psychological difficulties, we cannot establish reliable causality because adolescents who have engaged in sexting may have experienced negative social consequences, resulting in poorer psychological functioning. Similarly, adolescents with certain psychological difficulties, driven by different motives such as the need to build social relationships or improve their mood, may have been more inclined to engage in sexting. Further longitudinal studies are necessary in order to verify this relationship. Furthermore, social anxiety was negatively associated with sexting, while conduct disorders were positively associated with sexting (23). On the other hand, there are studies (22) which show that adolescent sexting was not necessarily positively associated with mental difficulties. According to some study findings, only non-consensual (pressured) sexting was positively associated with psychosocial difficulties, while consensual sexting was not (10, 24). Nonconsensual sexting was associated with hostility and aggressive temperament (24). In addition, receiving unsolicited sexual content was associated with higher levels of depression, anxiety, impulsivity, hostility, emotional dysregulation and aggressive temperament (24), as well as a tendency towards non-suicidal self-harm (10). Similar results were also obtained in the study conducted by Klettke et al. (25). Receiving unsolicited sexts and sexting under coercion were

razinama depresije, anksioznosti, simptoma stresa, te nižim samopoštovanjem. U pogledu longitudinalnih istraživanja (26) adolescenti koji sudjeluju u slanju ili objavljivanju seksualno eksplicitnih sadržaja pokazuju nakon jedne godine višu razinu depresije i anksioznosti. Međutim, dugoročni negativni učinci sekstinga na psihosocijalno funkcioniranje, uključujući simptome depresije (27,28) i anksioznosti (27), nisu evidentirani u drugim longitudinalnim istraživanjima. Za razliku od nekonsenzualnog sekstinga, konsenzualni seksting, u većem broju istraživanja nije bio povezan sa lošijim psihosocijalnim zdravljem (10,24,29-31).

Nekonzistentni nalazi istraživanja u ovom području ističu potrebu za daljnjim razumijevanjem složenoga odnosa sekstinga i psihosocijalnog funkcioniranja, ali i učestalosti sekstinga među sudionicima različitoga roda i statusa veze.

## CILJ ISTRAŽIVANJA

Sve većim porastom tehnologije i njenom sve većom primjenom u istraživanju seksualnosti, poput sudjelovanja u sekstingu, povećava se zabrinutost istraživača i praktičara zbog rizika takvog ponašanja. Trenutno u znanstvenim područjima dominiraju nalazi o pozitivnoj povezanosti sekstinga s negativnim aspektima psihosocijalnog funkcioniranja. Unatoč tome, ti nalazi su uglavnom korelacijske prirode. U ovom radu usmjeravamo se na povezanost sekstinga s negativnim aspektima psihosocijalnog funkcioniranja kao što su opće psihosocijalno disfunkcioniranje te problemi u ponašanju i odnosima. Međutim, istražujemo i pozitivne psihosocijalne aspekte funkcioniranja u kontekstu psihološke dobrobiti poput optimizma i strategija suočavanja. Naš je cilj jasnije ispitati složeni fenomen aspekta seksualnosti vezan uz seksting kroz prizmu riskantnog ponašanja, ali isto tako i pozitivnog ponašanja za pojedinca. Od druš-

associated with higher levels of depression, anxiety, stress symptoms and lower self-esteem. According to longitudinal studies (26), adolescents who participated in sexting and posting sexually explicit content showed higher levels of depression and anxiety one year later. However, long-term negative effects of sexting on psychosocial functioning, including depression symptoms (27, 28) and anxiety (27), were not recorded in other longitudinal studies. Unlike nonconsensual sexting, a large number of studies found no association between consensual sexting and poor psychosocial health (10, 24, 29-31).

Inconsistent findings in this area highlight the need for further understanding of the complex relationship between sexting and psychosocial functioning, as well as the frequency of sexting among participants of different genders and relationship status.

## AIM

With the advances in technology and its increasing use in the research of sexuality, such as engaging in sexting, there is increasing concern among the researchers and practitioners about the risks associated with such behavior. The literature is currently dominated by findings that emphasize a positive association between sexting and the negative aspects of psychosocial functioning. Nevertheless, these findings are largely correlational in nature. This study focuses on the association between sexting and the negative aspects of psychosocial functioning, such as general psychosocial dysfunction, and behavioral and relationship problems. However, we have also investigated the positive psychosocial aspects of functioning in the context of psychological well-being, such as optimism and coping strategies. Our aim is to take a closer look at the complex phenomenon of the aspect of sexuality in the context of sexting through the lens of risky behaviors and positive behaviors in individuals. It is of



tvene je važnosti bolje razumjeti kako se u digitalnom dobu istražuje seksualnost putem sekstinga te proširiti razumijevanje percepcije sekstinga u društvu kao fenomena seksualnosti prizmom potencijalno štetnog, ali i potencijalno korisnog ponašanja za osobu. Time se praktičarima pruža prostor za bolje razumijevanje kada djelovati u smjeru zaštite mladih od negativnih posljedica istraživanja seksualnosti, a kada pristupiti i pružiti smjernice za poticanje zdravog i relativno sigurnog načina istraživanja seksualnosti.

U skladu s tim, cilj ovoga istraživanja jest utvrditi postoje li razlike u sudjelovanju u sekstingu s obzirom na rod i status intimne veze sudionika, kao i ispitati povezanost slanja, primanja i prosljeđivanja seksualno eksplicitnih sadržaja s različitim aspektima psihosocijalnog funkcioniranja. Ne očekujemo razlike s obzirom na rod sudionika u učestalosti sekstinga (H1), ali očekujemo veću učestalost sekstinga među onima u vezi u odnosu na one koji nisu u vezi (H2). Na kraju, u ispitivanju doprinosa varijabli sekstinga (slanju, primanju te prosljeđivanju seksualno eksplicitnih sadržaja) u objašnjenju svih ispitivanih aspekata psihosocijalnog funkcioniranja (optimizam i strategije suočavanja, opće psihosocijalno disfunkcioniranje te problemi u ponašanju i odnosima), postavljena je nulta hipoteza o nepostojanju značajne povezanosti (H3).

## METODOLOGIJA

### Sudionici

U istraživanju je sudjelovao prigodni uzorak od 654 srednjoškolaca iz Republike Hrvatske. Međutim, isključeni su podatci 54 sudionika koji nisu u potpunosti ispunili upitnike, kao i podatci 42 sudionika homoseksualne orijentacije. Odlučeno je isključiti podatke sudionika s homoseksualnom orijentacijom zbog njihovog malog broja u uzorku što bi moglo utjecati na

societal importance to better understand how sexuality is explored through sexting in the digital age, and to broaden the understanding of society's perception of sexting as a sexual phenomenon, taking into account the potentially harmful, but also the potentially positive behaviors in individuals. This offers practitioners the opportunity to better understand when they should act to protect young people from the negative consequences of sexual exploration, and when they should approach and provide guidance to encourage healthy and relatively safe sexual exploration.

Accordingly, the aim of this study is to determine whether there are differences in sexting in terms of gender and intimate relationship status of participants, as well as to examine the associations between sending, receiving and forwarding sexually explicit content with different aspects of psychosocial functioning. We do not expect to find differences when it comes to the frequency of sexting in terms of participants' gender (H1), but we do expect a higher frequency of sexting among the participants who are involved in romantic relationships as opposed to those who are not (H2). Finally, when examining the contribution of sexting variables (sending, receiving and forwarding sexually explicit content) in the explanation of all assessed aspects of psychosocial functioning (optimism and coping strategies, general psychosocial dysfunction, as well as behavioral and relationship problems), a null hypothesis of no significant association has been postulated (H3).

## METHOD

### Participants

A convenience sample of 654 high school students from the Republic of Croatia took part in the study. However, the data of 54 participants who did not completely fill out the questionnaires were excluded, as were the data of 42

daljnje statističke analize. Također, njihovim isključivanjem smo usmjerili fokus istraživanja na većinsku populaciju srednjoškolaca u Republici Hrvatskoj koja je heteroseksualne orijentacije.

U konačnici, analizirani su rezultati ukupno 598 srednjoškolaca iz Hrvatske, od kojih je 372 (62,207 %) djevojaka i 226 (37,779 %) mladića. Dob sudionika kretala se u rasponu od 16 do 18 godina, s prosječnom dobi od 17,035 godina (SD = 0,753). Među sudionicima je ukupno 184 (30,777 %) bilo u intimnoj vezi u vrijeme provedbe istraživanja.

## MJERNI INSTRUMENTI

### Seksting ponašanje

Upitnik seksting ponašanja i motiva (*Sexting Behaviour and Motives Questionnaire*, SBM-Q) (32) namijenjen je za procjenu učestalosti seksting ponašanja među adolescentima i sastoji se od 39 čestica, a sastoji se od šest ljestvica: Slanje, Razlozi slanja, Žrtva nekonzenzualnog prosljeđivanja, Primanje seksualnog sadržaja, Aktivno prosljeđivanje i pasivno prosljeđivanje, Razlozi u pozadini aktivnog prosljeđivanja. Čestice se odnose na vremenski okvir koji obuhvaća posljednjih dvanaest mjeseci. Sudionici istraživanja na ljestvici Likertovog tipa od pet stupnjeva procjenjuju učestalost seksting ponašanja (0-nikada, 1-manje od jednom mjesečno, 2-mjesečno, 3-tjedno, 4-dnevno). Odgovori na ponašanje vezano uz seksting su dihotominizirani: 0 za nesudjelovanje u sekstingu i 1 za sudjelovanje u barem jednom obliku tijekom protekle godine pri računanju učestalosti sekstinga. U ovom istraživanju korištene su ljestvice Slanje, Primanje seksualnog sadržaja, Prosljeđivanje. Izvorne ljestvice (32) imale su dobru pouzdanost i valjanost. U našem istraživanju Cronbach  $\alpha$  bile su za slanje 0,889, primanje 0,922, i prosljeđivanje 0,882.

participants with a homosexual orientation. The decision to exclude the data of participants with homosexual orientation was made due to their small number in the sample, which could affect further statistical analyses. Furthermore, by excluding these participants, we focused the study on the majority of high school students in Croatia, who are heterosexual.

Finally, the results of a total of 598 high school students from Croatia were analyzed, of which 372 (62.207%) were girls and 226 (37.779%) were boys. The participants were between 16 and 18 years old, with the average age of 17.035 years (SD = 0.753). A total of 184 (30.777%) participants were involved in a romantic relationship at the time of the study.

## MEASURING INSTRUMENTS

### Sexting behavior

The purpose of the Sexting Behavior and Motives Questionnaire (SBM-Q) (32) is to examine the prevalence of sexting behavior among adolescents, and it consists of 39 items and has six subscales: sending, reasons for sending, victim of nonconsensual forwarding, receiving of sexual content, active forwarding and passive forwarding, reasons for active forwarding. All items refer to a time frame covering the past 12 months. The participants rated the frequency of their sexting behavior on a 5-point Likert scale (0-never, 1-less than once a month, 2-monthly, 3-weekly, 4-daily). Their responses with regard to sexting behavior were dichotomized: 0 for not sexting, and 1 for participating in at least one form of sexting during the past year when calculating the frequency of sexting. The subscales used in this study included sending, receiving sexual content and forwarding. The original scales (32) had good reliability and validity. In this study, the Cronbach coefficient  $\alpha$  for sending was 0.889, for receiving it was 0.922, while for forwarding it amounted to 0.882.

Psihosocijalno funkcioniranje adolescenata procijenjeno je Inventarom za psihosocijalno funkcioniranje adolescenata (*The Adolescents' Psychosocial Functioning Inventory*, APFI). APFI mjeri psihosocijalna pitanja povezana s adolescencijom (dob od 10 do 19 godina). APFI se uglavnom sastoji od internaliziranih atributa osim ljestvice za procjenu problema u ponašanju i odnosima. Inventar se sastoji od 23 čestice podijeljene u tri ljestvice: Optimizam i strategije suočavanja – OCS (4 čestice; npr. „Nadam se da će se dogoditi čudo.“), Opće psihosocijalno disfunkcioniranje – GPD (15 čestica; npr. „Osjećam da sam sramota za svoju obitelj.“) i Problemi u ponašanju i odnosima – BRP (4 čestice; npr. „Osjećam da će me ljudi mojih godina doživjeti zdravo za gotovo.“). Ukupni rezultat na inventaru (TFS) predstavlja sumu individualnih rezultata na ljestvicama OCS, GPD i BRP. Prema autorima, pouzdanost cijelog inventara je  $\alpha = 0,83$  dok pouzdanosti za tri ljestvice) imaju umjerenu do visoku pouzdanost ( $\alpha = 0,59$  za OCS,  $\alpha = 0,57$  za BRP i  $\alpha = 0,90$  za GPD). Tri faktorski model APFI inventara pokazao se kao pouzdana mjera za procjenu psihosocijalnog funkcioniranja adolescenata (33). U našem istraživanju pouzdanosti ljestvica izražene Cronbach alfa koeficijentom su u rasponu od umjerene do visoke ( $\alpha = 0,601$  za OCS,  $\alpha = 0,599$  za BRP i  $\alpha = 0,91$  za GPD).

## Demografske varijable

Od demografskih varijabli ispitivane su varijable rod, dob, status intimne veze, seksualna orijentacija. Sudionici su odgovarali na pitanje o rodu birajući jednu od ponuđenih kategorija, muški spol ili ženski spol. Na pitanje o dobi, naveli su svoju dob u godinama. Kada je riječ o statusu intimne veze, sudionici su odgovarali s kategorijama *nisam u vezi* ili *u vezi sam*. Na pitanje o seksualnoj orijentaciji, imali su na

Psychosocial functioning was assessed using the Adolescents' Psychosocial Functioning Inventory (APFI). APFI measures the psychosocial questions associated with adolescence (ages from 10 to 19). APFI consists mainly of items assessing internalized attributes, except for the subscale assessing the behavior and relationship problems. The inventory has 23 items divided into three subscales: optimism and coping strategies – OCS (4 items; e.g., “I hope a miracle will happen.”), general psychosocial dysfunction – GPD (15 items; e.g., “I feel I am a disgrace to my family.”) and behavior and relationship problems – BRP (4 items; e.g., “I feel people of my age will take me for granted.”). The total score at the inventory (TFS) represents the sum of individual results on the OCS, GPD and BRP scales. According to the authors, the reliability of the entire inventory amounts to  $\alpha = 0.83$ , while the three subscales have moderate to high reliability ( $\alpha = 0.59$  for OCS,  $\alpha = 0.57$  for BRP, and  $\alpha = 0.90$  for GPD). The three-factor model of APFI has proved to be a reliable measure for the assessment of the adolescent psychosocial functioning (33). In our study, reliabilities of the scales expressed in the Cronbach alpha coefficient range from moderate to high ( $\alpha = 0.601$  for OCS,  $\alpha = 0.599$  for BRP, and  $\alpha = 0.91$  for GPD).

## Demographic variables

The examined demographic variables included those of gender, age, intimate relationship status and sexual orientation. The participants responded to the question about gender by selecting one of the given categories, male or female. They indicated their age in years when asked about their age. When asked about their intimate relationship status, the participants responded by selecting the category *not in a relationship* or *in a relationship*. When asked about their sexual orientation, they had the following options: heterosexual, bisexual, pansexual, asexual and other.

raspolaganju ponuđene kategorije: heteroseksualna, biseksualna, panseksualna, aseksualna i ostalo.

## POSTUPAK

Istraživanje je dio međunarodnog projekta o sekstingu, koji je odobren od strane Etičkog povjerenstva Sveučilišta u Zadru i Ministarstva znanosti i obrazovanja Republike Hrvatske. Podatci su prikupljeni u školama koje su odobrile provedbu istraživanja. Rekrutacija sudionika provedena je putem školskih psihologa koji su distribuirali informacije učenicima o provedbi istraživanja i prikupili informirane pristanke od učenika mlađih od 16 godina. Sudionici zainteresirani za sudjelovanje u istraživanju i oni koji su dali informirani pristanak dobili su *online* poveznicu za provođenje istraživanja. Prije početka istraživanja sudionici su detaljno informirani o svrsi istraživanja, anonimnosti te dobrovoljnosti sudjelovanja. Nakon toga su pristupili *online* ispunjavanju upitnika. Ispunjavanje upitnika trajalo je 15 minuta, a sudionici su nakon završetka dobili kontakte istraživača i relevantnih institucija u slučaju doživljavanja neugode.

## REZULTATI

Prije glavnih analiza provedene su preliminarne analize testiranja razlika u aspektima psihosocijalnog zdravlja s obzirom na rod i status intimne veze. Jednosmjernom analizom varijance nisu utvrđene statistički značajne razlike u ispitivanim aspektima psihosocijalnoga funkcioniranja između adolescentica i adolescenata (tablica 1).

Daljnjom obradom rezultata nisu utvrđene ni razlike u psihosocijalnom funkcioniranju između onih sudionika koji su bili u vezi te onih koji nisu bili u vezi (tablica 2).

## PROCEDURE

This study is part of an international project about sexting, which was approved by the Ethics Committee of the University of Zadar and the Ministry of Science and Education of the Republic of Croatia. Data were collected at schools that approved the implementation of the study. The recruitment of participants was carried out through school psychologists who informed students about the study and collected informed consent documents from the students under the age of 16. The participants interested in taking part in the study and those who presented the informed consent documents were provided with an online link to complete the survey. Before the start of the study, the participants were informed in detail about the purpose of the study, their anonymity and voluntary participation, after which they proceeded to fill out the online questionnaire. It took 15 minutes on average to complete the questionnaires, and after completing them, the participants were given the contact information of the researchers and the relevant institutions in case they felt uncomfortable.

## RESULTS

Prior to the main analyses, preliminary analyses were conducted to examine whether there were differences in aspects of psychosocial functioning with regard to gender and intimate relationship status. The one-way analysis of variance revealed no statistically significant differences in the examined aspects of psychosocial functioning between female and male adolescents (Table 1).

Further analysis of the results also revealed no differences in psychosocial functioning between the participants who were in a relationship and those who were not (Table 2).

In terms of the main findings regarding the frequency of sexting, the results show that a

**TABLICA 1.** Testiranje razlika u psihosocijalnom funkcioniranju s obzirom na rod sudionika**TABLE 1.** Examining the differences in psychosocial functioning according to the gender of participants

Psihosocijalno funkcioniranje / Psychosocial functioning	Rod / Gender				
	Adolescence / Girls		Adolescenti / Boys		F (p)
	M	SD	M	SD	
Optimizam i strategije suočavanja / Optimism and coping strategies	0,813	1,518	0,818	1,657	0,001(0,971)
Opće psihosocijalno disfunkcioniranje / General psychosocial dysfunction	0,472	0,606	0,400	0,592	1,923 (0,166)
Poteškoće u ponašanju i odnosima / Behavior and relationship problems	0,377	0,647	0,467	0,721	0,023 (0,878)

**TABLICA 2.** Testiranje razlika u psihosocijalnom funkcioniranju s obzirom na status intimne veze**TABLE 2.** Examining the differences in psychosocial functioning according to intimate relationship status

Psihosocijalno funkcioniranje / Psychosocial functioning	Status intimne veze / Intimate relationship status				
	ne / no		da / yes		F (p)
	M	SD	M	SD	
Optimizam i strategije suočavanja / Optimism and coping strategies	0,781	1,343	0,897	2,039	0,615 (0,433)
Opće psihosocijalno disfunkcioniranje / General psychosocial dysfunction	0,422	0,541	0,483	0,721	1,188 (0,276)
Poteškoće u ponašanju i odnosima / Behavior and relationship problems	0,298	0,574	0,701	0,884	0,399 (0,528)

Što se tiče glavnih nalaza o učestalosti sekstinga, rezultati pokazuju kako u sekstingu sudjeluje značajan broj adolescenata (tablica 3). Ukupno 30,100 % sudionika sudjeluje u slanju, 48,662 % primanju, te 8,361 % u prosljeđivanju seksualno eksplicitnih sadržaja. Hi-kvadrat testom nisu utvrđene značajne razlike u sudjelovanju u sekstingu s obzirom na rod sudionika.

significant number of adolescents participate in sexting (Table 3). A total of 30.100% of participants engage in sending, 48.622% engage in receiving, and 8.361% engage in forwarding sexually explicit content. The chi-square test did not reveal any significant differences in participation in sexting according to the participants' gender.

**TABLICA 3.** Učestalost sekstinga s obzirom na rod sudionika**TABLE 3.** Frequency of sexting according to participants' gender

Seksting / Sexting		Rod / Gender								
		Adolescence / Girls				Adolescenti / Boys				χ <sup>2</sup> (p)
		N	%	M	SD	N	%	M	SD	
Slanje / Sending	ne / no	263	70,699	0,345	0,667	155	68,584	0,367	0,815	0,299 (0,584)
	da / yes	109	29,301			71	31,416			
Primanje / Receiving	ne / no	180	48,387	0,692	1,039	127	56,195	0,635	1,036	3,430 (0,064)
	da / yes	192	51,613			99	43,805			
Prosljeđivanje / Forwarding	ne / no	346	93,011	0,160	0,538	202	89,381	0,139	0,521	2,418 (0,120)
	da / yes	26	6,989			24	10,619			

Daljnjom obradom utvrđene su statistički značajne razlike u sudjelovanju u sekstingu s obzirom na status intimne veze (tablica 4). Ukupno 54,348 % osoba u vezi sudjelovalo je u slanju seksualno eksplicitnih sadržaja, dok je u ovakvom obliku sekstinga sudjelovalo samo 19,324 % onih koji nisu u vezi. Slično tome, 69,565 % osoba u vezi sudjelovalo je u primanju sekstova, te 39,372 % onih koji nisu u vezi. Osim toga, 14,130 % osoba u vezi sudjelovalo je u prosljeđivanju sekstova, te 5,797 % onih koji nisu u vezi.

Povezanost između roda, statusa intimne veze, varijabli sekstinga i varijabli psihosocijalnog funkcioniranja ispitivana je Pearsonovim koeficijentom korelacije. Statistički značajna pozitivna korelacija utvrđena je između varijable primanja seksualno eksplicitnog sadržaja i varijable prosljeđivanja. Drugim riječima, sudionici koji sudjeluju u primanju sekstinga sudjeluju i u prosljeđivanju. Primanje seksualno eksplicitnog sadržaja pozitivno je povezano sa svim ispitivanim aspektima psihosocijalnog funkcioniranja, dok je prosljeđivanje seksualno eksplicitnog sadržaja pozitivno povezano s općim psihosocijalnim disfunkcioniranjem. Interkorelacije različitih aspekata psihosocijalnog funkcioniranja su statistički značajne i pozitivne. Ostale korelacije nisu se pokazale statistički značajne. Dobivene korelacije prikazane su u tablici 5.

Further analysis determined statistically significant differences when it comes to participating in sexting according to the intimate relationship status (Table 4). A total of 54.348% of participants who are in a relationship engaged in sending sexually explicit content, while only 19.324% of participants who are not in a relationship engaged in this form of sexting. Similarly, 69.565% of participants in a relationship have received sexts, as opposed to 39.372% of participants who are not in a relationship. Moreover, 14.130% of participants in a relationship have forwarded sexts, and 5.797% of participants not in a relationship have done the same.

The Pearson correlation coefficient was used to analyse the connection between gender, intimate relationship status, sexting variables and psychosocial functioning variables. A statistically significant positive correlation was found between the variable of receiving sexually explicit content and the variable of forwarding. In other words, participants who receive sexts also participate in forwarding them. Receiving sexually explicit content is positively associated with all aspects of psychosocial functioning examined, while forwarding sexually explicit content is positively associated with overall psychosocial dysfunction. The intercorrelations between the different aspects of psychosocial functioning are statistically significant and positive. Other correlations were not found to be statistically significant. The correlations obtained are presented in Table 5.

**TABLICA 4.** Učestalost sekstinga s obzirom na status intimne veze  
**TABLE 4.** Frequency of sexting according to intimate relationship status

Seksting / Sexting	Status intimne veze / Intimate relationship status									
		ne / no				da / yes				$\chi^2$ (p)
		N	%	M	SD	N	%	M	SD	
Slanje / Sending	ne / no	334	80,676	0,335	0,740	84	45,652	0,403	0,778	74,269 (0,000)
	da / yes	80	19,324			100	54,348			
Primanje / Receiving	ne / no	251	60,628	0,625	1,004	56	30,435	0,767	1,109	46,484 (0,000)
	da / yes	163	39,372			128	69,565			
Prosljeđivanje / Forwarding	ne / no	390	94,203	0,142	0,510	158	85,870	0,173	0,576	11,545 (0,000)
	da / yes	24	5,797			26	14,130			

**TABLICA 5.** Povezanost između roda, statusa intimne veze, sekstinga i psihosocijalnog funkcioniranja  
**TABLE 5.** Correlations between gender, intimate relationship status, sexting and psychosocial functioning

	1	2	3	4	5	6	7	8
1	-	0,059	-0,014	0,027	0,019	-0,002	0,059	-0,007
2	-	-	0,042	0,062	0,027	0,034	0,047	0,027
3								
4	-	-	-	0,665***	0,376***	0,297***	0,411***	0,294***
5	-	-	-	-	-	-0,002	0,143**	-0,034
6	-	-	-	-	-	-	0,724***	0,962***
7	-	-	-	-	-	-	-	0,714***
8	-	-	-	-	-	-	-	-

Napomena: 1 = rod; 2 = status intimne veze; 3 = slanje, 4 = primanje; 5 = prosljeđivanje; 6 = optimizam i strategije suočavanja; 7 = opće psihosocijalno disfunkcioniranje; 8 = poteškoće u ponašanju i odnosima; \*\* p <.01; \*\*\* p <.001.

/ Note: 1 = gender, 2 = intimate relationship status; 3 = sending; 4 = receiving; 5 = forwarding; 6 = optimism and coping strategies; 7 = general psychosocial dysfunction; 8 = behavior and relationship problems; \*\* p <.01; \*\*\* p <.001.

Nadalje, provedena je regresijska analiza kako bi se utvrdilo doprinose li demografske varijable (rod i status intimne veze) te različiti oblici sekstinga (primanje, slanje, prosljeđivanje) objašnjenju različitih oblika psihosocijalnog funkcioniranja (Optimizam i strategije suočavanja, Problemi u ponašanju i odnosima, Opće psihosocijalno disfunkcioniranje) (tablica 6). Rezultati su pokazali da su rod i status veze značajni prediktori općeg psihosocijalnog disfunkcioniranja pri čemu adolescenti i osobe u vezama pokazuju više razine disfunkcije. Slanje je značajan prediktor sva tri aspekta psihosocijalnog funkcioniranja ukazujući da osobe koje šalju seksualno eksplicitne sadržaje imaju više

Furthermore, a regression analysis was performed in order to determine whether demographic variables (gender and intimate relationship status) and different forms of sexting (receiving, sending, forwarding) contribute to the explanation of different forms of psychosocial functioning (optimism and coping strategies, behavior and relationship problems, general psychosocial dysfunction) (Table 6). The obtained results showed that gender and relationship status were significant predictors of general psychosocial dysfunction, whereas boys and individuals in a relationship had higher levels of dysfunction. Sending was a significant predictor of all three aspects of psychosocial functioning,

Tablica 6. Regresijska analiza prediktora demografskih varijabli i varijabli sekstinga u objašnjenju psihosocijalnog funkcioniranja  
 Table 6. Regression analysis of demographic variable and sexting variable predictors in the explanation of psychosocial functioning

	Optimizam i strategije suočavanja / Optimism and coping strategies			Opće psihosocijalno disfunkcioniranje / General psychosocial dysfunction			Poteškoće u ponašanju i odnosima / Behavior and relationship problems		
	β	SE	p	β	SE	p	β	SE	p
Rod / Gender	-0,008	0,041	0,838	0,137	0,040	0,001	0,003	0,039	0,944
Status intimne veze / Intimate relationship status	-0,068	0,042	0,107	-0,084	0,041	0,042	-0,036	0,041	0,374
Slanje / Sending	0,127	0,057	0,027	0,227	0,055	0,000	0,230	0,054	0,000
Primanje / Receiving	0,087	0,055	0,111	0,069	0,053	0,196	0,169	0,052	0,001
Prosljeđivanje / Forwarding	0,027	0,044	0,540	0,029	0,043	0,498	-0,019	0,042	0,650
R2	3,956 %			8,909 %			12,157 %		

razine optimizma i strategija suočavanja, općeg psihosocijalnog disfunkcioniranja te problema u ponašanju i odnosima. Primanje je značajan prediktor problema u ponašanju i odnosima pri čemu su adolescenti koji primaju sekstove skloniji takvim poteškoćama. Međutim, prosljeđivanje sekstova nije bilo značajan prediktor niti jedne od ispitivanih varijabli psihosocijalnog funkcioniranja. Ispitivani prediktori objasnili su 3,956 %, 8,909 % i 12,157 % ukupne varijance optimizma i strategija suočavanja, općeg psihosocijalnog disfunkcioniranja odnosno problema u ponašanju i odnosima.

## DISKUSIJA

Cilj ovog istraživanja bio je ispitati moguće razlike u sudjelovanju u sekstingu s obzirom na rod i status intimne veze sudionika, te ispitati prikladnost varijabli slanja, primanja i prosljeđivanja seksualno eksplicitnih sadržaja kao prediktora psihosocijalnog funkcioniranja adolescenata.

Rezultati o tome da ne postoje statistički značajne razlike u sekstingu, odnosno slanju, primanju i prosljeđivanju seksualno eksplicitnih sadržaja s obzirom na spol sudionika, podržavaju dosadašnja istraživanja (2,34) i metaanalize (4,28). Međutim, ovi rezultati o rodnim usporedbama sekstinga su ograničeni na općenito djevojke i mladiće te se ne mogu generalizirati na ostalu populaciju mladih. Time ovi rezultati ne prikazuju nužno prevalenciju ovakvog ponašanja. Dodatno, unatoč istraživanjima koja pronalaze razlike u učestalosti sekstinga među rodovima (5,8), York i sur. (13) navode da je moguće da je seksting postao uobičajen i prihvatljiv među mladima, te se možda zbog toga ne pronalaze rodne razlike u slanju, primanju i prosljeđivanju seksualno eksplicitnih sadržaja.

Rezultati istraživanja također pokazuju da je učestalost svih oblika sekstinga veća kod sudionika i sudionica koji su u intimnoj vezi,

suggesting that participants who send sexually explicit content have higher levels of optimism and coping strategies, general psychosocial dysfunction, and behavior and relationship problems. Receiving was a significant predictor of behavior and relationship problems, meaning that adolescents who receive sexts are more likely to experience those problems. However, forwarding of sexts was not a significant predictor of any of the examined psychosocial functioning variables. The examined predictors explained 3.956%, 8.909% and 12.157% of the total variance of optimism and coping strategies, general psychosocial dysfunction, i.e. problems in behavior and relationships.

## DISCUSSION

The aim of this study was to examine the possible differences in the engagement in sexting with regard to the gender and intimate relationship status, as well as to examine the appropriateness of the variables of sending, receiving and forwarding sexually explicit content as predictors of adolescent psychosocial functioning.

The results which show that there are no statistically significant differences in sexting, i.e. sending, receiving and forwarding sexually explicit content depending on the gender of the participants, are consistent with previous studies (2, 34) and meta-analyses (4, 28). However, these results on gender comparisons in sexting are generally limited to girls and boys, and cannot be generalized to the rest of the youth population. These results, thereby, do not necessarily represent the prevalence of such behavior. Additionally, despite studies that have observed gender differences in the frequency of sexting (5, 8), York et al. (13) state that it is possible that sexting has become customary and acceptable among young people, and this might be the reason why no gender differences have been observed in terms of sending, receiving and forwarding of sexually explicit content.



naspram onih koji nisu, što je u skladu s prijašnjim istraživanjima (5-7,11). Istraživanja sugeriraju da je seksting unutar romantične veze prihvaćeno i normalno ponašanje (7), pomoću njega partneri pokazuju da vjeruju jedni drugima, te je on jedan od načina romantične komunikacije i flertovanja (6).

Kada se analizira povezanost između sekstinga i psihosocijalnog funkcioniranja sudionika utvrđeno je da slanje seksualno eksplicitnog sadržaja, iako u niskim veličinama, ipak značajno predviđa sve ispitivane varijable psihosocijalnog funkcioniranja.

Povezanost slanja seksualno eksplicitnog sadržaja sa aspektom optimizma i strategijama suočavanja ukazuje na to da je seksting zapravo povezan i s pozitivnim aspektom psihosocijalnog funkcioniranja. Ovo je u skladu s istraživanjima koja naglašavaju pozitivne ishode sudjelovanja u sekstingu, kao što su doživljavanje intimnosti, seksualne uzbuđenosti, učenje o seksualnom ponašanju, flertovanje, primanje komplimenata. (34). Kada se uzmu u obzir nalazi istraživanja koja ukazuju na nepovezanost sekstinga s lošijim psihosocijalnim blagostanjem kada je dobrovoljan (10,24), te na čestu pojavu sekstinga u romantičnim vezama (7), gdje mladi često primaju zahtjeve partnera za slanjem seksualnog sadržaja (17), postaje jasno da je osjećaj poželjnosti (10) jedan od glavnih motiva adolescenata za sudjelovanje u takvim aktivnostima. U tom kontekstu slanje sekstinga može pozitivno utjecati na percepciju o sebi i okolini, što ide u prilog našim rezultatima. Međutim, važno je s oprezom tumačiti dobivene rezultate i razumjeti da postoje i potencijalni rizici povezani sa sekstingom. Neki istraživači ističu kako su osobe sklone optimističnom uvjerenju o rjeđem doživljavanju negativnih životnih ishoda sklonije sudjelovati u rizičnim ponašanjima (35) te su posebno podložne riziku od *online* seksualne viktimizacije (36).

Naši nalazi dodatno ukazuju da sudjelovanje u slanju seksualno eksplicitnih poruka istovre-

Study findings also show a higher frequency of all types of sexting among the participants who are in an intimate relationship, as opposed to those who are not, which is in accordance with the previous studies (5-7, 11). Studies suggest that in the context of a romantic relationship sexting is an accepted and normal form of behavior (7), a way for partners to show trust in each other, and a means of romantic communication and flirtation (6).

When analyzing the relationship between sexting and psychosocial functioning of the participants, it was determined that sending sexually explicit content, albeit to a lesser extent, still significantly predicted all the psychosocial functioning variables examined.

The association between sending sexually explicit content and aspects of optimism and coping strategies suggests that sexting is in fact associated with positive aspects of psychosocial functioning as well. This is consistent with the studies that emphasize the positive effects of sexting, such as experiencing intimacy, sexual arousal, learning about sexual behavior, flirting and receiving compliments (34). Considering the study findings which suggest that there is no connection between sexting and poorer psychosocial well-being when it is voluntary (10, 24), as well as the common practice of sexting in romantic relationships (7) where young people are often asked by their partners to send sexual content (17), it is clear that the sense of desirability (10) is one of the main motives for adolescents to engage in such activities. In this context, sending sexts can positively influence self-perception and the perception of one's environment, which supports our findings. However, it is important to interpret the obtained results with caution, and to understand that there are potential risks associated with sexting. Some researchers point out that individuals who tend to have optimistic beliefs about having fewer negative life experiences are more likely to engage in risky behavior (35) and are

meno predviđa i negativne aspekte psihosocijalnog funkcioniranja, uključujući više razine općeg psihosocijalnog disfunkcioniranja te problema u ponašanju i odnosima. Sukladno našim nalazima neka istraživanja ističu povezanost sekstinga s negativnim aspektima psihosocijalnog funkcioniranja, poput depresije, anksioznosti, impulzivnosti, neprijateljstva, emocionalne disregulacije i agresivnog temperamenta (10,20,24,26), posebno u kontekstu nedobrovoljnog sekstinga (10,24) gdje se zahtjev za sudjelovanjem u takvoj aktivnosti može doživjeti kao pritisak (14). Međutim, ne smijemo zanemariti činjenicu da naši rezultati ukazuju da je slanje seksualnih poruka povezano i s pozitivnim i s negativnim aspektima psihosocijalnog funkcioniranja. Primjerice, sudjelovanjem u slanju seksualno eksplicitnih poruka osoba može doživjeti pozitivno iskustvo ostvarivanja bliskosti ili primanja pozitivnih informacija, ali isto tako može doživjeti negativno iskustvo ako se poruke prosljede ili ako povratne informacije nisu pozitivne. U budućim istraživanjima je važno promatrati *online* aktivnost slanja seksualno eksplicitnog sadržaja kao kontinuum aktivnosti koja može imati različite ishode, od pozitivnih i ugodnih do negativnih (odnosno rizičnih) i potpuno neugodnih. Također, u budućim istraživanjima treba uzeti u obzir kontekst slanja seksualno eksplicitnog sadržaja, dobrovoljnost sudjelovanja u takvom slanju, te njihov odnos s različitim pozitivnim i negativnim aspektima psihosocijalnog funkcioniranja.

Rezultati našeg istraživanja ukazuju na značajnu, ali umjerenu predikciju primanja seksualno eksplicitnog sadržaja objašnjenju problema u ponašanju i odnosima kod adolescenata. Ovo je u skladu s prethodnim istraživanjima (23,24,37) koja su utvrdila povezanost između primanja seksualno eksplicitnih poruka i lošijeg psihosocijalnog funkcioniranja mladih. Međutim, važno je također uzeti u obzir mogućnost da je primanje ovih poruka bilo ne-

particularly vulnerable to the risk of online sexual victimization (36).

Our findings additionally suggest that participation in sending sexually explicit messages at the same time also predicts the negative aspects of psychosocial functioning, including higher levels of general psychosocial dysfunction and problems in behavior and relationships. Consistent with our findings, some studies emphasize the association between sexting and the negative aspects of psychosocial functioning such as depression, anxiety, impulsivity, hostility, emotional dysregulation and aggressive temperament (10, 20, 24, 26), particularly in the context of involuntary sexting (10, 24), where being asked to participate in such activities can be perceived as pressure (14). However, we must not overlook the fact that our results suggest that sending sexts is associated with both positive and negative aspects of psychosocial functioning. For example, participating in sending sexually explicit messages may result in the positive effect of creating intimacy or receiving positive feedback for the individual, but it may also bring about negative experiences if the messages are forwarded or the feedback is not positive. In future research, it is important to consider the online activity of sending sexually explicit content as a continuum of activities that can have different outcomes, ranging from positive and pleasurable to negative (or risky) and completely unpleasant. Furthermore, future research should consider the context of sending sexually explicit content, the voluntary nature of participation in such sending, and its relationship with various positive and negative aspects of psychosocial functioning.

The results of our study indicate a significant, albeit moderate, prediction of receiving sexually explicit content as an explanation for behavior and relationship problems in adolescents. This is consistent with previous studies (23, 24, 37) that have observed an association between receiving sexually explicit messages and poor-

željeno na što ukazuju rezultati nekih studija (24) koji ističu da samo primanje neželjenih poruka može biti povezano s lošijim psihosocijalnim funkcioniranjem, osobito u kontekstu depresije, impulzivnosti, hostilnosti, emocionalne disregulacije i agresivnog temperamenta. Stoga adolescenti mogu doživjeti primanje takvih poruka kao emocionalno uznemirujuće, što može rezultirati određenim poteškoćama u socijalnim odnosima. Ipak, potrebna su daljnja istraživanja, posebice longitudinalna, kako bi se testirala ova pretpostavka te kako bi se bolje razumjeli mehanizmi putem kojih primanje ovakvih poruka utječe na psihosocijalno zdravlje.

Naš nalaz koji pokazuje da prosljeđivanje tuđih seksualnih sadržaja nije povezano s psihosocijalnim funkcioniranjem može se objasniti na nekoliko načina. Prvo, važno je razmotriti motive zbog kojih se prosljeđivanje događa. Često mladi prosljeđuju tuđe sadržaje najčešće što smatraju da je to zabavno ili šaljivo te to ne smatraju velikim problemom (38,39). U takvim situacijama prosljeđivanje tuđih sadržaja, koje je uobičajena zabavna interakcija među mladima, ne mora nužno biti povezano sa psihosocijalnim funkcioniranjem, kako negativnim aspektom u kontekstu općeg psihosocijalnog disfunkcioniranja ili poteškoćama u odnosima, tako i pozitivnim aspektom u smislu budućih pozitivnih ishoda ili očekivanja. Drugo, posljedice prosljeđivanja tuđeg sadržaja mogu biti negativne za osobu koja je doživjela iskustvo dijeljenja takvog sadržaja bez pristanka (40), ali ne i za osobu koja je prosljedila takav sadržaj. Vrlo često mladi prosljeđivanje vide kao i svaki drugi digitalni sadržaj te ga impulzivno dijele jedni s drugima, budući da smatraju da je takvo ponašanje prihvaćeno unutar vršnjačke skupine (41).

Na kraju, bitno je istaknuti neka ograničenja ovog istraživanja. Prvo, istraživanje je koristilo transversalni pristup kako bi istražilo odnos između sekstinga i psihosocijal-

er psychosocial functioning in young people. However, it is also important to consider the possibility that receiving these messages was unsolicited, as indicated by the results of some studies (24) which point out that receiving unsolicited sexual messages alone may be associated with poorer psychosocial functioning, particularly within the context of depression, impulsivity, hostility, emotional dysregulation, and aggressive temperament. Adolescents may, therefore, perceive receiving such messages as emotionally distressing, which could lead to certain difficulties in social relationships. Nevertheless, further research, particularly longitudinal studies, is necessary in order to test this assumption and to better understand the mechanisms by means of which receiving such messages affects psychosocial well-being.

Our results which suggest that forwarding the sexual content of others is not associated with psychosocial functioning can be explained in several ways. First, it is important to consider the motives for forwarding. Adolescents often forward the content of others because they find it entertaining or funny, and do not view it as a big problem (38, 39). In such situations, forwarding the content of others, which is a common form of fun among adolescents, is not necessarily associated with psychosocial functioning, both the negative aspects in terms of general psychosocial dysfunction or difficulties in relationships, and the positive aspects relating to future positive outcomes or expectations. Second, the consequences of forwarding the content of others can be negative for the person who has experienced their content of this type being shared without consent (40), but not for the person who has forwarded it. Very often, young people view forwarding as similar to any other digital content and impulsively share it with others because they believe that such behavior is accepted within their peer group (41).

Finally, some limitations of this study should be noted. First, the study used a cross-section-

nog funkcioniranja pa nije moguće donositi uzročno-posljedične zaključke. Na primjer, iako smo utvrdili povezanost između slanja seksualnih poruka i optimizma, ne možemo sa sigurnošću tvrditi da sudjelovanje u takvoj aktivnosti djeluje pozitivno potkrepljujuće na optimizam, ili da pojedinci s optimističnim stavom prema ishodu određenog ponašanja odabiru sudjelovanje u sekstingu. Potrebna su daljnja longitudinalna istraživanja kako bi se istražile navedene pretpostavke. Drugo, ovo istraživanje je provedeno na prigodnom uzorku heteroseksualnih adolescenata, s osobito visokim udjelom djevojaka, pa se podatci ne mogu generalizirati na cjelokupnu populaciju adolescenata. Treće, u ovom istraživanju nije kontroliran utjecaj nekih drugih varijabli, poput ranijih psiholoških teškoća što otežava jasnije razumijevanje odnosa između sekstinga i psihosocijalnog funkcioniranja. Četvrto, istraživanjem smo dobili niske do umjerene povezanosti između sekstinga i psihosocijalnog funkcioniranja, što ukazuje da vjerojatno postoje druge varijable koje bi mogle posredovati ili moderirati ovaj odnos. Na primjer, odnos između sekstinga i psihosocijalnog funkcioniranja može varirati ovisno o situacijskim odrednicama kao što su motivi za sudjelovanje u sekstingu ili individualnim odrednicama poput samokontrole, što bi trebalo istražiti u budućim studijama.

Zaključno, ovo istraživanje pokazuje da adolescenti, bez obzira na spol, sudjeluju u praksi sekstinga, posebice oni koji su u intimnim vezama. Također, utvrdili smo kako sudjelovanje u sekstingu, pogotovo slanju seksualno eksplicitnoga sadržaja, može biti povezano kako s lošijim, tako i s boljim psihosocijalnim funkcioniranjem. Ovakvi nalazi ističu važnost edukacije koja ne ističe samo potencijalno negativne aspekte *online* istraživanja seksualnosti, već i pozitivne, naglašavajući pritom moguće rizike kao i pružajući informacije o načinima sigurnog korištenja interneta u svrhu istraživanja seksualnosti.

al approach in order to explore the relationship between sexting and psychosocial functioning, therefore no causal conclusions can be drawn. For example, even though we have determined that there is a correlation between sending sexts and optimism, we cannot claim with certainty that engaging in such activities has a positive reinforcing effect on optimism, or that individuals with an optimistic attitude towards the outcome of certain behaviors choose to engage in sexting. Further longitudinal studies are necessary in order to test these assumptions. Second, this study was conducted on a convenience sample of heterosexual adolescents, with a particularly high proportion of girls, therefore the data cannot be generalized to the entire adolescent population. Third, the effect of some other variables, such as previous mental health problems, was not controlled in this study, which hinders a clearer understanding of the relationship between sexting and psychological functioning. Fourth, we have observed low to moderate connections between sexting and psychological functioning, suggesting that there are likely other variables that could mediate or moderate this relationship. For example, the relationship between sexting and psychosocial functioning might vary depending on situational determinants such as motives for engagement in sexting or individual determinants such as self-control, which should be investigated in future studies.

In conclusion, this study has shown that adolescents, regardless of gender, participate in sexting practices, especially when they are involved in intimate relationships. Furthermore, we have observed that engaging in sexting, particularly in the sending of sexually explicit content, can be associated with both poorer and better psychosocial functioning. These findings emphasize the importance of education that highlights not only the potentially negative, but also the positive aspects of exploring sexuality online, while also highlighting the potential risks and providing information on the safe use of the internet for the purpose of sexual exploration.

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# Biblioterapija, samopomoć i subjektivna dobrobit u otvorenom pristupu u Hrvatskoj

## */ Bibliotherapy, Self-Help and Subjective Well-Being in Open Access in Croatia*

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Samopomoć, biblioterapija i subjektivna dobrobit teme su koje su sve više prisutne u javnom diskursu u Hrvatskoj. U radu će se objasniti pojmovi samopomoći najčešće vezani uz knjige za samopomoć, biblioterapija kao jedna od terapijskih tehnika, te pojam subjektivne dobrobiti kao težnja za ostvarivanjem sreće i osobnog zadovoljstva životom. Svi ti pojmovi vezani su uz destigmatizaciju psihoterapije s ciljem povećane svjesnosti važnosti mentalnog zdravlja. S obzirom na sve veću prisutnost ovih tema u znanstvenom i stručnom diskursu, rad će prikazati rezultate istraživanja o tome koliko su one zastupljene u hrvatskim znanstvenim publikacijama u otvorenom pristupu. Istraživanje je provedeno u okviru aktivnosti građanske znanosti *Samopomoć i dobrobit u akademskom mrežnom okruženju*, koja se fokusira na stručne i znanstvene izvore u otvorenom pristupu. Aktivnost je povezana s jednim od UN-ovih ciljeva održivog razvoja (Cilj 3: zdravlje i dobrobit) te ujedno naglašava važnost otvorenog pristupa i otvorene znanosti te neovisnog pretraživanja informacija. Ideja o održavanju ove aktivnosti proizašla je iz mota Mjeseca hrvatske knjige 2022. „Misli o sebi – čitaj“ koji je bio usmjeren na mentalno zdravlje mladih. Studenti Odsjeka za informacijske i komunikacijske djelatnosti Filozofskog fakulteta Sveučilišta u Zagrebu (n=20) sudjelovali su u aktivnosti i pretraživali Portal hrvatskih znanstvenih i stručnih časopisa Hrčak koristeći ključne riječi *samopomoć*, *subjektivna dobrobit* i *biblioterapija*. Rezultati istraživanja su pokazali da je na Portalu hrvatskih znanstvenih i stručnih časopisa Hrčak najzastupljenija tema subjektivna dobrobit, dok se nešto manje piše o biblioterapiji i samopomoći. Sve tri teme povezane su s ključnim pojmovima kao što su psihologija, mladi, kvaliteta života i mentalno zdravlje. Osim rezultata istraživanja, prepoznato je da građanska znanost može pomoći u prikupljanju podataka i znanstvenom istraživanju, jer, osim što olakšava širenje znanja, pridonosi i izgradnji novih partnerstava i daljnjoj popularizaciji znanosti i širenju svjesnosti o mentalnom zdravlju.

*/ Self-help, bibliotherapy and subjective well-being are topics that are becoming increasingly present in public discourse in Croatia. This paper will explain the concepts of self-help most often associated with self-help books, bibliotherapy as one of the therapeutic techniques, and the concept of subjective well-being as the pursuit of happiness and personal satisfaction in life. All these terms relate to the destigmatization of psychotherapy with the aim of increasing awareness of the importance of mental health. Given the increasing presence of these topics in the scientific and professional discourse, this paper will present the results of research on the extent to which these topics are represented in the Croatian open access scientific publications. The research was conducted as part of the citizen science activity "Self-Help and Well-Being in an Academic Online Environment", which focuses on professional and scientific resources in open access. The activity is connected with one of the UN Sustainable Development Goals (Goal 3: health and well-being) and at the same time emphasizes the importance of open access and open science, as well as independent information search. The idea of implementing this activity originated from the motto of the 2022 Croatian Book Month, "Think about yourself – read", which focused on the mental health of young people. Students of the Department of Information and Communication Sciences, University of Zagreb Faculty of Humanities and Social Sciences (n=20) participated in the activity and searched the Portal of Croatian scientific and professional journals - Hrčak using the key words self-help, subjective well-being and*

*bibliotherapy. The results of the research showed that subjective well-being is the most represented topic on the Portal of Croatian scientific and professional journals - Hrčak, while the topics of bibliotherapy and self-help are discussed to a somewhat lesser extent. All three topics are associated with key terms such as psychology, youth, quality of life and mental health. In addition to research results, it has been observed that citizen science can assist in data collection and scientific research, because in addition to facilitating the dissemination of knowledge, it also contributes to building new partnerships, as well as a further popularization of science and spreading awareness about mental health.*

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## UVOD

Rad je posvećen teorijskom i empirijskom istraživanju odabranih pojmova iz područja mentalnog zdravlja i kvalitete života, a odnosi se na samopomoć, biblioterapiju i subjektivnu dobrobit. Ti pojmovi su sve više prisutni u javnom i znanstvenom diskursu u Hrvatskoj, a odabrani su jer se tiču zaštite mentalnog zdravlja, posebice mladih, što je bio moto Mjeseca hrvatske knjige 2022. „Misli o sebi – čitaj“ koji je bio usmjeren upravo na mentalno zdravlje mladih. U radu se polazi od pretpostavke da je za brigu o mentalnom zdravlju važno stvoriti preduvjete u javnom prostoru. Zato se i analizira pojam samopomoći koji je usko vezan uz sve popularnije knjige za samopomoć, a uz njega i pojam biblioterapije kao jedne od terapijskih tehnika koji tek, prodorom knjiga za samopomoć i naglašavanjem čitanja kao terapijskog učinka, postaje sve značajniji čimbenik u zaštiti mentalnog zdravlja, te naposljetku pojam dobrobiti koji zaokružuje oba pojma te se odnosi na ukupno zadovoljstvo životom. Teorijski dio rada će se shodno tome baviti objašnjenjem i

## INTRODUCTION

This paper addresses the theoretical and empirical research of selected concepts from the field of mental health and quality of life, and refers to self-help, bibliotherapy and subjective well-being. These concepts are increasingly present in the public and scientific discourse in Croatia and were selected because they relate to the preservation of mental health, specifically among young people, which was the motto of the 2022 Croatian Book Month: “Think about yourself - read”, that was aimed precisely at the mental health of young people. This paper is based on the assumption that it is important to create prerequisites in the public space for mental health care. That is why the concept of self-help, which is closely related to the increasingly popular self-help books, is analyzed, along with the concept of bibliotherapy as one of the therapeutic techniques that is only now, along with the dissemination of self-help books and the emphasis on reading as a therapeutic effect, becoming an increasingly significant factor in the protection of mental health. Finally, there is the concept of well-being, which encompasses both aforementioned concepts and refers



analizom pojmova biblioterapija, samopomoć i subjektivna dobrobit kako bi se objasnila njihova važnost i veza s brigom o mentalnom zdravlju.

Što se tiče empirijskog dijela rada, a s obzirom na sve veću prisutnost ovih tema u znanstvenom i stručnom diskursu, rad će prikazati i rezultate istraživanja o tome koliko su teme poput samopomoći, subjektivne dobrobiti i biblioterapije zastupljene u hrvatskim znanstvenim publikacijama u otvorenom pristupu. Istraživanje je provedeno u okviru aktivnosti građanske znanosti *Samopomoć i dobrobit u akademskom mrežnom okruženju*, koja se fokusira na stručne i znanstvene izvore u otvorenom pristupu. Aktivnost je povezana s jednim od UN-ovih ciljeva održivog razvoja (Cilj 3: zdravlje i dobrobit) te ujedno naglašava važnost otvorenog pristupa i otvorene znanosti te neovisnog pretraživanja informacija.

S obzirom na gore navedeno, ciljevi ovoga rada su sljedeći: 1) ukazati na važnost svjesnosti o mentalnom zdravlju u društvu općenito; 2) provedenim istraživanjem specifično istražiti koliko su odabrani ključni pojmovi povezani s mentalnim zdravljem zastupljeni u hrvatskim znanstvenim publikacijama u otvorenom pristupu; 3) ukazati na utjecaj otvorene građanske znanosti za širenje svjesnosti o mentalnom zdravlju.

Pregledom literature utvrđeno je da dosad nije provedeno istraživanje koje istovremeno obuhvaća radove u otvorenom pristupu na tematiku samopomoći, biblioterapije i subjektivne dobrobiti. Zato je ovaj rad iskorak u znanstvenom istraživanju ovih tema.

Ipak, uočeno je nekoliko istraživanja u obliku sustavnih pregleda literature koja su izrađena zasebno za svaku od tri navedene teme.

Muna Ahmed i Peter Bower su 2008. godine objavili istraživanje na temelju pregleda literature pod nazivom „*The effectiveness of self help technologies for emotional problems in adoles-*

to the overall satisfaction with life. Consequently, the theoretical part of the paper will address the explanation and analysis of the concepts of bibliotherapy, self-help and subjective well-being in order to explain their importance and connection with mental health care.

As for the empirical part of the paper, and considering the increasing presence of these topics in the scientific and professional discourse, the paper will also present the results of research on the extent to which topics such as self-help, subjective well-being and bibliotherapy are represented in the Croatian open access scientific publications. The research was conducted as part of the citizen science activity “Self-Help and Well-Being in an Academic Online Environment”, which focuses on professional and scientific resources in open access. The activity is connected with one of the UN Sustainable Development Goals (Goal 3: health and well-being) and at the same time emphasizes the importance of open access and open science, as well as independent information search.

In accordance with the above, the objectives of this paper are as follows: 1) to highlight the importance of mental health awareness in the society in general; 2) to examine, by means of the conducted research, to what extent the selected key terms are present in the Croatian open access scientific publications; 3) to highlight the influence of open citizen science when it comes to spreading awareness about mental health.

A review of the literature revealed that no studies have yet been conducted that simultaneously include papers in open access addressing the subjects of self-help, bibliotherapy and subjective well-being. Therefore, this paper represents a step forward in the scientific research of these topics.

However, several studies in the form of systematic reviews of the literature were found, and these were carried out separately for each of the three mentioned topics.

Authors Muna Ahmed and Peter Bower published a study in 2008 based on a literature re-

*cents: a systematic review*" (1). Cilj istraživanja bio je ispitati učinkovitost tehnologije samopomoći u liječenju emocionalnih problema adolescenata provedbom sustavnog pregleda randomiziranih i kvaziekperimentalnih dokaza. Na temelju pregleda zaključeno je da se trenutačno (2008. godine) ne može preporučiti uvođenje tehnologije samopomoći za adolescente s emocionalnim problemima u redovnu kliničku praksu. Autorice Lisa Beatty i Sylvie Lambert su 2013. objavile rad „*A systematic review of internet-based self-help therapeutic interventions to improve distress and disease-control among adults with chronic health conditions*“ (2). Cilj istraživanja na kojem je rad temeljen bio je procjena učinkovitosti internetskih intervencija za samopomoć u smanjenju stresa i kontroli bolesti među odraslim pacijentima s kroničnim bolestima. Dokazi su pokazali da internetske intervencije za samopomoć mogu biti obećavajuće u poboljšanju emocionalnog stanja i kontrole bolesti među odraslim pacijentima s kroničnim bolestima. Pregled literature na temu samopomoći istražili su i autori Harriet Mills, Nadine Mulfinger, Sophie Reader, Nicolas Rüschi, Henry Clements i Katrina Scior 2020., na temelju čega su objavili članak „*Self-help interventions to reduce self-stigma in people with mental health problems: a systematic literature review*“ (3). U fokusu istraživanja bila je kritička procjena literature o intervencijama samopomoći koje ciljaju samostigmatizaciju vezanu uz mentalne zdravstvene probleme. Ustanovljeno je da većina takvih intervencija čini grupne ili vršnjačke intervencije, uz mali broj terapijski vođenih individualiziranih intervencija. Utvrđene su jasne prednosti intervencija samopomoći koje su dostupne svakome, uključujući osobe koje bi inače izbjegavale ili odbacivale individualne ili grupne intervencije zbog strahova o objavi. Autori Anna Frokjaer Holsting, Mette Trøllund Rask, Lisbeth Frostholt, Marianne Rosendal i Charlotte Ulrikka Rask su 2021 objavili rad „*Self-help interventions for young people with*

*view, entitled “The Effectiveness of Self Help Technologies for Emotional Problems in Adolescents: a Systematic Review”* (1). The aim of the study was to examine the effectiveness of self-help technology in the treatment of adolescent emotional problems by conducting a systematic review of randomized and quasi-experimental evidence. Based on the review, it was concluded that at the moment (in 2008) the introduction of self-help technology for adolescents with emotional problems could not be recommended in regular clinical practice. In 2013, authors Lisa Beatty and Sylvie Lambert published the paper entitled “*A Systematic Review of Internet-Based Self-Help Therapeutic Interventions to Improve Distress and Disease-Control Among Adults with Chronic Health Conditions*” (2). The aim of the study that served as the basis for the paper was to evaluate the effectiveness of internet self-help interventions in stress reduction and disease control among adult patients with chronic diseases. Evidence has shown that Internet-based self-help interventions could show promise when it comes to improving emotional well-being and disease control among adult patients with chronic diseases. A literature review on the topic of self-help was also investigated by authors Harriet Mills, Nadine Mulfinger, Sophie Reader, Nicolas Rüschi, Henry Clements and Katrina Scior in 2020, on the basis of which they published the article “*Self-help Interventions to Reduce Self-Stigma in People with Mental Health Problems: a Systematic Literature Review*” (3). The focus of the study was a critical evaluation of the literature on self-help interventions which target self-stigma associated with mental health problems. It was found that the majority of such interventions are group or peer interventions, with a small number of therapeutically guided individualized interventions. Clear benefits of self-help interventions available to anyone were confirmed, which includes individuals who would otherwise avoid or reject individual or group interventions due to fears of their disclosure. Authors Anna Frokjaer Holsting, Mette Trøllund Rask, Lisbeth Frostholt, Marianne Rosendal and Charlotte Ulrikka Rask

*persistent physical symptoms*“ (4). U radu su predstavili istraživanje kojim su nastojali sustavno pregledati randomizirane kontrolirane pokuse o intervencijama samopomoći za mlade ljude s trajnim fizičkim simptomima u usporedbi s aktivnim ili pasivnim kontrolnim skupinama. Utvrđeno je kako je učinak intervencija samopomoći u ublažavanju opterećenja simptomima bio slab, a potencijalni učinci nisu se mogli povezati s jednim specifičnim teorijskim pristupom.

Pregled sličnih istraživanja literature u tematici biblioterapije istražili su Paul Montgomery i Kathryn Maunders u svom radu „*The effectiveness of creative bibliotherapy for internalizing, externalizing, and prosocial behaviors in children: a systematic review*“ objavljenom 2015. godine (5). Svrha istraživanja bila je procjena učinkovitosti i djelotvornosti kreativne biblioterapije u prevenciji i liječenju internalizirajućih i eksternalizirajućih ponašanja te jačanju prosocijalnih ponašanja kod djece u dobi od 5 do 16 godina. Iz istraživanja je proizašlo da kreativna biblioterapija može imati blagi do umjereni pozitivan utjecaj na ponašanje djece. Maria R. Gualano, Fabrizio Bert, Gianluca Voglino, Marco Martorana, Violetta Andriolo, Roberta Siliquini i drugi su 2017. godine objavili rad „*The long-term effects of bibliotherapy in depression treatment: systematic review of randomized clinical trials*“ (6). Cilj njihova istraživanja bio je provjeriti dugoročne učinke biblioterapije. Rezultati su sugerirali da biblioterapija ima važnu ulogu u liječenju ozbiljnih problema s mentalnim zdravljem. Astarani Kili i Richard Selvia David su 2020. godine objavili rad „*The influence of bibliotherapy on children’s psychological response during hospitalization: a systematic review*“ u kojem su proveli sustavni pregled literature (7). Cilj istraživanja bio je određivanje učinka biblioterapije na stres, i anksioznost kod djece koja su hospitalizirana. Zaključeno je da biblioterapija može smanjiti stres hospitalizacije i anksioznost kod djece tako da imaju psiho-

published the paper entitled “Self-help Interventions for Young People with Persistent Physical Symptoms” in 2021 (4). In the paper, they presented their research in which they attempted to systematically review randomized controlled trials of self-help interventions for young people with persistent physical symptoms compared to active or passive control groups. It was found that the effect of self-help interventions in alleviating the burden of symptoms was weak, and the potential effects could not be linked to one specific theoretical approach.

A review of similar literature research on the topic of bibliotherapy was conducted by authors Paul Montgomery and Kathryn Maunders in their paper “The Effectiveness of Creative Bibliotherapy for Internalizing, Externalizing, and Prosocial Behaviors in Children: A Systematic Review”, published in 2015 (5). The purpose of the study was to assess the efficiency and effectiveness of creative bibliotherapy in the prevention and treatment of internalizing and externalizing behaviors and the strengthening of prosocial behaviors in children between 5 and 16 years of age. The study showed that creative bibliotherapy can have a mild to moderate positive impact on children’s behavior. In 2017, authors Maria R. Gualano, Fabrizio Bert, Gianluca Voglino, Marco Martorana, Violetta Andriolo, Roberta Siliquini et al. published the paper entitled “The Long-Term Effects of Bibliotherapy in Depression Treatment: Systematic Review of Randomized Clinical Trials” (6). The aim of their study was to explore the long-term effects of bibliotherapy. The results suggested that bibliotherapy has an important role in the treatment of serious mental health problems. In 2020, authors Astarani Kili and Richard Selvia David published the paper entitled “The Influence of Bibliotherapy on Children’s Psychological Response During Hospitalization: a Systematic Review” (7), in which they conducted a systematic review of the literature. The aim of the study was to determine the effects of bibliotherapy on the stress and anxiety of hospitalized children. It was concluded that bibliotherapy can reduce the stress of hospitalization and anxiety in children

loški odgovor suočavanjem, koji je prilagodljiv i suradnički u medicinskoj i sestrinskoj primjeni. Godine 2021. Monroy-Fraustro i drugi izradili su istraživanje na temelju pregleda članaka o učinkovitosti biblioterapije u različitim problemima mentalnog zdravlja, objavljeno u radu „*Bibliotherapy as a non-pharmaceutical intervention to enhance mental health in response to the COVID-19 pandemic: a mixed-methods systematic review and bioethical meta-analysis*“ (8). Rezultati istraživanja pokazali su da su pacijenti biblioterapijom razvili nekoliko sposobnosti uključujući preoblikovanje vlastitih aktivnosti putem novog stajališta prema njihovom moralnom horizontu.

Što se tiče subjektivne dobrobiti, godine 2017. Kayonda H. Ngamaba, Maria Panagiotti i Christopher J. Armitage objavili su rad „*How strongly related are health status and subjective well-being? Systematic review and meta-analysis*“ na temelju sustavnog pregleda literature (9). Cilj istraživanja bio je ispitati povezanost između zdravstvenog statusa i subjektivne dobrobiti te testirati utjecaj ključnih operativnih i metodoloških faktora na tu povezanost. Zaključeno je da poboljšanje zdravstvenog statusa ljudi može biti jedan od načina putem kojeg vlade mogu unaprijediti subjektivni osjećaj dobrobiti svojih građana. Godinu dana kasnije objavljeno je istraživanje Nurula H. Azizana i Zamalie Mahmuda, „*Determinants of subjective well-being: a systematic review*“ (10). Iz pregleda je utvrđeno da su, osim osobnih faktora poput osobnosti, zdravlja, vjerske predanosti i duhovnosti, socijalno-ekonomske karakteristike poput prihoda, financijskog statusa i zaposlenja najviše usredotočene odrednice subjektivne dobrobiti među istraživačima. Slično istraživanje proveli su i Kirti V. Das, Carla Jones-Harrell, Yingling Fan, Anu Ramaswami, Ben Orlove i Nisha Botchwey 2020. koje su opisali u radu „*Understanding subjective well-being: perspectives from psychology and public health*“ (11). Naime, autori su željeli sa-

in such manner that they develop a psychological response through coping, which is adaptable and collaborative in medical and nursing applications. In 2021, Monroy-Fraustro et al. conducted a study based on a review of articles addressing the effectiveness of bibliotherapy in the treatment of various mental health problems, which was published in the paper “Bibliotherapy as a Non-Pharmaceutical Intervention to Enhance Mental Health in Response to the COVID-19 Pandemic: a Mixed-Methods Systematic Review and Bioethical Meta-Analysis” (8). The results of the study showed that patients developed several abilities through bibliotherapy, including the reshaping of their own activities by adopting a new point of view based on their moral horizon.

As for subjective well-being, in 2017, the authors Kayonda H. Ngamaba, Maria Panagiotti and Christopher J. Armitage published the paper entitled “How Strongly Related Are Health Status and Subjective Well-Being? Systematic Review and Meta-Analysis” (9), which was based on a systematic literature review. The aim of this study was to examine the connection between the health status and subjective wellbeing, as well as to test the impact of key operational and methodological factors on this connection. It was concluded that improving the health status of people can be one of the ways in which governments can improve the subjective sense of well-being of their citizens. A year later, a study conducted by the authors Nurul H. Azizan and Zamalia Mahmud was published, entitled “Determinants of Subjective Well-Being: a Systematic Review” (10). It was concluded in the review that, in addition to personal factors such as personality, health, religious commitment and spirituality, socioeconomic characteristics such as income, financial status and employment represent the most focused determinants of subjective well-being among researchers. A similar study was conducted by the authors Kirti V. Das, Carla Jones-Harrell, Yingling Fan, Anu Ramaswami, Ben Orlove and Nisha Botchwey in 2020, which was then described in the paper entitled “Understanding Subjective Well-Being: Perspectives from Psychology and

žeti teorijske i empirijske temelje literature o subjektivnoj dobrobiti prema disciplinarnim područjima. Autori su otkrili da se teorije o subjektivnom osjećaju dobrobiti mogu klasificirati u četiri skupine: teorije ispunjenja i angažiranosti, subjektivne orijentacije, evaluativne teorije i emocionalne teorije. Godine 2021. objavljen je rad Deborah Webster, Laura Dunne, i Ruth Hunter naslovljen „*Association between social networks and subjective well-being in adolescents: a systematic review*“ (12). Cilj ovog istraživanja bio je sustavan pregled postojeće literature koja istražuje odnos između društvenih mreža i subjektivne dobrobiti adolescenata. Ustanovljeno je da su potrebni programi intervencije i edukacije za mlade ljude, edukatore i roditelje kako bi se suočili s rizicima za subjektivnu dobrobit koje donose društvene mreže.

Sintetizirajući dosadašnja istraživanja u području samopomoći, biblioterapije i subjektivne dobrobiti, moguće je uočiti značajan napredak u razumijevanju i primjeni ovih koncepta u kontekstu mentalnog zdravlja. Istraživanja su istaknula važnost samopomoći kao pristupa koji može biti koristan za različite dobne skupine, iako je potrebno daljnje istraživanje kako bi se bolje razumjeli njegovi specifični učinci i najbolje prakse primjene. Biblioterapija je također dobila sve veću pažnju kao terapijska tehnika, posebno u kontekstu poboljšanja mentalnog zdravlja kod djece i adolescenata. Utvrđeno je da može imati pozitivan utjecaj na emocionalno stanje i ponašanje. Što se tiče subjektivne dobrobiti, istraživanja su pokazala da je povezanost između zdravstvenog statusa i subjektivne dobrobiti složena, s mnogim faktorima koji doprinose osjećaju dobrobiti. Dosađnja istraživanja ukazuju na važnost samopomoći, biblioterapije i subjektivne dobrobiti u kontekstu mentalnog zdravlja, što dodatno potvrđuje važnost analize njihove prisutnosti u hrvatskim znanstvenim i stručnim časopisima u otvorenom pristupu.

Public Health” (11). More precisely, the authors aimed to summarize the theoretical and empirical foundations of the literature on subjective well-being according to disciplinary areas. The authors observed that theories about subjective well-being can be classified into four groups: fulfillment and engagement theories, subjective orientations, evaluative theories and emotional theories. A paper by Deborah Webster, Laura Dunne and Ruth Hunter entitled “Association Between Social Networks and Subjective Well-Being in Adolescents: a Systematic Review” was published in 2021 (12). The aim of this study was to conduct a systematic review of the existing literature that investigates the relationship between social networks and the subjective well-being of adolescents. It was found that intervention and education programs for young people, educators and parents are necessary in order to face the risks to subjective well-being brought about by social networks.

By synthesizing the previous studies in the field of self-help, bibliotherapy and subjective well-being, a significant progress in the understanding and application of these concepts in the context of mental health can be observed. The studies have highlighted the importance of self-help as an approach that can be beneficial for various age groups, although further research is necessary in order to better understand its specific effects and best application practices. Bibliotherapy has also gained increasing attention as a therapeutic technique, particularly in the context of improving mental health among children and adolescents. It has been observed that it can have a positive impact on the emotional state and behavior. In terms of subjective well-being, studies have shown that the relationship between health status and subjective well-being is complex, with many factors contributing to the sense of well-being. The studies conducted so far emphasize the importance of self-help, bibliotherapy and subjective well-being in the context of mental health, thus further affirming the importance of analyzing their presence in the Croatian open access scientific and professional journals.

## KONCEPTUALIZACIJA POJMOVA BIBLIOTERAPIJE, SAMOPOMOĆI I SUBJEKTIVNE DOBROBITI

Kada govorimo o pojmovima biblioterapije, samopomoći i subjektivne dobrobiti, važno se ponajprije osvrnuti na značenje tih pojmova te potom i na njihovu upotrebu. Zbog toga će se u ovom teorijskom dijelu rada pažnja obratiti objašnjenju i kontekstualnim uvjetima nastanka pojmova i fenomena odabranih pojmova.

Biblioterapija, engl. *bibliotherapy*, grč. *biblion* — knjiga, knjižnica, grč. *therape-ia* — služenje, liječenje = „liječenje“ knjigama, terapija knjigama, jedna od grana art terapije, tj. jedan od načina terapije umjetnošću, odnosno književnošću, gdje je književno djelo medij kojim se postiže psihoterapijski učinak. Neki od ciljeva biblioterapije su da omogući pomoć pacijentu da bolje shvati svoje psihološke i fiziološke reakcije kod frustracija ili pak sukoba; da mu omogući da razgovara o svojim problemima; da mu pomogne u smanjivanju sukoba radom na stjecanju samopoštovanja kako bi pojedinac uočio da su njegove probleme drugi već proživjeli, te da mu pomogne u raščlambi njegova ponašanja, a da on ne prođe kroz stvarne opasnosti (13). Korištenje knjiga u svrhu liječenja metoda je biblioterapije gdje u terapijskom odnosu postoje tri glavna elementa — terapeut, klijent (pacijent) i knjiga kao medij koji inicira terapijski rad (14). Postoje i dvije škole biblioterapije: kognitivna i afektivna. Kognitivna biblioterapija promatra proces učenja kao glavni mehanizam terapijske promjene pa u tu svrhu rabi nefikcionalna djela<sup>1</sup> kao model za učenje kojim klijenti usvajaju nove vještine. Afektivna biblioterapija vuče podrijetlo iz psihodinamskih terapija te koristi fikcionalna djela kako bi se otkrile potisnute emocije, misli i iskustva. Pritom je jak naglasak na emocionalnim doživljajima čitatelja (klijenta) identifikacijom s

<sup>1</sup> Primjerice knjige za samopomoć koje vezemo uz pojam samopomoći koji je jedan od tri ključna pojma ovog rada.

## CONCEPTUALIZATION OF THE TERMS OF BIBLIOTHERAPY, SELF-HELP AND SUBJECTIVE WELL-BEING

When referring to the concepts of bibliotherapy, self-help and subjective well-being, it is important to primarily address the meaning of these concepts, and then their use. For this reason, in this theoretical part of the paper attention will be paid to the explanation and contextual conditions of the creation of these concepts and their phenomena.

Bibliotherapy, Greek *biblion* — book, library, Greek *therape-ia* — service, treatment = “treatment” with books, book therapy, is one of the branches of art therapy, i.e. one of the methods of art or literature therapy, where a literary work represents the medium through which a psychotherapeutic effect is achieved. Some of the aims of bibliotherapy include helping the patient to better understand their psychological and physiological reactions to frustrations or conflicts; allowing them to talk about their problems; helping them reduce conflicts by working on gaining self-esteem so that they can realize that others have already experienced their problems; and helping them analyze their behavior without them going through real dangers (13). The use of books for the purpose of treatment is a method of bibliotherapy in which there are three main elements in the therapeutic relationship — the therapist, the client (patient) and the book as a medium that initiates the therapeutic work (14). There are also two schools of bibliotherapy: cognitive and affective. Cognitive bibliotherapy observes the learning process as the main mechanism of therapeutic change, and for this purpose it uses non-fictional works<sup>1</sup> as a learning model through which clients acquire new skills. Affective bibliotherapy has its origins in psychodynamic therapies and uses fictional works to reveal repressed emotions, thoughts and experiences. In so doing, it puts great emphasis

<sup>1</sup> For example, self-help books that we associate with the concept of self-help, which is one of the three key concepts of this paper.

iskustvima likova. U stranoj literaturi posebnu pažnju razvoju biblioterapije kao terapijske metode obratili su Rhea J. Rubin (15), John T. Pardeck i Jean A. Pardeck (16, 17), Dale-Elizabeth Pehrsson i Paula McMillen (18), Zipora Shechtman (19), Biri Rottenberg (20) i dr. U domaćoj literaturi postoji manjak radova iz područja biblioterapije, no treba izdvojiti prvi hrvatski priručnik iz područja biblioterapije *Biblioterapija i poetska terapija – priručnik za početnike* Ivane Bašić (21) te *Literarna biblioterapija u nastavi književnosti* Rone Bušljete i Davora Piskača (22).

Uz pojam biblioterapije veže se pojam samopomoći. Razvoj fenomena samopomoći promatrat ćemo utjecajem religije, popularizacije znanosti i popularizacije psihoanalize te ćemo time pokazati liniju razvitka tog fenomena. Krenuvši s utjecajem religije, a vezano za povijesne dokumente koji bi poslužili kao začetak razvoja fenomena samopomoći, postoji mnogo metodoloških meandara. Ako se krene gledati daleko u prošlost, pogled može dosegnuti sve do Biblije, pa i prije, do egipatskih dokumenata o interpretaciji snova (23). Međutim, konture začetaka fenomena jasnije se vide tek kasnije, u tradiciji protestantizma u ranim danima osnivanja SAD-a. Takva polazišna točka direktnije i cjelovitije ukazuje na začetke onoga što će se dogoditi u 20. st., kada se zbiva procvat fenomena samopomoći i pratećih knjiga za samopomoć. Idejne začetke onoga što će se kasnije nazvati fenomenom samopomoći nalazimo u jakoj tradiciji protestantizma kod prvih doseljenika u Ameriku tijekom 15. i 16. st., o čemu i Steven Starker raspravlja u knjizi *Oracle at the Supermarket: the American preoccupation of self-help books* (23). On navodi da je 85 % crkava u prvih 13 kolonija bilo puritansko. Gajile su uvjerenje da će ljudi koji žive u skladu s Božjim očekivanjima primiti njegovu milost. Teoretičar Tom Butler-Bowdon (24) smatra da je preteča knjiga za samopomoć *Autobiografija* Benjamina Franklina, američkog državnika i

on the emotional experiences of the reader (client) through identification with the experiences of the characters. In foreign literature, authors Rhea J. Rubin (15), John T. Pardeck and Jean A. Pardeck (16, 17), Dale-Elizabeth Pehrsson and Paula McMillen (18), Zipora Shechtman (19), Biri Rottenberg (20) and others paid special attention to the development of bibliotherapy as a therapeutic method. There is a lack of studies addressing bibliotherapy in domestic literature, however, the first Croatian manual in the field of bibliotherapy, entitled “Bibliotherapy and Poetic Therapy - a Manual for Beginners” written by Ivana Bašić (21), as well as “Literary Bibliotherapy in the Teaching of Literature” by Rona Bušljeta and Davor Piskač, should be singled out (22).

The concept of bibliotherapy is associated with the concept of self-help. We will observe the development of the self-help phenomenon through the influence of religion, the popularization of science and the popularization of psychoanalysis, and the line of development of this phenomenon will thus be evident. Starting with the influence of religion, and with reference to the historical documents that would serve as the beginning of development of the self-help phenomenon, there are many methodological meanders. If one should look far into the past, they could reach all the way to the Bible and even earlier, to the Egyptian documents discussing the interpretation of dreams (23). However, the contours of the beginnings of the phenomenon can be seen more clearly only later, in the tradition of Protestantism in the early days of the founding of the USA. Such a starting point provides a more direct and comprehensive indication of the beginnings of what would happen in the 20th century, when the self-help phenomenon and the accompanying self-help books flourished. The conceptual beginnings of what would later be called the self-help phenomenon can be found in the strong tradition of Protestantism among the first settlers in America during the 15th and 16th centuries, which Steven Starker also discusses in the book “Oracle at the Supermarket: the American Preoccupation of Self-Help Books” (23). He states that 85% of the churches in the first 13 colonies

jednog od autora Deklaracije neovisnosti. On u knjizi svojim čitateljima daje savjete i upute za postizanje zadanih ciljeva svakodnevnim praćenjem osobnog napretka. Odatle i korijeni ideje o samopomoći kojoj je temelj u oslanjanju na vlastite snage i „rad na sebi“. Ideja samopomoći konkretizirana je otprilike u isto vrijeme kada su puritanski ideali teškog rada, samopropitivanja i discipline bili nerazdvojni pojmovi na putu za osobni napredak. To je osobito vidljivo u knjizi *Self-Help* Samuela Smilesa (25) u kojoj je autor među prvima upotrijebio pojam samopomoći. Početkom 20. st. dolazi do zaokreta. Više se ne naglašava težak rad i trud oko izgradnje sebstva. Samodisciplinu i težak posao zamijenila je „snaga uma“. Religijski utjecaj slabi, a koncentracija na „prave misli“ i „pozitivno mišljenje“ dolazi u prvi plan (14). Krajem stoljeća možemo uočiti pojavu stručnijih popularno-znanstvenih psihologijskih knjiga koje nude istraživanja i upute ne samo akademski obrazovanim građanima, već i širem puku. U njima se navode istraživanja i studije kojima se potkrjepljuju savjeti iz područja samopomoći kako bi se potvrdila znanstvenost pristupa kao legitimacija diskursa samopomoći i terapijskog učinka koji se u takvim knjigama najavljuje.<sup>2</sup> Odnos znanosti i popularne znanosti tema je koja, uz analizu utjecaja religije na razvitak kulture samopomoći, također pridonosi istraživanju konteksta nastanka fenomena samopomoći. Ovdje se razmatra uloga znanosti u 19. i 20. st. te uvjeti koji su doveli do njene popularizacije, kako bi se rastući trend popularizacije znanosti doveo u vezu s procvatom popularne psihologije, odnosno knjiga za samopomoć. U knjizi *Understanding popular science* Peter Broks (28) iz kulturno-teorijske perspektive promatra načine na koje su se tijekom povijesti konstruirali diskurs o znanosti i onaj o popularnoj znanosti. Tvrdi kako su se kulturalna značenja popularne znanosti jasnije počela uspostavljati

were Puritan. They believed that people who lived according to God's expectations would receive his grace. Theorist Tom Butler-Bowdon (24) believes that the forerunner of self-help books is the "Autobiography" of Benjamin Franklin, American statesman and one of the authors of the Declaration of Independence. In the book, he gives his readers advice and instructions on how to achieve their set goals through daily monitoring of their personal progress. Hence the roots of the idea of self-help, which is based on relying on one's own strengths and "working on oneself". The idea of self-help was concretized around the same time when the Puritan ideals of hard work, self-examination and discipline represented inseparable concepts on the path to personal advancement. This is particularly evident in the book "Self-Help" by Samuel Smiles (25), in which the author was one of the first to use the term self-help. A turning point occurred at the beginning of the 20th century. The emphasis was no longer on hard work and efforts to build oneself. Self-discipline and hard work were replaced by the "power of the mind". The religious influence weakened, and the concentration on "right thoughts" and "positive thinking" came to the fore (14). By the end of the century, the appearance of more professional popular-scientific psychology books that offered research and instructions not only to academically educated citizens, but also to the general public, can be observed. They cited research and studies that supported self-help advice in order to confirm the scientific nature of the approach as a legitimization of self-help discourse and the therapeutic effect which is announced in such books.<sup>2</sup> The relationship between science and popular science is a topic that, along with the analysis of the influence of religion on the development of self-help culture, also contributes to the research addressing the context of the emergence of the self-help phenomenon. The role of science in the 19th and 20th centuries and the conditions that led to its popularization were considered here, in order to connect the growing trend of popularization of

<sup>2</sup> Primjeri takvih knjiga su: *Motivation and Personality* (26) i *Emocionalna inteligencija* (27).

<sup>2</sup> Examples of such books are: "Motivation and Personality" (26) and "Emotional Intelligence" (27).



u prvoj polovici 19. st., kada i nastaje pojam „znanstvenik“ i moderna upotreba pojma „popularizacija“ (28). Broks smješta jak i jasan kulturalni zaokret prema popularizaciji znanosti na kraj 1970-ih i početak 1980-ih godina, što dokazuju mnoge knjižare koje su uvele novo područje popularne znanosti na svoje police (28). Godine 1988. objavljeno je djelo Stephe-  
na Hawkinga *A brief history of time* (29) koja je četiri i pol godine bila najprodavanija knjiga s prodanih više od 9 milijuna primjeraka (14). U 20. st. su značenja znanosti i popularne znanosti dovođena u vezu s kontra-kulturalnim kritikama tehnokracije te s potragom za mističnim iskustvima. Popularizacija znanosti utjecala je na razvitak popularne psihologije. Tek je popularizacija znanosti omogućila popularizaciju psihologije, odnosno proces popularizacije znanosti doveo je do sličnih promjena i unutar znanosti psihologije, što je u konačnici rezultiralo pojavom novog etosa promišljanja o ovom mikrosvijetu kroz diskurs samopomoći. Psihologijski diskurs se u 20. st. institucionalizirao u različitim društvenim praksama. On je, s jedne strane, prisutan kroz tekstove i teorije koje stvaraju stručnjaci u institucijama (sveučilišta, instituti, stručni časopisi, strukovne udruge i dr.), a s druge strane prisutan je i u svakodnevicu u raznim mehanizmima kulturalne industrije (knjige za samopomoć, radionice za „rad na sebi“, grupe podrške, talk show, radio programe, tribine, filmove, serije, romane, časopise i dr.). Prema tomu, psihologijski diskurs ima dvostruki status — profesionalni i popularni — te se može vidjeti kako se zbiva difuzija profesionalnog psihologijskog diskursa od institucija prema popularnoj kulturi i natrag (14). Psihologija je u to vrijeme bila ključan element za otvaranje prostora prodoru u područje popularne kulture i time popularizaciji novog i drugačijeg pogleda na čovjeka. Ona je to činila, smatra Eva Illouz, sociologinja i kulturalna teoretičarka u svojoj knjizi *Saving the Modern Soul: Therapy, Emotions, and the Culture of Self-Help* (30) putem triju ključnih mehanizama: u

science with the flourishing of popular psychology, i.e. self-help books. In his book “Understanding popular science”, Peter Broks (28) observes from a cultural-theoretical perspective the ways in which the discourse on science and popular science was constructed throughout history. He claims that the cultural meanings of popular science began to be more clearly established in the first half of the 19th century, when the term “scientist” and the modern use of the term “popularization” were born (28). Broks places a strong and clear cultural turn towards the popularization of science at the end of the 1970s and the beginning of the 1980s, as evidenced by the many bookstores that introduced the new field of popular science to their shelves (28). Stephen Hawking’s work “A brief history of time” (29) was published in 1988, and it was the best-selling book for four and a half years, with more than nine million copies sold (14). In the 20th century, the meanings of science and popular science were linked to counter-cultural criticisms of technocracy and the search for mystical experiences. The popularization of science influenced the development of popular psychology. It was only the popularization of science that enabled the popularization of psychology, that is, the process of popularization of science led to similar changes within the science of psychology, thus ultimately resulting in the emergence of a new ethos of thinking about this microworld through the discourse of self-help. In the 20th century, psychological discourse became institutionalized in various social practices. On the one hand, it is present through texts and theories created by experts working in institutions (universities, institutes, professional journals, professional associations, etc.), and on the other hand, it is also present in everyday life through various mechanisms of the cultural industry (self-help books, workshops for “working on oneself”, support groups, talk shows, radio programs, panels, films, series, novels, magazines, etc.). The psychological discourse, therefore, has a dual status — professional and popular — and one can see how the diffusion of the professional psychological discourse from institutions to popular culture and back takes place (14). At that time, psychology was

savjetodavnoj literaturi, filmu i reklamiranju. Kada spominje savjetodavnu literaturu, Illouz tvrdi da su psiholozi dobili autoritet davati savjete o gotovo svim aspektima ljudskog života što je rezultiralo njihovim okupiranjem dviju sfera društva — institucionalne i popularne. Savjetodavna je literatura postala rastuća kulturna industrija 1920-ih, što je omogućilo difuziju psihologijskih znanja na širu publiku. Na taj su način stvoreni uvjeti za ono što u 20. st. nazivamo kulturom samopomoći koja je svakako plodonosan prostor i prilika za širenje javnog diskursa o važnosti mentalnog zdravlja. U okviru ovog rada će se pokazati kako upravo popularizacija znanosti može odigrati bitnu ulogu u širenju svjesnosti o važnosti mentalnog zdravlja.

Treći pojam iz područja mentalnog zdravlja odabran za analizu jest pojam subjektivne dobrobiti. Pojam dobrobiti je dinamičan koncept i možemo ga definirati kao poželjno stanje sreće, zdravlja ili prosperiteta (31). Dobrobit uključuje subjektivne i objektivne aspekte života, gdje će subjektivna komponenta obuhvaćati kvalitetu života pojedinca s obzirom na primjerice životni standard, zdravlje, mogućnost ostvarivanja bliskih kontakata, sigurnost, pripadanje zajednici i dr. Subjektivna dobrobit se može razumjeti samo iz perspektive pojedinca, dok se objektivna komponenta dobrobiti odnosi na kulturno blagostanje (32). S obzirom da se naše istraživanje bavilo ključnim pojmom subjektivne dobrobiti, u radu ćemo se pažljivije obratiti elaboraciji koncepta subjektivne dobrobiti i njegovoj vezi s pojmovima samopomoć i biblioterapija. Autori Jonathan Bradshaw, Antonia Keung, Gwyther Rees i Haridhan Goswami (33) navode da subjektivna dobrobit obuhvaća zadovoljenje spoznajnih i emocionalnih potreba pojedinaca te navode tri glavne karakteristike subjektivne dobrobiti: procjene pojedinca i njegova iskustva o vlastitom životu, njegovo iskustvo pozitivnih i negativnih emocija te opće zadovoljstvo životom. Sarah C. White u

a key element for creating an opportunity for the emergence of popular culture, and thereby popularization of a new and different view of the mankind. According to Eva Illouz, sociologist and cultural theorist who wrote the book "Saving the Modern Soul: Therapy, Emotions, and the Culture of Self-Help" (30), psychology enabled this through three key mechanisms: counseling literature, film and advertising. When mentioning counseling literature, Illouz argues that psychologists have been given the authority to give advice on almost all aspects of human life, which has resulted in them occupying two spheres of society — the institutional and the popular. Counseling literature became a growing cultural industry in the 1920s, which enabled a diffusion of psychological knowledge to a wider audience. In this way, conditions were created for what we called "the culture of self-help" in the 20th century, and it certainly represents a fruitful space and an opportunity for expanding the public discourse on the importance of mental health. This work will further present how the popularization of science can play an important role in spreading awareness about the importance of mental health.

The third concept from the field of mental health that was selected for analysis in this paper is the concept of subjective well-being. The concept of well-being is a dynamic one, and can be defined as a desirable state of happiness, health or prosperity (31). Well-being includes subjective and objective aspects of life, where the subjective component will include the quality of an individual's life in terms of, for example, the living standard, health, ability to make close contacts, security, belonging to a community, etc. Subjective well-being can only be understood from the individual's perspective, while the objective component refers to cultural well-being (32). Given that our study addressed the key concept of subjective well-being, in our paper we will pay more attention to the elaboration of the concept of subjective well-being and its connection with the concepts of self-help and bibliotherapy. Authors Jonathan Bradshaw, Antonia Keung, Gwyther Rees and Haridhan Goswami (33) state that subjective well-being encompasses the satisfaction of cognitive and emotional needs

članku „But what is well-being?“ (34) navodi tri dimenzije koncepta blagostanja, a to je materijalna, odnosna i subjektivna, gdje subjektivna dimenzija uključuje vrijednosti, percepciju i iskustvo, a specifičnije se odnosi na samopoznavanje, osobnost, nadanja, strahove i želje, doživljaj smisla/besmisla, razinu (ne)zadovoljstva, povjerenje i samopouzdanje.

Iz navedene relevantne literature je vidljivo kako se koncept subjektivne dobrobiti u kontekstu ovog članka može shvatiti kao krovni pojam među ključnim pojmovima koje ovaj rad istražuje. Subjektivna dobrobit se ovdje promatra kao subjektivno stanje pojedinca koje on/ona doživljava kao poželjno i kojem stremi. S obzirom da je motivacija za provedeno istraživanje bilo stavljanje fokusa na mentalno zdravlje mladih i njegovu poveznicu s čitanjem, možemo tvrditi kako su pojmovi samopomoći i biblioterapije pojmovi integrirani u koncept subjektivne dobrobiti. Konkretno, samopomoć idejom savjetodavne literature te biblioterapija kao tehnika koja se koristi u psihoterapiji, doprinose ostvarivanju subjektivne dobrobiti kod pojedinca i mogu se promatrati kao dobrodošli alati za ostvarivanje i održavanje kvalitete mentalnog zdravlja općenito.

Nakon spomenute teorijske elaboracije ključnih pojmova samopomoći, biblioterapije i subjektivne dobrobiti, osvrnut ćemo se na provedeno istraživanje o zastupljenosti spomenutih ključnih pojmova u otvorenoj znanosti u Hrvatskoj.

## METODOLOGIJA ISTRAŽIVANJA

### Kontekst istraživanja

Istraživanje je provedeno na inicijativu Nacionalne i sveučilišne knjižnice u Zagrebu (u daljnjem tekstu NSK) u sklopu „Mjeseca hrvatske knjige“, nacionalne manifestacije čije su vođenje 1995. godine od Nacionalne i sveučilišne knjižnice u Zagrebu preuzele Knjižnice grada Zagre-

of individuals, and they point out three main characteristics of subjective well-being: the individual's evaluations and their experiences of their own life, their experience of positive and negative emotions and general life satisfaction. In the article “But What is Well-Being?” (34) Sarah C. White lists three dimensions of the concept of well-being, and these are material, relational and subjective, where the subjective dimension includes values, perception and experience, and more specifically refers to self-concept, personality, hopes, fears and desires, experience of meaning/meaninglessness, level of (dis)satisfaction, trust and self-confidence.

It is evident from the relevant literature mentioned above that the concept of subjective well-being in the context of this article can be understood as an umbrella term among the key terms that this paper explores. Subjective well-being is seen here as the subjective state of an individual, which he/she perceives as desirable and strives for. Given that the motivation for the conducted research was to focus on the mental health of young people and its link with reading, we can claim that the concepts of self-help and bibliotherapy are concepts integrated into the concept of subjective well-being. In particular, self-help through the idea of advisory literature and bibliotherapy as a technique used in psychotherapy, both contribute to the achievement of subjective well-being in an individual, and can be viewed as welcome tools for achieving and maintaining the quality of mental health in general.

After the aforementioned theoretical elaboration of the key concepts of self-help, bibliotherapy and subjective well-being, we will further refer to the conducted research on the representation of the subject key concepts in open science in Croatia.

## RESEARCH METHODOLOGY

### Research context

The research was carried out at the initiative of the National and University Library in Zagreb (hereafter NUL) as part of the “Croatian Book Month”, a national event the management of which was

ba. Već godinama Mjesec hrvatske knjige, koji se tradicionalno održava punih mjesec dana, postao je izuzetno važan događaj za poticanje čitanja u Hrvatskoj. Unatoč kontinuiranim napornima knjižnica u promicanju knjiga i čitanja, ova manifestacija posebno se ističe jer od 15. listopada do 15. studenog intenzivira svoje aktivnosti, privlačeći pozornost čitatelja diljem zemlje. Jedna od manifestacija koju je NSK organizirala na lokalnoj razini odnosila se i na aktivnost građanske znanosti „Samopomoć i dobrobit u akademskom mrežnom okruženju“ koja se održala 14. listopada 2022. godine. Aktivnost je održana u sklopu Mjeseca hrvatske knjige koji je 2022. godine imao moto „Misli na sebe – čitaj“.

Dodatno značenje ovog istraživanja jest da je izvedeno prema modelu građanske znanosti. Građanska znanost (engl. *citizen science*) podrazumijeva pristup u kojem neprofesionalni sudionici doprinose prikupljanju podataka u znanstvenim istraživanjima (35). Takvi neprofesionalni sudionici u relevantnoj literaturi se nazivaju građanima znanstvenicima (engl. *citizen scientists*), a svojim uključivanjem u znanstvena istraživanja mogu pomoći profesionalcima i znanstvenicima u prikupljanju, analizi i/ili objavi znanstvenih podataka. Godine 2015. proglašeno je 10 smjernica građanske znanosti koje pojašnjavaju da uključivanje građana znanstvenika u znanstvena istraživanja rezultira novim znanjem i ima originalan znanstveni ishod od kojeg korist imaju i znanstvenici i građani znanstvenici (36). Aktivnosti građanske znanosti obuhvaćaju različita znanstvena područja i znatno variraju u pogledu potrebnog znanja, vremenskog angažmana, putovanja i upotrebe tehnologije sudionika aktivnosti (37). U ovom istraživanju model građanske znanosti primijenjen je s obzirom na to da je NSK od siječnja 2022. sudjelovala u međunarodnom projektu *Citizen-enhanced open science in southeastern europe higher education knowledge hubs* (u daljnjem tekstu CeOS\_SE). Cilj projekta je populariziranje otvorene znanosti i građanske znanosti u jugoistočnoj Europi (38). Aktivnost građanske

taken over from the National and University Library in Zagreb by the Zagreb City Libraries in 1995. For years, the Croatian Book Month, which is traditionally held for a full month, has been an extremely important event aimed at encouraging reading in Croatia. Despite the continuous efforts of libraries to promote books and reading, this event stands out because it intensifies its activities from October 15 to November 15, attracting the attention of readers across the country. One of the events organized by the NUL at the local level referred to the citizen science activity “Self-Help and Well-Being in an Academic Online Environment”, which took place on October 14, 2022. The activity was held as part of the Croatian Book Month, which in 2022 had the motto “Think about yourself – read”.

An additional significance of this research lies in the fact that it was carried out according to the citizen science model. Citizen science implies an approach in which non-professional participants contribute to the collection of data in scientific research (35). Such non-professional participants are called citizen scientists in the relevant literature, and through their involvement in scientific research they can help professionals and scientists in collecting, analyzing and/or publishing scientific data. Ten guidelines for citizen science were announced in 2015, clarifying that the involvement of citizen scientists in scientific research results in new knowledge and has an original scientific outcome that benefits both scientists and citizen scientists (36). Citizen science activities encompass different scientific fields and vary considerably in terms of required knowledge, time commitment, travel and technology use of those participating in the activity (37). In this research, the citizen science model was applied due to the fact that NUL has participated in the international project “Citizen-Enhanced Open Science in Southeastern Europe Higher Education Knowledge Hubs” (hereinafter CeOS\_SE) since January 2022. The goal of the project is to popularize open science and citizen science in Southeastern Europe (38). The citizen science activity “Self-Help and Well-Being in an Academic Environment” was

znanosti „Samopomoć i dobrobit u akademskom okruženju“ provedeno je u sklopu projekta CeOS\_SE, ali i unutar Mjeseca hrvatske knjige. S obzirom na spomenuti moto Mjeseca hrvatske knjige, kao i želju za popularizacijom građanske znanosti i promicanjem otvorenog pristupa, ključne istraživačke teme odnosile su se na: samopomoć, subjektivnu dobrobit i biblioterapiju.

## Predmet istraživanja

Predmet ovog istraživanja fokusira se na analizu zastupljenosti ključnih tema, konkretno samopomoći, subjektivne dobrobiti i biblioterapije, u znanstvenim i stručnim časopisima Republike Hrvatske koji su dostupni u otvorenom pristupu. Otvoreni pristup je pristup koji omogućava besplatno dostupno čitanje, preuzimanje, kopiranje, distribuiranje, tiskanje, pretraživanje ili povezivanje s punim tekstom tih članaka, analizira ih za indeksiranje, pretraživanje, kopiranje, koristi ih u svrhu bilo koje zakonite svrhe, bez financijskih, pravnih ili tehničkih prepreka, osim onih koje nisu ništa nužne za postizanje pristupa, distribucije, upotrebe, kopiranja ili indeksiranja (39).

Valja istaknuti da se navedene teme istražuju iz perspektive mentalnog zdravlja. Ovaj pristup omogućava proučavanje dostupnih izvora koje šira javnost može koristiti za stjecanje znanja i razumijevanja ovih ključnih tema. Istraživanjem se nastoji dublje razumjeti i kvantificirati prisutnost tih tema u hrvatskoj znanstvenoj i stručnoj literaturi. Nadalje, istraživanje će se usredotočiti na identifikaciju mogućih razlika u međusobnoj zastupljenosti ovih tema.

## Cilj istraživanja

Cilj ovog istraživanja jest dublje razumjeti i kvantificirati prisutnost ključnih tema samopomoći, biblioterapije i subjektivne dobrobiti u znanstvenim i stručnim časopisima Republike Hrvatske koji su dostupni u otvorenom pristupu.

carried out as part of the CeOS\_SE project, but also within the Croatian Book Month. Considering the aforementioned Croatian Book Month motto, as well as the desire to popularize citizen science and promote open access, the key research topics addressed the concepts of self-help, subjective well-being and bibliotherapy.

## Research subject

The subject of this research focuses on an analysis of the representation of key topics, specifically self-help, subjective well-being and bibliotherapy, in scientific and professional journals in the Republic of Croatia that are available in open access. Open access is access that enables freely available reading, downloading, copying, distributing, printing, searching or linking to the full text of these papers, analyzing them for indexing, searching, copying, using them for any lawful purpose, without financial, legal or technical barriers, except for those that are not absolutely necessary to achieve access, distribution, use, copying or indexing (39).

It should be noted that the aforementioned topics are investigated from the perspective of mental health. This approach allows the study of available resources that the general public can use to gain knowledge and understanding of these key topics. The aim of the research is to enable a better understanding and quantification of the presence of these topics in Croatian scientific and professional literature. Furthermore, focus will be placed on identifying the possible differences in the mutual representation of these topics.

## Aim

The aim of this research is to better understand and quantify the presence of the key topics of self-help, bibliotherapy and subjective well-being in scientific and professional journals in the Republic of Croatia that are available in open access.

Based on this aim, the research will address the following research questions:

Na temelju postavljenog cilja, istraživanje će se baviti sljedećim istraživačkim pitanjima:

1. Koliko često se teme samopomoći, biblioterapije i subjektivne dobrobiti pojavljuju u znanstvenim i stručnim časopisima Republike Hrvatske koji su dostupni u otvorenom pristupu?
2. Postoje li razlike u zastupljenosti tema samopomoći, biblioterapije i subjektivne dobrobiti u analiziranim člancima, te koje su moguće interpretacije tih razlika?
3. Koje druge ključne riječi se pojavljuju u člancima koji obrađuju teme samopomoći, biblioterapije i subjektivne dobrobiti?

Prvo istraživačko pitanje učestalosti pojavljivanja proučenih tematika usmjereno je na kvantitativnu analizu učestalosti pojavljivanja tema samopomoći, biblioterapije i subjektivne dobrobiti u znanstvenim i stručnim časopisima Republike Hrvatske koji su slobodno dostupni na mreži. Cilj ovog istraživanja je stvoriti jasnu sliku o tome koliko često se ove teme pojavljuju u dostupnoj literaturi te utvrditi postoji li trend u njihovoj učestalosti tijekom vremena. Analiza će omogućiti uvid u važnost tih tema unutar znanstvene zajednice Republike Hrvatske. Ovo pitanje pomaže istraživačima da razumiju opću dinamiku istraživanja u području samopomoći, biblioterapije i subjektivne dobrobiti u lokalnom kontekstu.

Drugo istraživačko pitanje razlike u međusobnoj zastupljenosti istraživanih tema usmjereno je na utvrđivanje postoje li značajne razlike u učestalosti pojavljivanja tema samopomoći, biblioterapije i subjektivne dobrobiti u analiziranim člancima. Cilj je razumjeti varijacije u zastupljenosti ovih tema te pokušati interpretirati razlike kako bi se bolje razumjela njihova važnost i kontekst unutar znanstvenih i stručnih časopisa Republike Hrvatske.

Treće istraživačko pitanje analize ostalih ključnih riječi ima za cilj istražiti širu lepezu ključnih riječi i pojmova koji se pojavljuju u

1. How often do the topics of self-help, bibliotherapy and subjective well-being appear in scientific and professional journals in the Republic of Croatia that are available in open access?
2. Are there differences in the frequency of occurrence of the topics of self-help, bibliotherapy and subjective well-being in the analyzed articles, and what are the possible interpretations of these differences?
3. What other keywords appear in articles addressing the topics of self-help, bibliotherapy, and subjective well-being?

The first research question addressing the frequency of occurrence of the studied topics is focused on the quantitative analysis of the frequency of occurrence of the topics of self-help, bibliotherapy and subjective well-being in scientific and professional journals in the Republic of Croatia that are freely available online. The aim of this research is to create a clear picture of how often these topics appear in the available literature and to determine whether there is a trend in their frequency over time. The analysis will provide insight into the importance of these topics within the scientific community of the Republic of Croatia. This question helps researchers understand the general dynamics of research in the field of self-help, bibliotherapy and subjective well-being in local contexts.

The second research question regarding the difference in the mutual representation of the researched topics is aimed at determining whether there are significant differences in the frequency of occurrence of the topics of self-help, bibliotherapy and subjective well-being in the analyzed articles. The aim is to understand the variations in the representation of these topics and try to interpret the differences in order to better understand their importance and the context within the scientific and professional journals in the Republic of Croatia.

The third research question on the analysis of other keywords aims to explore a wider range of keywords and terms that appear in articles deal-

člancima koji se bave samopomoći, biblioterapiji i subjektivnoj dobrobiti. Analiza dodatnih ključnih riječi može pružiti dodatnu dubinu u razumijevanju konteksta i specifičnih područja interesa unutar ovih tema.

## Instrumenti istraživanja

U početnom dijelu istraživanja podatke su putem modela građanske znanosti prikupljali studenti Informacijskih i komunikacijskih znanosti pri Filozofskom fakultetu Sveučilišta u Zagrebu, polaznici kolegija Digitalna knjižnica 2 koji vodi prof. dr. sc. Tomislav Ivanjko. Studenti su imali predznanje o pretraživanju, no prije prikupljanja podataka održana je i edukacija u trajanju od jednog sata koje podatke birati za potrebe istraživanja. Također, podatci su pretraživani uz nadzor stručnjaka. Alat kojim su se studenti služili za pretraživanje je Portal hrvatskih znanstvenih i stručnih časopisa Hrčak. Hrčak je odabran s obzirom na to da je on središnje mjesto za pohranu znanstvenih i stručnih časopisa u otvorenom pristupu. Prikupili su se podatci od članaka koji su objavljeni na hrvatskom i engleskom jeziku.

Prikupljeni podaci su pregledani, a dodano je i nekoliko novijih rezultata kako bi zaključna godina bila 2022. Primijenjen je model PRISMA za svaku od tri ključne teme: samopomoć, biblioterapija i subjektivna dobrobit kako bi se odabrao konačni uzorak članaka. Kriteriji uključivanja obuhvatili su radove napisane na hrvatskom i engleskom jeziku, radove objavljene do kraja prosinca 2022. godine, vrstu rada (stručni rad, pregledni rad, prethodno priopćenje i izvorni znanstveni rad), fokus rada vezan je uz tematiku samopomoći, biblioterapije i/ili subjektivne dobrobiti aspekta mentalnog zdravlja. Kriteriji isključenja obuhvaćaju duplicirane radove, radove na jezicima koji nisu hrvatski i engleski, radove objavljene nakon 2022. godine, vrste radova kao što su recenzije, eseji, sažeci s konferencija, kratka priopćenja,

ing with self-help, bibliotherapy and subjective well-being. An analysis of additional keywords can provide additional depth in terms of understanding the context and specific areas of interest within these topics.

## Research instruments

In the initial part of the research, data were collected through the citizen science model by the students of the Department of Information and Communication Sciences, University of Zagreb Faculty of Humanities and Social Sciences, who were participants of the Digital Library 2 course led by professor Tomislav Ivanjko, PhD. The students had prior knowledge of the search, but an hour-long training session was also held before the data collection in order to explain which data should be selected for research purposes. Furthermore, the data search was carried out under the supervision of experts. The tool used by the students for searching purposes was the Portal of Croatian scientific and Professional Journals – Hrčak. Hrčak was chosen since it is the central place for storing scientific and professional journals in open access. Data were collected from articles published in Croatian and English.

The collected data were reviewed and several recent results were also added so that the final year would be 2022. The PRISMA model was applied to each of the three key topics: self-help, bibliotherapy and subjective well-being, in order to select the final sample of the articles. The inclusion criteria included papers written in Croatian and English, papers published by the end of December 2022, types of papers (professional papers and review articles, preliminary communication and original scientific paper), the focus of the paper being associated with the topic of self-help, bibliotherapy and/or subjective well-being aspects of mental health. Exclusion criteria included duplicate papers, papers in languages other than Croatian and English, papers published after 2022, types of papers such as reviews, essays, conference abstracts, short reports, editorials, etc., and papers not focused on mental health (but rather, for

uvodnici i sl, te radove čiji fokus nije vezan uz mentalno zdravlje (nego npr. pravni aspekt, ekonomski aspekt, fizikalna terapija i sl). Svakom sudioniku dodijeljena je jedna ključna riječ za pretraživanje, a s obzirom na to da se radilo o šest ključnih riječi („samopomoć“, „biblioterapija“, „subjektivna dobrobit“, „self-help“, „bibliotherapy“ i „subjective well-being“), više sudionika pretraživalo je iste ključne riječi što je omogućilo prikupljanje većeg broja podataka za istu ključnu riječ. Metapodatkovno polje Hrčka korišteno za pretraživanje bilo je „Predmet pretraživanja“. Za pretraživanje višestrukih izraza korišteni su navodni znakovi. Isključivanje prema vrsti rada vršeno je uz pomoć filtera koji su implementirani na portal Hrčka. S obzirom na to da su sudionici pretraživali iste ključne riječi, dijelu sudionika savjetovano je da pokušaju učiniti isključivanje prema temi kako bi se obuhvatili članci koji promatraju traženu tematiku s aspekta psihologije i mentalnog zdravlja. Provjeru i krajnje isključivanje prema temi obavile su autorice ovog rada. Na temelju prikupljenih podataka izrađen je PRISMA model, a kao predložak korišten je „*The PRISMA 2020 statement: an updated guideline for reporting systematic reviews*“, Page i suradnika iz 2021. godine (40). Predložak je prilagođen za potrebe ovog istraživanja.

### a) Samopomoć

Pojam „samopomoć“ pretražen je upisom u tražilicu Hrčka, a pretraga je ponudila ukupno 24 rezultata. Nakon probira prema vrsti rada u kojima su prema kriterijima uključivanja preostali znanstveni, pregledni i stručni radovi, preostao je 21 rad. Potom je učinjen probir na temelju teme rada, a uključeni su oni radovi koji se bave samopomoći s aspekta mentalnog zdravlja, u smislu korištenja literature za samopomoć. Isključeni su radovi koji se bave grupama za podršku u samopomoći za liječenje ovisnosti, samopomoći u smislu samostalnog davanja lijekova, samopomoći s pravnog aspekta i sl.

example, on the legal aspect, economic aspect, physical therapy, etc.). Each participant was assigned one keyword to search for, and given that there were six keywords (Croatian “samopomoć”, “biblioterapija”, “subjektivna dobrobit”, and English “self-help”, “bibliotherapy” and “subjective well-being”), multiple participants searched for the same keywords, which enabled more data to be collected for the same keyword. The metadata field of Hrčak used for search purposes was “Predmet pretraživanja” (“Search subject”). Quotation marks were used to search for multi-term expressions. Exclusion according to the type of work was done using filters implemented on the Hrčak portal. Taking into account that the participants were searching for the same keywords, some of the participants were advised to try excluding according to topic in order to encompass articles addressing the requested topic from the aspect of psychology and mental health. Verification and final exclusion according to the topic was carried out by the authors of this paper. The PRISMA model was created based on the collected data, while “The PRISMA 2020 Statement: an Updated Guideline for Reporting Systematic Reviews”, created by Page et al. in 2021, was used as a template (40). The template was adapted for the purposes of this research.

### a) Self-help

The term “samopomoć” (Croatian for “self-help”) was searched by typing the term into the search engine of Hrčak, and the search yielded a total of 24 results. After screening according to the type of paper in which, according to the inclusion criteria, the remaining papers were scientific, review and professional papers, 21 papers remained. Screening was then done based on the subject matter, and the works addressing self-help from the aspect of mental health, in terms of using literature for self-help, were included. Papers addressing self-help support groups for addiction treatment, self-help in terms of self-administration of medication, self-help from the legal aspect, etc. were excluded. The remaining number of papers was three. Considering that



Preostali broj radova bio je 3. S obzirom na to da se u Hrčku objavljuju i radovi na engleskom jeziku, a većina časopisa traži i pisanje sažetka na engleskom jeziku, pojam je pretražen i na engleskom jeziku („*self-help*“). Ova ključna riječ učestalija je od „samopomoći“ pa je tako izvorno pronađeno 328 rezultata. Nakon primjene kriterija isključivanja prema vrsti rada, preostalo je 280 radova. Od toga je bio i jedan duplikat čija je hrvatska verzija već uzeta u obzir, pa je preostalo 279 radova. Na kraju je proveden probir prema temi čime su izdvojena 4 rada. Zbrojem radova pronađenih prema ključnoj riječi „samopomoć“ i prema ključnoj riječi „*self-help*“ dobiven je broj od 7 radova za potrebe ovog istraživanja. Proces pretraživanja prikazan je u na slici 1.

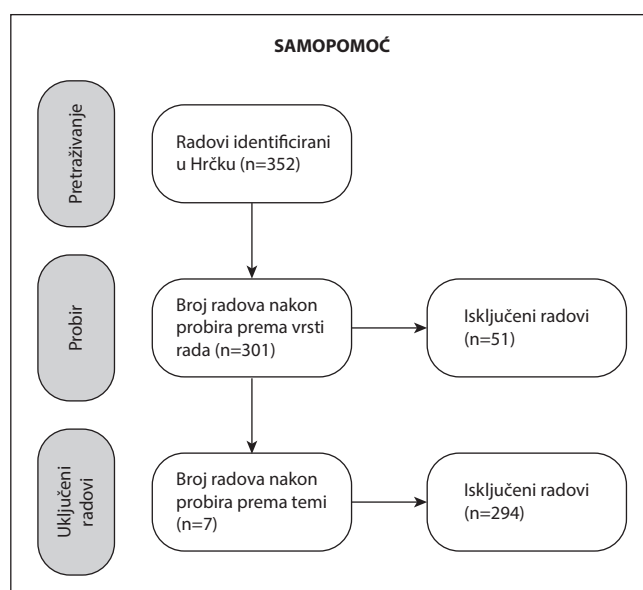
## b) Biblioterapija

Upisom u tražilicu Hrčka pretražen je pojam „biblioterapija“ za koji je ponuđeno 24 rezultata. Probirom prema vrsti rada preostalo je 19 rezultata s obzirom da su isključeni radovi kategorija recenzija, prikaz, esej i ostalo. Pregledom prema temi koja je u fokusu trebala imati biblioterapiju preostalo je 18 rezultata (jedan rad spomenuo je biblioterapiju, no u fokusu je

papers in English are also published in Hrčak, and most journals also demand abstracts written in English, the term was also searched in English (“self-help”). This keyword appeared in more results than “samopomoć” in Croatian, therefore 328 results were originally found. After applying the exclusion criteria according to the type of work, 280 papers remained. One of these papers was a duplicate the Croatian version of which had already been taken into account, thus 279 works remained. Finally, selection was carried out according to the subject matter, and four papers remained. The total number of papers found under the keywords “samopomoć” and “self-help” resulted in a total of seven papers being used for the purposes of this research. The search process is presented in Figure 1.

## b) Bibliotherapy

Entering the term “*biblioterapija*” (Croatian for “bibliotherapy”) into the Hrčak search engine yielded 24 results. After screening according to the type of paper, 19 results remained given that the categories of review, essay and other were excluded. After selection according to the subject matter which should focus on bibliotherapy, 18 results remained (bibliotherapy was mentioned in one paper, but the focus was on another type



SLIKA 1. Model PRISMA za pojam „samopomoć“  
FIGURE 1. PRISMA model for the concept of “self-help”

bila druga vrsta terapije). Također, pretražen je i pojam na engleskom jeziku: „bibliotherapy“. Pretraga je ponudila ukupno 20 rezultata od kojih je 10 bilo duplicirano. Prema kriterijima uključenosti vrste rada preostalo je 6 radova, a probirom prema temi naposljetku su ostala 3. Zbrojem preostalih radova pretragom na hrvatskom i engleskom jeziku pronađen je ukupno 21 rad koji se odnosi na temu biblioterapije. Pretraga je prikazana modelom PRISMA na slici 2.

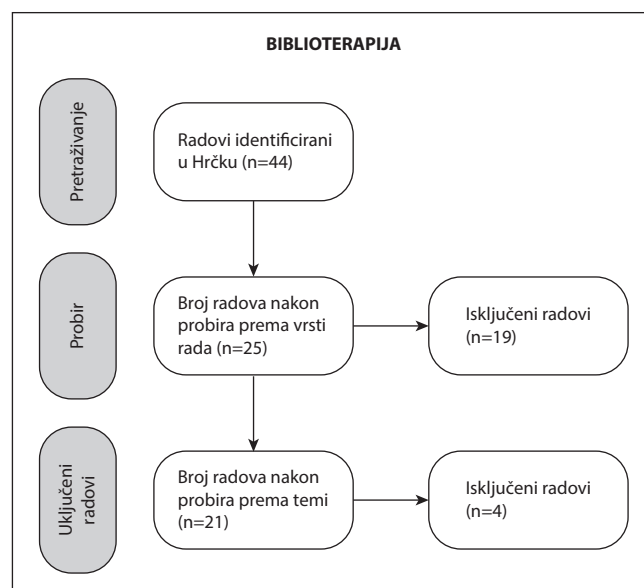
### c) Subjektivna dobrobit

U prvom dijelu pretraživanja tražena je ključna riječ „subjektivna dobrobit“ koja je upisana u tražilicu Hrčka. Za hrvatsku verziju ove riječi dobivena su 42 rada. Nakon što su isključeni rezultati s obzirom na vrstu rada preostalo je 40 radova (izbačeni su radovi u kategoriji „ostalo“ i „vijest“). Zatim su radovi pregledani prema temi i odabrano je 36 radova. Potom je pretražena ključna riječ „*subjective well-being*“ koja je ponudila 75 rezultata pretraživanja. Odabrano je 66 radova s obzirom na njihovu vrstu, odnosno zadržani su radovi koji se odnose na izvorni znanstveni članak, pregledni

of therapy). Furthermore, a search was made for the term in English: “bibliotherapy”. The search yielded a total of 20 results, 10 of which were duplicates. According to the inclusion criteria for the type of work, six papers remained, and after screening according to the subject matter, the final result included three papers. After summing up the remaining papers, the search in both Croatian and English yielded a total of 21 papers addressing the topic of bibliotherapy. The search is presented in the PRISMA model in Figure 2.

### c) Subjective well-being

In the first part of the search, the key word “*subjektivna dobrobit*” (Croatian for “subjective well-being”) was entered into the Hrčak search engine. A total of 42 results were found for the Croatian version of this word. After excluding the results based on the type of paper, 40 papers remained (papers in the categories “other” and “news” were excluded). The papers were then reviewed according to the subject matter and 36 papers were selected. The keyword “subjective well-being” in English was then searched, yielding 75 search results. A total of 66 papers was selected based on their type, i.e. papers referring to an original scientific paper, review article and pre-



SLIKA 2. Model PRISMA za pojam „biblioterapija“  
 FIGURE 2. PRISMA model for the concept of “bibliotherapy”

rad i prethodno preopćenje. Od toga je 20 radova bilo duplikat, odnosno pronađeni su u pretrazi ključne riječi na hrvatskome jeziku. Od 46 preostalih radova 42 rada je odabrano s obzirom na temu koja je bila usmjerena na subjektivnu dobrobit s aspekta psihologije. Zajedno s prethodnom pretragom, sveukupno je odabrano 78 radova koji se odnose na subjektivnu dobrobit, što je prikazano modelom PRISMA na slici 3.

liminary communication were retained. Of these, 20 papers were duplicates, that is, they were already found during the search for keywords in the Croatian language. Of the 46 remaining papers, 42 papers were selected with regard to the subject matter that focused on subjective well-being from the aspect of psychology. Together with the previous search, a total of 78 papers addressing subjective well-being were selected, which is presented in the PRISMA model in Figure 3.

## REZULTATI I RASPRAVA

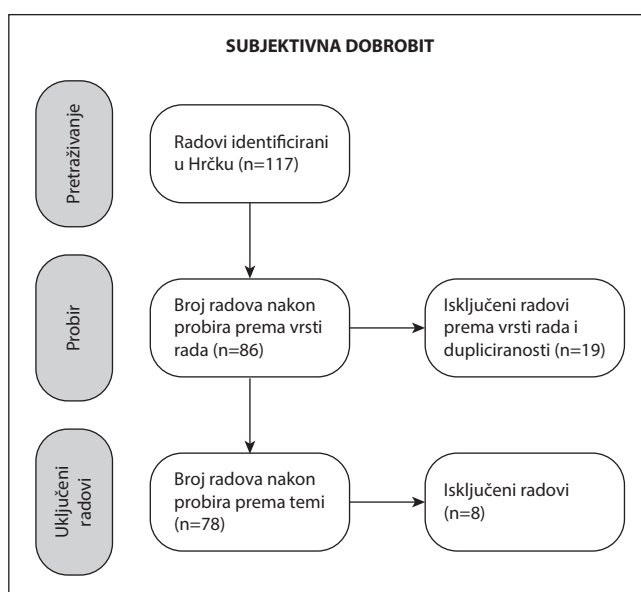
Model PRISMA je pomogao u odabiru radova za analizu koji su prikazani u tablici 1. (prilog).

Samopomoć, promatrana iz perspektive korištenja literature za samopomoć tema je koja je u manjoj mjeri zastupljena u hrvatskim znanstvenim i stručnim časopisima. Prema vrsti rada dobivena su 4 izvorna znanstvena rada i 3 pregledna rada. Prvi rad na tu temu objavljen je 2006. godine, no najviše se o njoj piše u razdoblju između 2014. i 2017. godine. Svi radovi dostupni su na hrvatskom jeziku, a jedan je preveden i na engleski i njemački jezik.

## RESULTS AND DISCUSSION

The PRISMA model assisted in the selection of papers for analysis, which are presented in Table 1 (in the Appendix).

Self-help, viewed from the perspective of the use of self-help literature, is a topic that is less frequently addressed in Croatian scientific and professional journals. According to the type of paper, four original scientific papers and three review articles were found. The first paper on this topic was published in 2006, but it was mostly written about in the period between 2014 and 2017. All papers are available in Croatian, and one has been translated into English and German.



**SLIKA 3.** Model PRISMA za pojam „subjektivna dobrobit“  
**FIGURE 3.** The PRISMA model for the concept of “subjective well-being”

**TABLICA 1.** Radovi odabrani modelom PRISMA  
**TABLE 1.** Papers selected using the PRISMA model

SAMOPOMOĆ/SELF-HELP / SELF-HELP				
Naziv rada i autori / Title and authors	Naziv i broj časopisa / Journal title and number	Vrsta rada / Type of paper	Jezik / Language	Ključne riječi / Key words
<i>Pojam identiteta i njegov odnos prema društvenom poretku u knjigama za samopomoć / The Notion of Identity and its Relation to Social Order in Self-Help Books</i> Žurić Jakovina, I.; Jakovina, T.	Revija za sociologiju, Vol. 46, No. 3, 2016.	Pregledni rad / Review article	Hrv. / Cro.	knjige za samopomoć; identitet; Eriksonova teorija identiteta; samoaktualizacija; kognitivno-bihevioralna terapija; društvena promjena / self-help books; identity; Erikson's theory of identity; self-actualisation; cognitive-behavioural therapy; social change
<i>Projekcije na terapiji: o medijskoj reprezentaciji psihoterapije u Hrvatskoj / Projections in Treatment: on Media Representation of Psychotherapy in Croatia</i> Žurić Jakovina, I.	Medijska istraživanja : znanstveno-stručni časopis za novinarstvo i medije, Vol. 21, No. 1, 2015.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	medijska reprezentacija psihoterapije; psihoterapija; diskurs samopomoći; psihoterapijski diskurs; knjige za samopomoć; dekonstrukcija psihoterapije; serija <i>Na terapiji</i> ; film <i>Projekcije</i> / media representation of psychotherapy; psychotherapy; self-help discourse; psychotherapeutic discourse; self-help books; deconstruction of psychotherapy; series <i>In treatment</i> ; film <i>Projection</i>
<i>Samopomoć kao kulturalni fenomen: kontekstualni aspekti nastanka i razvoja knjiga za samopomoć i psihoterapijskog diskursa / Self-help as a Cultural Phenomenon: Contextual Aspects of Birth and Development of Self-Help Books and Psychotherapeutic Discourse</i> Žurić Jakovina, I.	Holon : postdisciplinarni znanstveno-stručni časopis, Vol. 4, No. 1, 2014.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	knjige za samopomoć; popularna kultura; protestantizam; psihoanaliza; psihološki diskurs; psihoterapijski diskurs / self-help books; popular culture; Protestantism; psychoanalysis; psychological discourse; psychotherapeutic discourse
<i>Odgoj u Modroj lasti između izgradnje socijalističkoga čovjeka i tinejdžerske self-help literature (1966. – 1976.) / Education in Modra lasta between Building a Socialist Human and Teenage Self-Help Literature (1966–1976)</i> Lončar, M.	Anali za povijest odgoja, Vol. 17, No. 17, 2019.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	„Modra lasta”; socijalistički čovjek; tinejdžerski prilozi; 1966. – 1976. / <i>Modra lasta</i> (magazine); socialist man; teenage materials; 1966–1976
<i>Psihoterapijski romani: učenje na kauču / The Psychotherapy Novel: Learning on the Couch</i> Žurić Jakovina, I.	Književna smotra : Časopis za svjetsku književnost, Vol. 49, No. 183(1), 2017.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	psihoterapijski roman; psihoterapija; knjige za samopomoć; didaktički roman; psihologija književnosti / the psychotherapy novel; psychotherapy; self-help books; the didactic novel; psychology of literature
<i>Savjetodavna (ne)moć self-help literature / Advisory Power(lessness) of the Self-Help Literature</i> Klemenčić Rozman, M.M.	Školski vjesnik : časopis za pedagošku teoriju i praksu, Vol. 63, No. 1-2, 2014.	Pregledni rad / Review article	Hrv. / Cro.	grupe za samopomoć; grupe za podršku; članstvo; koristi / self-help groups; support groups; membership; benefits
<i>Savjeti u self literaturi – časopisu za mlade / Advice Found in Self-Help Literature – a Teenage Magazine</i> Vrcelj, S.; Zloković, J.	Pedagoški istraživanja, Vol. 3, No. 2, 2006.	Pregledni rad / Review article	Hrv., eng., njem. / Cro., Eng., Germ.	savjeti za mlade; self literatura; odgoj; mediji / advice for teenagers; self-help literature; education; media
BIBLIOTERAPIJA / BIBLIOTHERAPY				
Naziv rada i autori / Title and authors	Naziv i broj časopisa / Journal title and number	Vrsta rada / Type of paper	Jezik / Language	Ključne riječi / Key words
<i>Utjecaj kreativnog pisanja na prevenciju emocionalnih teškoća kod mladih / The Impact of Creative Writing on the Prevention of Emotional Difficulties in Young People</i> Jarebić, I.	Bjelovarski učitelj : časopis za odgoj i obrazovanje, Vol. 27, No. 1-3, 2022.	Prethodno priopćenje / Preliminary communication	Hrv. / Cro.	pisanje; mladi; kreativnost; emocionalne teškoće; biblioterapija / writing; youth; creativity; emotional difficulties; bibliotherapy
<i>Biblioterapija i psihoanalitička kritika u kontekstu teorije sustava / Bibliotherapy and the Psychoanalytic Criticism in the Context of the System Theory</i> Piskač, D.	Kroatologija, Vol. 7, No. 2, 2016.	Pregledni rad / Review article	Hrv., eng. / Cro., Eng.	biblioterapija; MED ciklus; teorija sustava; psihoanalitička kritika / bibliotherapy; MED cycle; system theory; psychoanalytic criticism
<i>Razlika između biblioterapije i literarne biblioterapije / The Difference Between the Bibliotherapy and the Literature Bibliotherapy</i> Piskač, D.	Kroatologija, Vol. 12, No. 2. – 3, 2021.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	biblioterapija; literarna biblioterapija; emocionalni paralelizam; komunikacijska komplementarnost; estetske funkcije / bibliotherapy; literary bibliotherapy; emotional parallelism; communicative complementarity; aesthetic functions
<i>Biblioterapijske kompetencije u nastavi književnosti / Bibliotherapeutic Competencies in Teaching Literature</i> Lekić, N.; Piskač, D.; Koščec Bjelajac, A.	Kroatologija, Vol. 12, No. 2. – 3, 2021.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	biblioterapija; emocije; emocionalni doživljaj; prepoznavanje emocija / bibliotherapy; emotions; emotions perceived; emotion detection
<i>Interes za biblioterapiju kod studenata nastavničkoga smjera diplomskih studija na Odsjeku za kroatistiku u Rijeci / Students' Interest for Bibliotherapy in Graduate Study Programme (Teaching Track) at Department of Croatian Language and Literature in Rijeka</i> Banov, E.; Rogina, T.; Sokač, M.	Kroatologija, Vol. 12, No. 2. – 3, 2021.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	obrazovanje nastavnika Hrvatskoga jezika; metodičko osposobljavanje; ishodi učenja; biblioterapija; izdavačka djelatnost; studentske aktivnosti / Croatian language teacher education; methodical training; learning outcomes, bibliotherapy; publishing; student activities
<i>Uloga biblioterapije u narodnoj knjižnici / The Role of Bibliotherapy in Public Libraries</i> Klak Mršić, I.; Krpan, K.; Pisičić, J.	Kroatologija, Vol. 12, No. 2. – 3, 2021.	Stručni rad / Professional paper	Hrv. / Cro.	biblioterapija; knjižnica; knjižničari; čitanje / bibliotherapy, library, librarians, reading
<i>Vrijeme za bajku u 1. razredu / Fairy Tale Time in 1st Grade</i> Debeljak, M.	Varaždinski učitelj : digitalni stručni časopis za odgoj i obrazovanje, Vol. 4, No. 6, 2021.	Stručni rad / Professional paper	Hrv. / Cro.	čitanje; djeca; emocije; školska biblioterapija / reading; children; emotions; school bibliotherapy

**TABLICA 1. Nastavak**  
**TABLE 1. Continued**

SAMOPOMOĆ/SELF-HELP / SELF-HELP				
Naziv rada i autori / Title and authors	Naziv i broj časopisa / Journal title and number	Vrsta rada / Type of paper	Jezik / Language	Ključne riječi / Key words
<i>Knjiga kao sredstvo za razgovor o različitim problemima učenika / The Book as a Means to Discuss Various Student Issues</i> Šraml, N.	Varaždinski učitelj : digitalni stručni časopis za odgoj i obrazovanje, Vol. 5, No. 8, 2022.	Stručni rad / Professional paper	Hrv. / Cro.	razgovor o knjizi; lektira; problemi mladih; biblioterapija / book discussion; literature; youth issues; bibliotherapy
<i>Utjecaj kreativnog pisanja na prevenciju emocionalnih teškoća kod mladih / The Impact of Creative Writing on the Prevention of Emotional Difficulties in Young People</i> Jarebić, I.	Varaždinski učitelj : digitalni stručni časopis za odgoj i obrazovanje, Vol. 5, No. 10, 2022.	Stručni rad / Professional paper	Hrv. / Cro.	pisanje; mladi; kreativnost; emocionalne teškoće; biblioterapija / writing; youth; creativity; emotional difficulties; bibliotherapy
<i>Primjena razvojne biblioterapije u radu s djecom i mladima u narodnoj knjižnici / The Implementation of Developmental Bibliotherapy in Working with Children and Young Adults in Public Libraries</i> Krupan, K.; Klak Mršić, I.; Cej, V.	Vjesnik bibliotekara Hrvatske, Vol. 61, No. 1, 2018.	Stručni rad / Professional paper	Hrv. / Cro.	biblioterapija; grupna dinamika; komunikacija; socijalni odgoj / bibliotherapy; group dynamic; communication; social education
<i>Uloga knjižnice u biblioterapiji (s osvrtom na sveučilišne knjižnice) / The Role of Libraries in Bibliotherapy (with Reference to University Libraries)</i> Antulov, Z.	Vjesnik bibliotekara Hrvatske, Vol. 62, No. 1, 2019.	Pregledni rad / Review article	Hrv. / Cro.	biblioterapija; knjižnice; sveučilišne knjižnice; studenti / bibliotherapy; academic libraries; libraries; students
<i>Evaluacija utjecaja primjene ekspresivnog pripovijedanja terapijske priče na socijalnu pažnju učenika s poremećajima iz spektra autizma / Impact Evaluation of Expressive-Therapeutic Storytelling on the Social Attention of Students with Autism Spectrum Disorders</i> Skočić Mihić, S.; Pejčić, I.	Magistra ladertina, Vol. 14, No. 1, 2019.	Stručni rad / Professional paper	Hrv. / Cro.	poremećaji iz spektra autizma; terapijska priča; biblioterapija; kreativno-ekspresivna tehnika; evaluacija; socijalna pažnja / autism spectrum disorders; therapeutic story; bibliotherapy; expressive therapies; evaluation; social attention
<i>Stručni i specijalni rad knjižničarke s pokretno ograničenom i dugotrajno bolesnom djecom i omladinom Zavoda za osposobljavanje omladine s invaliditetom Kamnik / Professional and Special Librarian's Work with Physically Handicapped and Chronically Ill Children and Adolescents in the Centre for Training of the Physically Handicapped Young People Kamnik</i> Perko, M.	Vjesnik bibliotekara Hrvatske, Vol. 53, No. 2, 2010.	Stručni rad / Professional paper	Hrv. / Cro.	školska knjižnica; školska mladež; čitanje knjiga; biblioterapija; razgovor o knjizi / school library; secondary school; reading; bibliotherapy; book discussion
<i>Knjižnične usluge za osobe s posebnim potrebama kao dio Nacionalne strategije jedinstvene politike za osobe s invaliditetom od 2003. do 2006. godine / Library Services for Persons with Special Needs and Disabilities as Part of the National Strategy of the Unique Policy for the Disadvantaged from 2003 to 2006</i> Čelić-Tica, V.; Gabriel, D.	Vjesnik bibliotekara Hrvatske, Vol. 49, No. 1, 2006.	Stručni rad / Professional paper	Hrv. / Cro.	knjižnične usluge za osobe s posebnim potrebama; narodne knjižnice; školske knjižnice; knjižnice odgojnih domova i kaznenih ustanova; Nacionalna strategija jedinstvene politike za osobe s invaliditetom; disleksija; biblioterapija; logo-biblioterapija; Hrvatska / library services for persons with special needs and disabilities; public libraries; school libraries; libraries of the young offenders institutions and penal institutions; National strategy of the unique policy for the disadvantaged; dyslexia; bibliotherapy; logo-bibliotherapy; Croatia
<i>Pričom do emocionalne stabilnosti / Through Storytelling to Emotional Stability</i> Šimunović, D.	Dijete, vrtić, obitelj : Časopis za odgoj i naobrazbu predškolske djece namijenjen stručnjacima i roditeljima, Vol. 7, No. 25, 2001.	Stručni rad / Professional paper	Hrv. / Cro.	dijete; vrtić; obitelj; kreativnost; emocionalna stabilnost; biblioterapija / child; kindergarten; family; creativity; emotional stability; bibliotherapy
<i>Psihodinamski aspekti biblioterapije i prevencija suicida / Psychodynamic Aspects of Bibliotherapy and Prevention of Suicide</i> Lecher-Švarc, V.; Radovančević, Lj.	Socijalna psihijatrija, Vol. 43, No. 1, 2015.	Pregledni rad / Review article	Hrv. / Cro.	biblioterapija; psihodinamika; suicid / bibliotherapy; psychodynamics; suicide
<i>Biblioterapijski ili katarzični učinci kroz recepciju drame „Izlazak sunca na Campobellu“ Dorea Scharya / Bibliotherapeutical or Cathartic Effects Through Reception of Drama “Sunrise at Campobello” by Dore Scharya</i> Puškar Mustafić, N.	Socijalne teme : Časopis za pitanja socijalnog rada i srodnih znanosti, Vol. 1, No. 4, 2017.	Izvorni znanstveni članak / Original scientific paper	Hrv, eng. / Cro., Eng.	biblioterapija; katarza; američka drama; recipijenti; čitatelji/gledatelji / bibliotherapy; catharsis; American drama; recipients; readers/viewers
<i>Biblioterapijske radionice u knjižnicama Primorsko-goranske županije / Bibliotherapy Workshops in the Libraries of the Primorje-Gorski Kotar County</i> Kučan Buterin, A.	Knjižničar/Knjižničarka : e-časopis Knjižničarskog društva Rijeka, Vol. 13, No. 13, 2022.	Stručni rad / Professional paper	Hrv. / Cro.	biblioterapijske radionice; knjižnice Primorsko-goranske županije; razvojna biblioterapija / bibliotherapy workshops; libraries of the Primorje-Gorski Kotar County; developmental bibliotherapy
<i>Various aspects of using bibliotherapy in the field of education and rehabilitation / Various Aspects of Using Bibliotherapy in the Field of Education and Rehabilitation</i> Martinec, R.; Šimunović, D.; Kos Jerković, V.	Hrvatska revija za rehabilitacijska istraživanja, Vol. 58, No. 1, 2022.	Pregledni rad / Review article	Eng.	bibliotherapy; education; rehabilitation; efficiency; limitations / bibliotherapy; education; rehabilitation; efficiency; limitations
<i>Uloga kreativnih metoda u radu s oboljelima od Alzheimerove demencije / The Role of Creative Methods in Working with Alzheimer's Patients</i> Vidučić, M.; Rusac, S.	Hrvatska revija za rehabilitacijska istraživanja, Vol. 54, No. 2, 2018.	Pregledni rad / Review article	Hrv. / Cro.	Alzheimerova demencija; kreativne metode; nefarmakološke intervencije / dementia; Alzheimer's disease; creative methods; nonpharmacological interventions
<i>Biblioterapija u školskoj knjižnici ili razgovor o knjizi / The Bibliotherapy in School Library or Book Discussion</i> Mikuletić, N.	Vjesnik bibliotekara Hrvatskem Vol. 53, No. 2, 2010.	Stručni rad / Professional paper	Hrv. / Cro.	školska knjižnica; školska mladež; čitanje knjiga; biblioterapija; razgovor o knjizi / school library; secondary school; reading; bibliotherapy; book discussions

**TABLICA 1. Nastavak**  
**TABLE 1. Continued**

SUBJEKTIVNA DOBROBIT/SUBJECTIVE WELL-BEING				
Naziv rada i autori / Title and authors	Naziv i broj časopisa / Journal title and number	Vrsta rada / Type of paper	Jezik / Language	Ključne riječi / Key words
<i>„Je kako je, bit će bolje“: Subjektivna dobrobit nezaposlenih korisnika zajamčene minimalne naknade / „That’s the Way It Is, It Will Get Better“: Subjective Well-Being of Unemployed beneficiaries of the Guaranteed Minimum Benefit</i> Kletečki Radović, M.; Tutić Grokša, I.	Jahr : Europski časopis za bioetiku, Vol. 12, No. 2, 2021.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	subjektivna dobrobit; nezaposlenost; zajamčena minimalna naknada; životna situacija; percepcija budućnosti; uloga socijalnog rada / subjective well-being; unemployment; welfare; life situation; the image of the future; the role of the social work
<i>Subjektivna dobrobit i osobine ličnosti: Povezanost na fenotipskoj i etiološkoj razini / Subjective Well-Being and Personality Traits: Association at the Phenotypic and Aetiological Level</i> Pocnić, M.; Bratko, D.	Psihologijske teme, Vol. 30, No. 3, 2021.	Pregledni rad / Review article	Hrv. / Cro.	subjektivna dobrobit; ličnost; Velikih pet; heritabilnost; zadovoljstvo životom; genetika ponašanja / subjective well-being; personality; Big Five; heritability; life-satisfaction; behavioral genetics
<i>Čimbenici prilagodbe ključnih radnika za vrijeme krize uzrokovane Covid-19 / Adaptation Factors of Essential Workers During the COVID-19 Crisis</i> Žderić, L.	Psychè : Časopis studenata psihologije, Vol. 4, No. 1, 2021.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	Covid-19; ključni radnici; osobine ličnosti; subjektivna dobrobit; zadovoljstvo poslom / COVID-19; essential workers; job satisfaction; personality traits; well-being
<i>Životni ciljevi, orijentacije prema sreći i psihološke potrebe adolescenata: Koji je najbolji put do sreće? / Adolescents’ Life Goals, Orientations to Happiness and Psychological Needs: Which is The Best Path to Happiness?</i> Brdar, I.; Anić, P.	Psihologijske teme, Vol. 19, No. 1, 2010.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	subjektivna dobrobit; životni ciljevi; osnovne psihološke potrebe; orijentacije prema sreći; zadovoljstvo životom; pozitivne i negativne emocije / subjective well-being; life goals; basic psychological needs; orientations to happiness; satisfaction with life; positive and negative emotions
<i>Povezanost subjektivne dobrobiti i rizičnoga ponašanja studenata: Medijatorska uloga socijalnih faktora / The Association Between Subjective Well-Being and Risky Behaviours in University Students: the Mediating Role of Social Factors</i> Alves, R. F.	Psihologijske teme, Vol. 31, No. 3, 2022.	Izvorni znanstveni članak / Original scientific paper	Eng.	zdravstvena ponašanja; subjektivna dobrobit; društveni čimbenici; zdravstveni odgoj; strukturalno modeliranje / health behavior; subjective well-being; social factors; health education; structural equations model
<i>Povezanost nacionalnog identiteta, subjektivna dobrobit i smisao života / The Relationship Between National Identity, Subjective Well-Being and Meaning in Life</i> Groždanovska, E.	Suvremena psihologija, Vol. 19, No. 1, 2016.	Prethodno priopćenje / Preliminary communication	Eng.	nacionalni identitet; subjektivna dobrobit; smisao života / national identity; subjective well-being; meaning in life
<i>Zdravlje i subjektivna dobrobit / Health and Subjective Welfare</i> Miljković, D.	Radovi Zavoda za znanstvenoistraživački i umjetnički rad u Bjelovaru, No. 7, 2013.	Pregledni rad / Review article	Hrv. / Cro.	zdravlje; subjektivna dobrobit; Bjelovarsko-bilogorska županija / health; subjective welfare; the Bjelovar-Bilogora County
<i>Pregled nekih istraživanja u kontekstu subjektivne dobrobiti / A Survey of Research on Subjective Well-Being</i> Tadić, M.	Društvena istraživanja : časopis za opća društvena pitanja, Vol. 19, No. 1-2 (105-106), 2010.	Pregledni rad / Review article	Hrv. / Cro.	subjektivna dobrobit; sreća; kvaliteta življenja / subjective well-being; happiness; quality of life
<i>Genetski doprinos individualnim razlikama u subjektivnoj dobrobiti: metaanaliza / Genetic Contribution to the Individual Differences in Subjective Well-Being: a Meta-Analysis</i> Vukasović, T.; Bratko, D.; Butković, A.	Društvena istraživanja : časopis za opća društvena pitanja, Vol. 21, No. 1 (115), 2012.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	metaanaliza; heritabilnost; subjektivna dobrobit; zadovoljstvo životom; genetika ponašanja / meta-analysis; heritability; subjective well-being; life-satisfaction; behavioral genetics
<i>Vremenske perspektive i subjektivna dobrobit srednjoškolarca / Time Perspectives and Subjective Well-Being of Secondary School Students</i> Anić, P.	Napredak : Časopis za interdisciplinarna istraživanja u odgoju i obrazovanju, Vol. 154, No. 1-2, 2014.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	vremenske perspektive; subjektivna dobrobit; adolescencija; srednjoškolci / time perspectives; subjective well-being; adolescence; secondary school students
<i>Stil vodstva ravnatelja i subjektivna dobrobit učitelja: posredujuća uloga školske kulture / Leadership Styles of Principals and Subjective Well-Being of Teachers: Mediating Role of school culture</i> Slavić, A.; Rijavec, M.; Matić, D.	Napredak : Časopis za interdisciplinarna istraživanja u odgoju i obrazovanju, Vol. 160, No. 1-2, 2019.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	subjektivna dobrobit; suradnička školska kultura; stil vodstva; učitelji / subjective well-being; collaborative school culture; leadership styles; teachers
<i>Iskustvo zanesenosti kod budućih nastavnika tijekom studija / Flow Experience Among Future Teachers During Studies</i> Kopačević, D.; Rogulja, N.; Tomić, M.K.	Croatian Journal of Education, Vol. 13, No. 4, 2011.	Prethodno priopćenje / Preliminary communication	Hrv., eng. / Cro., Eng.	flow; optimalno iskustvo; informatika; računarstvo; subjektivna dobrobit / flow; optimal experience; informatics; computing science; subjective well-being
<i>Dobrobit – pojmovno utemeljenje i istraživačke prakse / Wellbeing – Conceptual Background and research practices</i> Džužewska, A.	Društvena istraživanja, Vol. 25, No. 4, 2016.	Pregledni rad / Review article	Eng.	dobrobit; subjektivna dobrobit; metodologije; istraživačka praksa / wellbeing; subjective wellbeing; methodologies; research practice
<i>Odnos nekih odrednica subjektivne dobrobiti s brigom zbog novog vala Covid-19 pandemije / The Relationship of Some Determinants of Subjective Well-Being and the Concern Over a New Wave of COVID-19</i> Kopilaš, V.	Zdravstveni glasnik, Vol. 8, No. 1, 2022.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	subjektivna dobrobit; briga; COVID-19 pandemija; novi val / subjective well-being; concern; COVID-19 pandemic; new wave
<i>Kognitivni trening kod starijih osoba: utječe li kognitivna vježba na neke osobine ličnosti i subjektivnu dobrobit? / Cognitive Training in the Elderly: the Effect of Cognitive Training on Dispositional Variables and Subjective Well-Being</i> Bekavac, J.; Vranić, A.	Društvena istraživanja, Vol. 24, No. 2, 2015.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	kognitivno starenje; trening pamćenja; optimizam; mjesto kontrole; subjektivna dobrobit / cognitive aging; memory training; optimism; locus of control; subjective well-being
<i>Školska kultura, stres i dobrobit učitelja / School Culture, Stress and Well-Being of Teachers</i> Slavić, A.; Rijavec, M.	Napredak, Vol. 156, No. 1-2, 2015.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	psihološka dobrobit; stres; subjektivna dobrobit; školska kultura; učitelji / psychological well-being; stress; subjective well-being; school culture; teachers

**TABLICA 1. Nastavak**  
**TABLE 1. Continued**

SUBJEKTIVNA DOBROBIT/SUBJECTIVE WELL-BEING				
Naziv rada i autori / Title and authors	Naziv i broj časopisa / Journal title and number	Vrsta rada / Type of paper	Jezik / Language	Ključne riječi / Key words
<i>Kvaliteta života mladih s otoka Prvića / The Quality of Life of Young People From the Island of Prvić</i> Mikulandra, K.; Rajhvajn Bulat, L.	Socijalna ekologija, Vol. 31, No. 3, 2022.	Prethodno priopćenje / Preliminary communication	Hrv. / Cro.	život na otoku; kvaliteta života; subjektivna dobrobit; resursi zajednice; mladi; pandemija COVID-19 / life on the island; quality of life; subjective well-being; community resources; young people; COVID-19 pandemic
<i>Subjektivna dobrobit i životna očekivanja adolescenata / Adolescents' Subjective Well-Being and Their Life Expectations</i> Reić Ercegovac, I.; Peričić, M.; Šiško, J.; Bilić, K.	Školski vjesnik, Vol. 60, No. 1., 2011.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	adolescencija; depresivnost; zadovoljstvo životom; samopoštovanje; očekivanja / adolescence; depressive symptoms; life satisfaction; self-respect; expectations
<i>Odnos subjektivne dobrobiti i tjelesnog zdravlja / The Relationship Between Subjective Wellbeing and Physical Health</i> Marčinko, I.	Klinička psihologija, Vol. 6, No. 1-2, 2013.	Pregledni rad / Review article	Hrv. / Cro.	subjektivna dobrobit; pozitivna afektivnost; negativna afektivnost; emocije; zdravlje / subjective well-being; positive affectivity; negative affectivity; emotions; health
<i>Odnos otvorenosti prema iskustvu i uspješnog starenja: Provjera posredujuće uloge životnih žaljenja / The Relationship Between Openness to Experience and Successful Aging: Testing the Mediation Role of the Life Regrets</i> Tucak Junaković, I.; Ambrosi-Randić, N.; Nekić, M.	Psihologijske teme, Vol. 27, No. 3, 2018.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	uspješno starenje; otvorenost prema iskustvu; životna žaljenja; starije osobe / successful ageing; openness to experience; life regrets; older people
<i>Uloga osamljenosti u odnosu socijalne anksioznosti i subjektivne dobrobiti: upotreba Inventara socijalne fobije (SPIN) kao mjere / The Role of Loneliness in the Relationship Between Social Anxiety and Subjective Well-Being: Using the Social Phobia Inventory (SPIN) as a Measure</i> Maričić, A.; Štambuk, M.	Društvena istraživanja, Vol. 24, No. 3, 2015.	Izvorni znanstveni članak / Original scientific paper	Eng.	socijalna anksioznost; SPIN; osamljenost; subjektivna dobrobit / social anxiety; SPIN; loneliness; subjective well-being
<i>Odnos socijalne podrške i subjektivne dobrobiti tijekom života / The Relationship Between Social Support and Subjective Well-Being Across the Lifespan</i> Brajša-Žganec, A.; Kaliterna Lipovčan, Lj.; Hanzec, I.	Društvena istraživanja, Vol. 27, No. 1, 2018.	Izvorni znanstveni članak / Original scientific paper	Eng.	socijalna podrška; subjektivna dobrobit; dobne razlike / social support; subjective well-being; age differences
<i>Zadovoljstvo životom u adolescentnoj i odrasloj dobi / Life Satisfaction at Adolescence and Adulthood</i> Penezić, Z.	Društvena istraživanja, Vol. 15, No. 4-5 (84-85), 2006.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	opće zadovoljstvo životom; temporalno zadovoljstvo životom; adolescencija; odrasla dob / general life satisfaction; temporal life satisfaction; adolescence; adulthood
<i>Zadovoljstvo životom: individualna i obiteljska perspektiva / Life Satisfaction: Individual and Family Perspective</i> Kovčoo Vukadin, I.; Novak, M.; Križan, H.	Kriminologija & socijalna integracija, Vol. 24, No. 1, 2016.	Pregledni rad / Review article	Hrv. / Cro.	zadovoljstvo životom; mjere zadovoljstva životom; obiteljska perspektiva; FamResPlan / life satisfaction; measures of life satisfaction; family perspective; FamResPlan
<i>Uloga samopoštovanja u održavanju subjektivne dobrobiti u primjeni strategija suočavanja sa stresom / The Role of Self-Esteem in Maintaining Subjective Well-Being While Using Various Coping Strategies</i> Mirjanić, L.; Milas, G.	Društvena istraživanja, Vol. 20, No. 3 (113), 2011.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	suočavanje sa stresom; strategije suočavanja; subjektivna dobrobit; samopoštovanje / coping with stress; coping strategies; subjective well-being; self-esteem
<i>Subjektivna dobrobit bračnih partnera prilikom tranzicije u roditeljstvo / Subjective Well-Being of Spouses During the Transition to Parenthood</i> Reić Ercegovac, I.; Penezić, Z.	Društvena istraživanja, Vol. 21, No. 2 (116), 2012.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	tranzicija u roditeljstvo; zadovoljstvo životom; zadovoljstvo brakom; roditeljska kompetentnost; osobine ličnosti / transition to parenthood; life satisfaction; satisfaction with marriage; parental competence; personality traits
<i>Nostalgija i mentalno zdravlje / Nostalgia and Mental Health</i> Gombar, G.	Psychè : Časopis studenata psihologije, Vol. 3, No. 1, 2020.	Pregledni rad / Review article	Hrv. / Cro.	emocije; mentalno zdravlje; nostalgija; subjektivna dobrobit / emotions; mental health; nostalgia; subjective well-being
<i>Povezanost pristupa sreći, motiva za volontiranje i subjektivne dobrobiti volontera / The Relationship Between Approaches to Happiness, Motives and Outcomes of Volunteering and Subjective Well-Being of Volunteers</i> Miljković, D.; Jurčec, L.	Napredak, Vol. 156, No. 1-2, 2015.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	volontiranje; motivi za volontiranje; subjektivna dobrobit; pristupi sreći / volunteering; subjective well-being; approaches to happiness
<i>Kako i zašto mjeriti zadovoljstvo učenika školom / How and Why to Measure Students' School Satisfaction</i> Vidić, T.	Napredak : Časopis za interdisciplinarna istraživanja u odgoju i obrazovanju, Vol. 163, No. 1 - 2, 2022.	Pregledni rad / Review article	Hrv. / Cro.	zadovoljstvo školom; subjektivna dobrobit; učenici / school satisfaction; subjective well-being; students
<i>Doprinos neprilagođenog dnevnog sanjarenja razini psihološkog distresa i suočavanju sa stresom / Contribution of Maladaptive Daydreaming to the Level of Psychological Distress and Coping Strategies</i> Dujjić, G.; Antičević, V.; Mišetić, I.	Socijalna psihijatrija Vol. 48, No. 1, 2020.	Izvorni znanstveni članak / Original scientific paper	Hrv, eng. / Cro, Eng.	neprilagođeno dnevno sanjarenje; strategije suočavanja sa stresovima; psihološki distres / maladaptive daydreaming; coping strategies; psychological distress
<i>Psihičko zdravlje geekova / Mental Health of Geeks</i> Mikac, U.	Socijalna psihijatrija, Vol. 50, No. 3, 2022.	Izvorni znanstveni članak / Original scientific paper	Hrv, eng. / Cro, Eng.	geek; dvojni model psihičkog zdravlja; subjektivna dobrobit; psihološka uznemirenost; geek uključenost / geek; dual factor model of mental health; subjective well-being; psychological distress; geek engagement
<i>Sindrom sagorijevanja kod zaposlenih u odnosima s javnošću u Hrvatskoj / Burnout Syndrome in Public Relations Employees in Croatia</i> Selimber, V.; Milković Šipek, S.	Communication Management Review, Vol. 7, No. 01, 2022.	Pregledni rad / Review article	Hrv. / Cro.	odnosi s javnošću; sindrom sagorijevanja; uvjeti rada; COVID-19 subjektivna dobrobit; konflikt rad – obitelj / public relations; burnout syndrome; working conditions; COVID-19 subjective well-being; work-family conflict

**TABLICA 1. Nastavak**  
**TABLE 1. Continued**

SUBJEKTIVNA DOBROBIT/SUBJECTIVE WELL-BEING				
Naziv rada i autori / Title and authors	Naziv i broj časopisa / Journal title and number	Vrsta rada / Type of paper	Jezik / Language	Ključne riječi / Key words
<i>The Nexus between Welfare State and Subjective Well-Being: A Multi-Level Assessment / The Nexus Between Welfare State and Subjective Well-Being: a Multi-Level Assessment</i> Fassil, S.Y.	Interdisciplinary Description of Complex Systems, Vol. 18, No. 2-A, 2020.	Izvorni znanstveni članak / Original scientific paper	Eng.	welfare state; subjective well-being; SWB; life satisfaction / welfare state; subjective well-being; SWB; life satisfaction
<i>A phenomenological perspective on subjective well-being: from myth to science / A Phenomenological Perspective on Subjective Well-Being: from Myth to Science</i> Mindoljević Drakulić, A.	Psychiatria Danubina, Vol. 24., No. 1., 2012.	Pregledni rad / Review article	Eng.	subjective well-being; happiness; positive psychology / subjective well-being; happiness; positive psychology
<i>The sense of coherence and subjective well-being as resources of resilience in the time of stressful situations: covid-19 outbreak and earthquakes / The Sense of Coherence and Subjective Well-Being as Resources of Resilience in the Time of Stressful Situations: COVID-19 Outbreak and Earthquakes</i> Matić, I.; Takšić, I.; Božičević, M.	Psychiatria Danubina, Vol. 33, No. broj 4, 2021.	Izvorni znanstveni članak / Original scientific paper	Eng.	sense of coherence; psychological distress; COVID-19; earthquakes / sense of coherence; psychological distress; COVID-19; earthquakes
<i>Using a multilevel modelling approach to explain the influence of economic development on the subjective well-being of individuals / Using a Multilevel Modelling Approach to Explain the Influence of Economic Development on the Subjective Well-Being of Individuals</i> Novak, M.; Pahor, M.	Economic research - Ekonomska istraživanja, Vol. 30, No. 1, 2017.	Izvorni znanstveni članak / Original scientific paper	Eng.	subjective well-being; multilevel model; life satisfaction; income; contextual effects / subjective well-being; multilevel model; life satisfaction; income; contextual effects
<i>Personality Traits and Social Desirability as Predictors of Subjective Well-being / Personality Traits and Social Desirability as Predictors of Subjective Well-Being</i> Brajša-Zganec, A.; Ivanović, D.; Kaliterna Lipovčan, Lj.	Psihologijske teme, Vol. 20, No. 2, 2011.	Izvorni znanstveni članak / Original scientific paper	Eng.	subjective well-being; life satisfaction; positive and negative affects; the Big Five model of personality; social desirability / subjective well-being; life satisfaction; positive and negative affects; the Big Five model of personality; social desirability
<i>Orientations to happiness, subjective well-being and life goals / Orientations to Happiness, Subjective Well-Being and Life Goals</i> Anić, P.; Tončić, M.	Psihologijske teme, Vol. 22, No. 1, 2013.	Izvorni znanstveni članak / Original scientific paper	Eng.	orientations to happiness; subjective well-being; life goals; self-control; cluster analysis / orientations to happiness; subjective well-being; life goals; self-control; cluster analysis
<i>Odnos između usredotočene svjesnosti u roditeljstvu, kognitivne roditeljske svjesnosti i subjektivne dobrobiti adolescenata / The Relationship Between Mindful Parenting, Cognitive Parental Awareness, and the Subjective Well-Being of Adolescents</i> Ljubetić, M.; Reić Ercegović, I.	Metodički ogledi, Vol. 27, No. 1, 2020.	Prethodno priopćenje / Preliminary communication	Eng.	usredotočena svjesnost u roditeljstvu; kognitivna roditeljska svjesnost; adolescenti; zadovoljstvo životom; samopoštovanje; usamljenost / mindful parenting; cognitive parental awareness; adolescents; life satisfaction; self-esteem; loneliness
<i>Slobodne aktivnosti i zadovoljstvo osoba zaposlenih u sustavu zdravstvene skrbi / Off-the-Job Activities and Well-Being in Healthcare Professionals</i> Burušić, J.; Kaliterna Lipovčan, Lj.; Prizmić, Z.	Revija za socijalnu politiku, Vol. 16, No. 3, 2009.	Izvorni znanstveni članak / Original scientific paper	Eng.	slobodno vrijeme; životno zadovoljstvo; osjećaj sreće; zadovoljstvo poslom; ravnoteža života i rada / off-the-job activities; life satisfaction; happiness; job satisfaction; work-family balance
<i>Osjećaj koherentnosti i kvaliteta života adolescenata - uloga boravka u učeničkom domu u odnosu na život s obitelji / Sense of Coherence and Subjective Well-Being Among Adolescents - the Potential Impact of Living in a Dormitory Compared to Living with Family</i> Matić, I.; Jureša, V.	Acta clinica Croatica, Vol. 60., No. 4., 2021.	Izvorni znanstveni članak / Original scientific paper	Eng.	adolescencija; učenici; osjećaj koherentnosti; kvaliteta života / adolescence; students; sense of coherence; subjective well-being
<i>Well-Being on Planet Earth / Well-Being on Planet Earth</i> Diener, E.; Tov, W.	Psihologijske teme, Vol. 18, No. 2, 2009.	Izvorni znanstveni članak / Original scientific paper	Eng.	subjective well-being; income; money; quality of life; national well-being / subjective well-being; income; money; quality of life; national well-being
<i>Intergenerational Contacts Influence Health Related Quality of Life (HRQL) and Subjective Well Being among Austrian Elderly / Intergenerational Contacts Influence Health Related Quality of Life (HRQL) and Subjective Well Being Among Austrian Elderly</i> Kirchengast, S.; Haslinger, B.	Collegium antropologicum, Vol. 39, No. 3, 2015.	Izvorni znanstveni članak / Original scientific paper	Eng.	old age; health related quality of life; intergenerational contacts / old age; health related quality of life; intergenerational contacts
<i>Provjera dvaju modela subjektivne dobrobiti te povezanosti zadovoljstva životom, demografskih varijabli i osobina ličnosti / Examination of the two Models of Subjective Well-Being and Correlations Between Satisfaction With Life, Demographic Variables and Personality Traits</i> Lučev, I.; Tadinac, M.	Migracijske i etničke teme, Vol. 26, No. 3, 2010.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	zadovoljstvo životom; model opće pozitivnosti; model prosudbi; osobine ličnosti; demografske varijable / satisfaction with life; general positivity model; judgment model; personality traits; demographic variables
<i>Long-term Abstinence and Well-being of Alcohol-dependent Patients after Intensive Treatment and Aftercare Telephone Contacts / Long-term Abstinence and Well-Being of Alcohol-Dependent Patients After Intensive Treatment and Aftercare Telephone Contacts</i> Rus-Makovec, M.; Čebašek-Travnik, Z.	Croatian Medical Journal, Vol. 49, No. 6, 2008.	Izvorni znanstveni članak / Original scientific paper	Eng.	treatment outcome; alcohol dependency; well-being; aftercare; telephone intervention / treatment outcome; alcohol dependency; well-being; aftercare; telephone intervention
<i>Effects of exercise dependence on psychological health of Chinese college students / Effects of Exercise Dependence on Psychological Health of Chinese College Students</i> Li, M.; Nie, J.; Ren, Y.	Psychiatria Danubina, Vol. 27, No. 4, 2015.	Izvorni znanstveni članak / Original scientific paper	Eng.	exercise dependence; psychological health; depression; anxiety; college students / exercise dependence; psychological health; depression; anxiety; college students



**TABLICA 1. Nastavak**  
**TABLE 1. Continued**

SUBJEKTIVNA DOBROBIT/SUBJECTIVE WELL-BEING				
Naziv rada i autori / Title and authors	Naziv i broj časopisa / Journal title and number	Vrsta rada / Type of paper	Jezik / Language	Ključne riječi / Key words
<i>Nedostatak uvida kod oboljelih od shizofrenije: definicija, etiološki koncepti i terapijske implikacije / Lack of Insight Among Persons with Schizophrenia: Definition, Etiological Concepts and Implications for Treatment</i> Štrkalj-Ivezić, S.; Horvat, K.	Liječnički vjesnik, Vol. 139, No. 7-8, 2017.	Pregledni rad / Review article	Hrv. / Cro.	shizofrenija – dijagnoza, liječenje; psihologija shizofrenih bolesnika; svjesnost; skale za procjenu psihijatrijskog stanja; spoznajni poremećaji – psihologija; neuropsihološki testovi; samopoimanje; dijagnostička samoprocjena; depresija – psihologija; socijalna stigma; ishod liječenja / Schizophrenia – diagnosis, therapy; Schizophrenic psychology; awareness; psychiatric status rating scales; cognition disorders – psychology; neuropsychological tests; self concept; diagnostic self evaluation; depression – psychology; social stigma; treatment outcome
<i>The Contributions of Positive and Negative Affect to Emotional Well-Being / The Contributions of Positive and Negative Affect to Emotional Well-Being</i> Larsen, R.	Psihologijske teme, Vol. 18, No. 2, 2009.	Izvorni znanstveni članak / Original scientific paper	Eng.	emotinal well-being; positive affect; negative affect / emotinal well-being; positive affect; negative affect
<i>Providing the Scientific Backbone for Positive Psychology: A Multi-Level Conception of Human Thriving / Providing the Scientific Backbone for Positive Psychology: a Multi-Level Conception of Human Thriving</i> Sheldon, K.M.	Psihologijske teme, Vol. 18, No. 2, 2009.	Izvorni znanstveni članak / Original scientific paper	Eng.	psychological needs; personality structure; positive psychology; subjective well-being / psychological needs; personality structure; positive psychology; subjective well-being
<i>Importance of the Alternative Five and Trait Emotional Intelligence for Agentic and Communal Domains of Satisfaction / Importance of the Alternative Five and Trait Emotional Intelligence for Agentic and Communal Domains of Satisfaction</i> Avsec, A.; Kavčič, T.	Psihologijske teme, Vol. 20, No. 3, 2011.	Izvorni znanstveni članak / Original scientific paper	Eng.	alternative five personality traits; personality traits; emotional intelligence; life satisfaction; domains of life satisfaction / alternative five personality traits; personality traits; emotional intelligence; life satisfaction; domains of life satisfaction
<i>Narcissism and the Strategic Pursuit of Short-Term Mating: Universal Links across 11 World Regions of the International Sexuality Description Project-2 / Narcissism and the Strategic Pursuit of Short-Term Mating: Universal Links Across 11 World Regions of the International Sexuality Description Project-2</i> Schmitt, D.P. et al.	Psihologijske teme, Vol. 26, No. 1, 2017.	Izvorni znanstveni članak / Original scientific paper	Eng.	narcissism; sexuality; personality; cross-cultural psychology / narcissism; sexuality; personality; cross-cultural psychology
<i>Is there Anything Good about the COVID-19 Pandemic? Perceptions of the Positive Consequences at the Beginning of the Pandemic / Is There Anything Good About the COVID-19 Pandemic? Perceptions of the Positive Consequences at the Beginning of the Pandemic</i> Ajduković, M.; Rezo Bagarić, I.; Ajduković, D.	Psihologijske teme, Vol. 31, No. 1, 2022.	Izvorni znanstveni članak / Original scientific paper	Eng.	positive consequences; COVID-19 pandemic; mental health; well-being / positive consequences; COVID-19 pandemic; mental health; well-being
<i>Laičke definicije uspješnoga starenja i čimbenika koji mu doprinose u starijih osoba u Hrvatskoj: Tematska analiza kvalitativnih podataka / Lay Definitions of Successful Ageing and Contributing Factors among Croatian Older Adults: a Thematic Analysis of Qualitative Data</i> Tucak Junaković, I.; Ambrosi-Randić, N.	Psihologijske teme, Vol. 31, No. 3, 2022.	Izvorni znanstveni članak / Original scientific paper	Eng.	uspješno starenje; laičke koncepcije; kvalitativno istraživanje; starije osobe / successful ageing; lay conceptions; qualitative research; older people
<i>Živjeti u materijalnom blagostanju ili više vjerovati drugima? Životni standard i interpersonalno povjerenje kao prediktori subjektivne dobrobiti u različitim dobnim skupinama / To Live in Material Well-Being or to Trust Others More? Standard of Living and Interpersonal Trust as Predictors of Personal Well-Being in Different Age Groups</i> Burušić, J.; Ribar, M.; Rac, A.	Ljetopis socijalnog rada, Vol. 21 No. 2, 2014.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	subjektivna dobrobit; generalizirano interpersonalno povjerenje; životni standard; dobne razlike / personal well-being; generalised interpersonal trust; standard of living; age differences
<i>Životni ciljevi adolescenata sklonih kockanju / Life goals of Adolescents Prone to Gambling</i> Bilić, V.	Život i škola, Vol. 58, No. 27, 2012.	Prethodno priopćenje / Preliminary communication	Hrv., eng., njem. / Cro., Eng., Germ.	adolescenti; kockanje; životni ciljevi; školski uspjeh; srednje škole / adolescents; gambling; life goals; academic achievement; secondary schools
<i>Odnos nepovoljnih iskustava u djetinjstvu, zaštitnih čimbenika u sadašnjosti i zadovoljstva životom profesionalnih pomagača / Relationship Between Adverse Childhood Experiences, Currently Available Protective Factors, and Life Satisfaction of Professional Helpers</i> Maurović, I.	Hrvatska revija za rehabilitacijska istraživanja, Vol. 58, No. 2, 2022.	Izvorni znanstveni članak / Original scientific paper	Hrv., eng. / Cro., Eng.	nepovoljna iskustva u djetinjstvu; zadovoljstvo životom; zaštitni čimbenici; profesionalni pomagači / adverse childhood experiences; life satisfaction; protective factors; professional helpers
<i>Od rizika do sreće: otpornost adolescenata u odgojnim ustanovama / From Risk to Happiness: the Resilience of Adolescents in Residential Care</i> Maurović, I.; Križanić, V.; Klasić, P.	Kriminologija i socijalna integracija Vol. 22, No. 2, 2014.	Izvorni znanstveni članak / Original scientific paper	Hrv., eng. / Cro., Eng.	rizik; sreća; otpornost; adolescenti; odgojne ustanove / risk; happiness; resilience; adolescence; residential care
<i>Osuđeni na socijalnu isključenost? Životni uvjeti i kvaliteta življenja mladih bez završene srednje škole / Destined to Social Exclusion? Conditions and Quality of Life of High School Dropouts</i> Milas, G.; Ferić, I.; Šakić, V.	Društvena istraživanja, Vol. 19, No. 4-5 (108-109), 2010.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	rano prekidanje školovanja; mladi; socijalna isključenost; kvaliteta življenja / dropout; youth; social exclusion; quality of life
<i>Pozitivna psihologija – od ishodišta do prakse u školi u dijalogu s pedagogijom i logoterapijom / Positive Psychology – from its Origins to School Practice in Relation with Pedagogy and Logotherapy</i> Plaza Leutar, M.	Acta Iadertina, Vol. 18, No. 2, 2021.	Pregledni rad / Review article	Hrv. / Cro.	dobrobit; pozitivna psihologija; primjena pozitivne psihologije; smisao; škola / well-being; positive psychology; applied positive psychology; meaning; school

**TABLICA 1. Nastavak**  
**TABLE 1. Continued**

SUBJEKTIVNA DOBROBIT/SUBJECTIVE WELL-BEING				
Naziv rada i autori / Title and authors	Naziv i broj časopisa / Journal title and number	Vrsta rada / Type of paper	Jezik / Language	Ključne riječi / Key words
<i>Life satisfaction, optimism and social capital as predictors of mental health of the recipients of financial welfare from the state / Life Satisfaction, Optimism and Social Capital as Predictors of Mental Health of the Recipients of Financial Welfare from the State</i> Bilajac, L.; Vasiljev Marchesi, V.; Tešić, V.; Rukavina, T.	Psychiatria Danubina, Vol. 26, No. suppl 3, 2014.	Izvorni znanstveni članak / Original scientific paper	Eng.	optimism; life satisfaction; socioeconomic status; mental health; health inequalities / optimism; life satisfaction; socioeconomic status; mental health; health inequalities
<i>Intervention effect of time management training on nurses mental health during the covid-19 epidemic / Intervention effect of Time Management Training on Nurses Mental Health During the COVID-19 Epidemic</i> Sun, L.	Psychiatria Danubina, Vol. 33, No. broj 4, 2021.	Izvorni znanstveni članak / Original scientific paper	Eng.	mental health; time management training; Balint group intervention; medical nurses / mental health; time management training; Balint group intervention; medical nurses
<i>Cjeloživotno učenje i osobe starije životne dobi u kontekstu IKT-a / Lifelong Learning and Older People in the Context of ICT</i> Možanić, R.; Bukvić, Z.	Croatian Journal of Education, Vol. 23., No. 4., 2021.	Pregledni rad / Review article	Eng., hrv. / Eng., Cro.	aktivno starenje; cjeloživotno učenje; IKT, kvaliteta života / active aging; lifelong learning; ICT; quality of life
<i>Doživljaj zanesenosti kod adolescenata: razlike između glazbeno obrazovanih, sportaša i ostalih adolescenata / Flow Experiences in Adolescents: Comparison of Musically Educated, Athletically Active, and Other Adolescents</i> Šimunović, Z.; Vidulin, S.; Miljković, D.	Croatian Journal of Education, Vol. 24., No. 4., 2022.	Izvorni znanstveni članak / Original scientific paper	Eng., hrv. / Eng., Cro.	izvanškolske aktivnosti; pozitivni razvoj; psihološka dobrobit / extracurricular activities; positive development; psychological well-being
<i>Istraživanje višedimenzionalnog životnog zadovoljstva kao prediktora usamljenosti i samopoštovanja / Examining Multi-Dimensional Life Satisfaction as a Predictor of Loneliness and Self-Esteem</i> Isiklar, A.	Croatian Journal of Education, Vol. 15, No. 4, 2013.	Izvorni znanstveni članak / Original scientific paper	Eng., hrv. / Eng., Cro.	adolescenti; pretilost; subjektivno blagostanje; životno zadovoljstvo / adolescents; obesity; subjective well-being; life satisfaction
<i>Application of the Principles and Techniques of Psychodrama in Social Work with Different Groups of Users / Application of the Principles and Techniques of Psychodrama in Social Work with Different Groups of Users</i> Andrić, D.; Blažeka Kokorić, S.	Socijalne teme, Vol. 1, No. 8, 2021.	Pregledni rad / Review article	Eng.	psychodrama; social work; different groups of users; positive changes / psychodrama; social work; different groups of users; positive changes
<i>Pozitivna psihologija: psihologija čije je vrijeme (ponovno) došlo / Positive Psychology: the Psychology Whose Time Has Come (Again)</i> Rijavec, M.; Miljković, D.	Društvena istraživanja : časopis za opća društvena pitanja, Vol. 15, No. 4-5 (84-85), 2006.	Pregledni rad / Review article	Hrv. / Cro.	pozitivna psihologija; psihološka dobrobit; optimalno funkcioniranje; primijenjena pozitivna psihologija / positive psychology; psychological well-being; optimal functioning; applied positive psychology
<i>Visokoobrazovane migrantice iz Hrvatske u državama Europske unije. Iskustva integracije i subjektivne dobrobiti / Highly Educated Migrant Women from the Republic of Croatia in European Countries. Experiences of Integration and Well-Being</i> Lučan, L.; Rajković Iveta, M.; Klasnić, K.	Etnološka tribina : Godišnjak Hrvatskog etnološkog društva, Vol. 52, No. 45, 2022.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	suвременe migracije; visokoobrazovane migrantice; integracija; subjektivna dobrobit / contemporary migrations; highly educated migrant women; integration; wellbeing
<i>Što filozofi znaju o dobrom životu? / What Do Philosophers Know about the Good Life?</i> Gavran Miloš, A.	Prolegomena : Časopis za filozofiju, Vol. 20, No. 1, 2021.	Pregledni rad / Review article	Hrv. / Cro.	dobrobit; hedonizam; teorija ispunjenja želja; objektivna lista; subjektivna dobrobit; objektivna dobrobit; normativna adekvatnost; deskriptivna adekvatnost / well-being; hedonism; desire fulfillment theory; objective list; subjective well-being; objective well-being; normative adequacy; descriptive adequacy
<i>Imidž u javnosti i subjektivna dobrobit hrvatskih branitelja / Public Image and Subjective Welfare of Croatian Veterans</i> Rihtar, S.; Šakic, V.; Plenković, A.	Pilar : časopis za društvene i humanističke studije, Vol. 18, No. 32(1), 2022.	Izvorni znanstveni članak / Original scientific paper	Hrv., eng. / Cro., Eng.	Hrvatska; branitelji; javno raspoloženje; stigma; doprinos; kompenzacija / Croatia; defenders; public opinion; stigma; contribution; compensation
<i>Economics and happiness – key insights and latest findings / Economics and Happiness – Key Insights and Latest Findings</i> Andrijić, M.	Ekonomska misao i praksa, Vol. 31, No. 1, 2022.	Pregledni rad / Review article	Eng.	happiness; subjective well-being; life satisfaction; economics; economic policy / happiness; subjective well-being; life satisfaction; economics; economic policy
<i>Odnos zbornih aktivnosti i dobrobiti pjevača amatera / The Relationship Between Choirs' Activities and the Wellbeing of Amateur</i> Škojo, T.	Nova prisutnost : časopis za intelektualna i duhovna pitanja, Vol. 19, No. 3, 2021.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	zbornsko pjevanje; dobrobit; slobodno vrijeme / choral singing; wellbeing; leisure time
<i>Usporedba odnosa usamljenosti i preferirane samoće s nekim sociodemografskim varijablama i aspektima subjektivne i psihološke dobrobiti odraslih / Comparison between Relationships of Loneliness and Preference for Solitude with Some Socio-demographic Variables and Aspects of Subjective and Psychological Well-being of Adults</i> Tucak Junaković, I.	Socijalna psihijatrija, Vol. 47, No. 1, 2019.	Izvorni znanstveni članak / Original scientific paper	Hrv., eng. / Cro., Eng.	usamljenost; samoća; zadovoljstvo životom; samopoštovanje; smisao života; dobrobit / loneliness; solitude; life satisfaction; self-esteem; purpose in life; well-being
<i>The management of the accompanying administrative territories of the metropolitan: case of Latvia / The Management of the Accompanying Administrative Territories of the Metropolitan: Case of Latvia</i> Jekabsone, I.; Biruta S.; Grantins, A.	Ekonomska misao i praksa, Vol. 26, No. 2, 2017.	Pregledni rad / Review article	Eng.	well-being; accompanying administrative territories; objective and subjective well-being; citizens' engagement / well-being; accompanying administrative territories; objective and subjective well-being; citizens' engagement

**TABLICA 1. Nastavak**  
**TABLE 1. Continued**

SUBJEKTIVNA DOBROBIT/SUBJECTIVE WELL-BEING				
Naziv rada i autori / Title and authors	Naziv i broj časopisa / Journal title and number	Vrsta rada / Type of paper	Jezik / Language	Ključne riječi / Key words
<i>Čimbenici motivacije voditelja za rad u županijskom stručnom vijeću / Factors of Motivation of Leaders of Expert County Councils</i> Skupnjak, D.; Pahić, T.	Život i škola : časopis za teoriju i praksu odgoja i obrazovanja, Vol. 63, No. 1, 2017.	Prethodno priopćenje / Preliminary communication	Hrv. / Cro.	motivacijski čimbenici; učitelji; stručno usavršavanje; županijska stručna vijeća; voditelji / motivational factors; teachers; professional development; expert county councils; leaders
<i>Demokracija i vladavina u javnim službama: slučaj rezidencijalne skrbi u Litvi / Democracy and Governance in Public Services: The Case of Residential Care in Lithuania</i> Arvydas Guogis, I. R.; Urtė L.O.	Revija za socijalnu politiku, Vol. 23, No. 2, 2016.	Izvorni znanstveni članak / Original scientific paper	Hrv. / Cro.	demokracija; osnaživanje; sudjelovanje; koprodukcija; socijalne usluge; socijalna skrb / democracy; empowerment; co-participation; co-production; social services; social care
<i>Ličnost i samoprocjena fizičkoga i emocionalnoga zdravlja u studenata prve godine fakulteta / Personality and Self-Perception of Physical and Emotional Health among First-Year University Students</i> Bobić, J.; Cvijetić, S.; Macan, J.	Društvena istraživanja : časopis za opća društvena pitanja, Vol. 24, No. 2, 2015.	Izvorni znanstveni članak / Original scientific paper	Eng.	ličnost; osjećaj dobrobiti; ekstraverzija; neuroticizam; SF-36 / personality; well-being; extraversion; neuroticism; SF-36
<i>Long-term Abstinence and Well-being of Alcohol-dependent Patients after Intensive Treatment and Aftercare Telephone Contacts / Long-term Abstinence and Well-being of Alcohol-dependent Patients after Intensive Treatment and Aftercare Telephone Contacts</i> Rus-Makovec, M.; Čebašek-Travnik, Z.	Croatian Medical Journal, Vol. 49, No. 6, 2008.	Izvorni znanstveni članak / Original scientific paper	Eng.	treatment outcome; alcohol dependency; well-being; aftercare; telephone intervention / treatment outcome; alcohol dependency; well-being; aftercare; telephone intervention
<i>The Subjective Quality of Life (SQOL) in Gastroenterological Patients / The Subjective Quality of Life (SQOL) in Gastroenterological Patients</i> Jokić-Begić, N.; Tadinac, M.; Hromatko, I.; Lauri Korajlija, A.	Psiholojske teme, Vol. 16, No. 2, 2007.	Izvorni znanstveni članak / Original scientific paper	Eng.	subjective quality of life; gastroenterological patients; anxiety; depression; coping; social support / subjective quality of life; gastroenterological patients; anxiety; depression; coping; social support

U usporedbi s temom samopomoći, možemo reći da je tema biblioterapije zastupljenija u hrvatskim časopisima, a odabran je 21 rad. Prema vrsti rada ističe se količina stručnih radova kojih je 11, zatim slijede pregledni radovi od kojih je odabrano 5, potom znanstveni sa 4 istaknuta rada i jedno prethodno priopćenje. Dva rada dostupna su i na hrvatskom i na engleskom jeziku dok je jedan rad dostupan isključivo na engleskom jeziku. Prvi rad na tu temu objavljen je u otvorenom pristupu 2001. godine, a učestalije se o temi piše od 2018., s posebnim naglaskom na 2021. i 2022. godinu. Može se primijetiti da je tema jednog broja časopisa Kroatologija (Vol. 12 No. 2. – 3) bila posvećena upravo biblioterapiji s obzirom na to da su o toj temi bila 4 rada.

Tema subjektivne dobrobiti od triju istraženih najzastupljenija je u hrvatskim časopisima u otvorenom pristupu, a odabrano je 78 radova. Od toga je 54 rada izvornih znanstvenih članaka, 18 je preglednih radova i 6 prethodnih priopćenja. Na hrvatskom jeziku dostupno je 35 radova, na engleskom 32, a na istovremeno na oba spomenuta jezika objavljeno je 11 rado-

Compared to the topic of self-help, we could say that the topic of bibliotherapy is more discussed about in Croatian journals, and a total of 21 papers were selected. According to the type of paper, the number of professional papers stands out, of which there are 11. It is followed by review articles, five of which were selected, and scientific papers with four papers selected, as well as one preliminary communication. Two papers are available in both Croatian and English, while one paper is available exclusively in English. The first paper on this topic was published in open access in 2001, while the topic has been more frequently written about since 2018, with a special emphasis on 2021 and 2022. It can be observed that the topic of one issue of the journal “Croatology” (Vol. 12 No. 2. - 3) was dedicated to bibliotherapy, given that four papers were published on that topic.

The topic of subjective well-being is the most represented one among the three topics researched in open access Croatian journals, with 78 papers selected. These include as many as 54 original scientific papers, 18 review articles and 6 preliminary communications. A total of 35 papers are available in Croatian, 32 in English, and 11

va s time da je jedan od njih i na trećem jeziku – njemačkom. Prvi je rad na tu temu objavljen 2006. godine i otada do 2022. godine u prosjeku je objavljeno 5 članaka godišnje na tu temu (u otvorenom pristupu). Ipak ističe se godina 2015. u kojoj je objavljeno čak 8 članaka tematski vezanih uz subjektivnu dobrobit. Nakon pandemije COVID-19 primijećen je povećan broj radova o toj temi, pa je tako vidljivo da je 2021. objavljeno 11 radova, a 2022. čak 13 radova o subjektivnoj dobrobiti. Ova tema često je zastupljena u časopisima *Psihologijske teme* (14 radova) i *Društvena istraživanja* (12 radova).

Manja zastupljenost teme samopomoći može ukazivati na manji interes ili istraživanje u području samopomoći u znanstvenim i stručnim časopisima Republike Hrvatske. Razlozi za to mogu uključivati manju svijest o važnosti samopomoći u odnosu na druge teme ili ograničenja resursa za istraživanje, moguće zbog toga što je pojam samopomoći još uvijek manje prepoznatljiv kao vrijedan znanstveni predmet istraživanja u Hrvatskoj, a više je prepušten osobnom odabiru pojedinca u sigurnom privatnom prostoru zbog mogućeg straha od kritike i neodobravanja (11). Veća zastupljenost teme biblioterapije može ukazivati na povećanu prepoznatljivost i značenje ovog pristupa u istraživanjima, osobito jer postoji nekoliko biblioterapijskih grupa u Hrvatskoj. Moguće je da se biblioterapija smatra relevantnijom ili učinkovitijom u kontekstu hrvatske znanstvene i stručne zajednice, posebno što je direktnije od samopomoći vezana uz psihoterapiju općenito, što dovodi do većeg broja istraživanja i radova u tom području od teme samopomoći prema rezultatima na portalu Hrčak. Zastupljenost teme subjektivne dobrobiti u hrvatskim časopisima otvorenog pristupa, sa 78 odabranih radova, ukazuje na snažniji interes i angažman istraživačke zajednice u proučavanju aspekata subjektivne dobrobiti. Ova količina radova ukazuje na veću relevantnost teme te konstantan interes znanstvenika, osobito psihologa iz pod-

papers were published simultaneously in both languages, with one of them also in a third language - German. The first paper on the subject was published in 2006, and from then until 2022, an average of five articles per year were published on the subject (in open access). However, the year 2015 stands out, in which as many as eight articles addressing subjective well-being were published. After the COVID-19 pandemic, an increased number of papers on this topic was observed, therefore 11 papers were published in 2021, while 2022 included as many as 13 papers on the subject of subjective well-being. This topic is often represented in the journals "Psychological Topics" (14 papers) and "Social Research" (12 papers).

Lower prevalence of the topic of self-help may indicate less interest or less research in the field of self-help in scientific and professional journals of the Republic of Croatia. Reasons for this may include less awareness when it comes to the importance of self-help compared to other topics or limitations of resources for research, possibly due to the fact that the concept of self-help is still less recognized as a valuable scientific subject of research in Croatia, and is more left to the personal choice of the individual in a safe private space due to the possible fear of criticism and disapproval (11). Greater representation of the topic of bibliotherapy may indicate an increased recognition and significance of this approach in research, especially since there are several bibliotherapy groups in Croatia. It is possible that bibliotherapy is considered more relevant or effective in the context of the Croatian scientific and professional community, especially as it is more directly related to psychotherapy in Croatia than self-help, which leads to a greater number of studies and papers in that field compared to the topic of self-help according to the results on the Hrčak portal. The prevalence of the topic of subjective well-being in Croatian open access journals, with 78 selected papers, indicates a stronger interest and engagement of the research community in the study of aspects of subjective well-being. This amount of papers suggests a higher rel-

ručja pozitivne psihologije, za istraživanje faktora koji utječu na dobrobit pojedinaca. Može se zaključiti kako su teme poput samopomoći i biblioterapije manje prepoznate od strane znanstvene zajednice u Hrvatskoj i odražavaju tradicionalniji pristup temama koje su vezane uz mentalno zdravlje, za razliku od situacije u svijetu, posebice u Sjedinjenim Američkim Državama, gdje se osim subjektivne dobrobiti, sve veći znanstveni doprinos nalazi u istraživanju upravo samopomoći i biblioterapije koje su obje prepoznate teme vezane za održavanje mentalnog zdravlja, što je u skladu sa znanstvenim istraživanjem provedenim u Hrvatskoj (11). Naša znanstvena zajednica još uvijek suzdržano prihvaća takve potentne društveno-kulturalne koncepte kao što je fenomen literature samopomoći.

Analizirane su i ključne riječi koje se pojavljuju u sažetcima radova. Potrebno je istaknuti da ključne riječi dodjeljuju autori radova. Što se tiče teme samopomoći, ključne riječi dodijeljene u sažetcima radova pokrivaju širok spektar područja povezanih sa samopomoći, identitetom, terapijom, medijima te kulturnim i društvenim aspektima. Ključne riječi koje se ponavljaju u više navrata uključuju „knjige za samopomoć“, „psihoterapija“, „diskurs samopomoći“, „grupe za samopomoć“, „savjeti za mlade“, i „mediji“. Ostale ključne riječi ukazuju na raznolikost tema u istraživanjima. Istraživački naglasci usmjereni su na individualne aspekte (kao što su identitet i samoaktualizacija) te društvene i medijske dimenzije psihoterapije.

S druge strane, za temu biblioterapije najučestalije ključne riječi su „pisanje“, „mladi“, „kreativnost“, „emocionalne teškoće“, „biblioterapija“, „čitanje“ i „knjižnica“. U ključnim riječima vidi se obrazovni kontekst kao i kontekst knjižnica te psihološki aspekt.

Što se tiče zastupljenosti ključnih riječi u radovima o subjektivnoj dobrobiti može se primijetiti da se uz „subjektivnu dobrobit“ najčešće

evance of the topic and the constant interest of scientists, especially psychologists in the field of positive psychology, in researching factors that affect the well-being of individuals. It can be concluded that topics such as self-help and bibliotherapy are less recognized by the scientific community in Croatia and reflect a more traditional approach to topics relating to mental health, in contrast to the situation in the world, particularly in the United States of America, where apart from the concept of subjective well-being, an increasing scientific contribution can be found in the very research of self-help and bibliotherapy, which are both recognized topics associated with the maintenance of mental health, and that is in line with the scientific research conducted in Croatia (11). Our scientific community is still reluctant to embrace such potent social-cultural concepts such as the phenomenon of self-help literature.

Key words appearing in abstracts were also analyzed. It should be noted that keywords are assigned by the authors of the papers. Regarding the topic of self-help, the keywords assigned in the abstracts cover a wide range of areas related to self-help, identity, therapy, media, and cultural and social aspects. Recurring keywords include “self-help books”, “psychotherapy”, “self-help discourse”, “self-help groups”, “youth advice”, and “media”. Other keywords indicate the diversity of research topics. Research emphasis is on individual aspects (such as identity and self-actualization), as well as the social and media dimensions of psychotherapy.

On the other hand, for the topic of bibliotherapy, the most frequent keywords are “writing”, “youth”, “creativity”, “emotional difficulties”, “bibliotherapy”, “reading” and “library”. The key words show the educational context, as well as the context of libraries and the psychological aspect.

As for the representation of key words in papers addressing subjective well-being, it can be observed that in addition to “subjective well-being” the following key words most often appear: “life

pojavljaju ključne riječi: „životni ciljevi“, „zadovoljstvo životom“, „COVID-19“, „adolescencija“ i „kvaliteta života“. Prema ključnim riječima može se primijetiti da se subjektivna dobrobit veže uz psihološke aspekte, rad i zaposlenje, zdravlje, životne okolnosti i situacije te obrazovanje.

Analizom ključnih riječi u sažetcima radova primjećuju se značajne sličnosti između područja samopomoći, biblioterapije i subjektivne dobrobiti. Sva tri područja dijele interes za psihološke aspekte, identitet, te kulturne i društvene kontekste. Ključne riječi poput „identitet“, „psihoterapija“ te „emocionalne teškoće“ pojavljuju se u radovima na sva tri područja naglašavajući zajednički fokus na emocionalnim i psihološkim aspektima pojedinaca. Također, istraživanja u sva tri područja pokazuju interes za društveni i kulturni kontekst, iako je možda veći naglasak na povezanost tematike samopomoći s tematikom biblioterapije što potvrđuju ključne riječi poput „grupe za samopomoć“, „savjeti za mlade“, „kreativnost“, „obrazovni kontekst“ i „knjižnica“. Povezanost s pitanjima zdravlja također je prisutna u ključnim riječima poput „zdravlje“ i „COVID-19“. Osim toga, riječi koje opisuju životne okolnosti i kvalitetu života, poput „životni ciljevi“, „zadovoljstvo životom“ te „kvaliteta života“, pojavljuju se u kontekstu subjektivne dobrobiti, ali i u vezi s pojedinim aspektima samopomoći i biblioterapije. Iako svako područje ima svoje specifičnosti, ove sličnosti ukazuju na preklapanje interesa te naglašavaju kompleksnost pristupa proučavanju pojedinaca i njihovog dobrog stanja, potencijalno otvarajući prostor za integrirani pristup istraživanju ovih tema. Sva tri područja istraživanja dijele zajednički interes za unaprjeđenjem ljudskog blagostanja. Samopomoć se fokusira na individualni razvoj, biblioterapija koristi pristup knjižničnih resursa, dok se subjektivna dobrobit povezuje s različitim aspektima života. Sličnosti proizlaze iz prepoznavanja važnosti kreativnosti, emo-

goals”, “life satisfaction”, “COVID-19”, “adolescence” and “quality of life”. According to these key words, it can be observed that subjective well-being is associated with psychological aspects, work and employment, health, life circumstances and situations, and education.

Upon analyzing the keywords appearing in the abstracts of the papers, significant similarities between the areas of self-help, bibliotherapy and subjective well-being were observed. All three areas share an interest for psychological aspects, identity, and cultural and social contexts. Key words such as “identity”, “psychotherapy” and “emotional difficulties” appear in works in all three areas, emphasizing the common focus on the emotional and psychological aspects of individuals. Furthermore, research in all three areas has shown that there is interest in the social and cultural context, although there is perhaps a greater emphasis on the connection between the topic of self-help and the topic of bibliotherapy, which is confirmed by key words such as “self-help groups”, “advice for young people”, “creativity”, “educational context” and “library”. The connection to health issues is also present in the keywords such as “health” and “COVID-19”. In addition, words that describe life circumstances and quality of life, such as “life goals”, “life satisfaction” and “quality of life”, appear in the context of subjective well-being, but also in connection with certain aspects of self-help and bibliotherapy. Although each area has its own specificities, these similarities point to overlapping interests and highlight the complexity of approaches to the study of individuals and their well-being, potentially creating space for an integrated approach to research on these topics. All three areas of research share a common interest in improving human well-being. Self-help focuses on individual development, bibliotherapy uses a library resource approach, while subjective well-being relates to different aspects of life. The similarities stem from recognizing the importance of creativity,

cionalnog izraza te poticanja osobnog rasta i dobrobiti.<sup>3</sup>

## ZAKLJUČAK

Zaključak ovog rada naglašava zastupljenost tema samopomoći, biblioterapije i subjektivne dobrobiti u znanstvenim i stručnim časopisima Republike Hrvatske dostupnim u otvorenom pristupu. Ispitivanje je ukazalo na manju zastupljenost teme samopomoći u usporedbi s biblioterapijom i subjektivnom dobrobiti, što ukazuje na potrebu za povećanom pažnjom prema ovom području ili potencijalnim rastućim interesom. Biblioterapija se ističe kao značajno prisutna tema, posebice u stručnim radovima, s povećanim interesom u razdoblju nakon 2018. godine.

Značajan porast interesa za temu subjektivne dobrobiti primjećuje se nakon 2015. godine, a posebno intenziviran nakon pandemije COVID-19, i to 2021. i 2022. godine. S obzirom na brojnost radova, čini se da je ova tema od iznimne važnosti za istraživačku zajednicu, naglašavajući potrebu za proučavanjem faktora koji utječu na dobrobit pojedinaca. Ključne riječi u sažecima radova otkrivaju sličnosti među istraživanjima u sva tri područja, uključujući fokus na emocionalnim i psihološkim aspektima, društvenim i kulturnim kontekstima te povezanost s pitanjima zdravlja.

Ovim se radom namjeravala istaknuti važnost brige o mentalnom zdravlju i utjecaju na kvalitetu života. Knjige za samopomoć nastale u okviru fenomena samopomoći postaju sve više prisutne na tržištu prodaje knjiga (14). Njihova uloga bi s vremenom mogla naći sve jasnije mjesto u okviru brige o mentalnom zdravlju bi-

<sup>3</sup> Analiza ključnih riječi nije bila glavni fokus ovoga rada, već se navodi kao dodatna ilustracija osnovnih teza i ciljeva rada, pa sukladno tomu ovdje nisu navedeni brožani podaci o učestalosti pojavljivanja ključnih riječi u odabranim radovima.

emotional expression, and fostering personal growth and well-being.<sup>3</sup>

## CONCLUSION

The conclusion of this paper emphasizes the presence of the topics of self-help, bibliotherapy and subjective well-being in scientific and professional journals of the Republic of Croatia available in open access. The analysis indicated a lower prevalence of the topic of self-help compared to bibliotherapy and subjective well-being, suggesting a need for increased attention to this area or a potential growing interest. Bibliotherapy stands out as a significantly present topic, especially in professional papers, with increased interest in the period after 2018.

A significant increase in interest in the subject of subjective well-being is observed after 2015, and was especially intensified after the COVID-19 pandemic, namely in 2021 and 2022. Considering the number of papers, it seems that this topic is of exceptional importance for the research community, emphasizing the need to study the factors that influence the well-being of individuals. Keywords in the abstracts reveal similarities between research in all three areas, including a focus on emotional and psychological aspects, social and cultural contexts, and connections to health issues.

The aim of this paper was to highlight the importance of mental health care and its impact on the quality of life. Self-help books created within the framework of the self-help phenomenon are becoming increasingly present in the book sales market (14). Over time, their role could grow in importance within the framework of mental health care through bibliotherapy which uses the reading of fictional and non-fictional works for the purpose of treating mental disorders on the

<sup>3</sup> The analysis of keywords was not the main focus of this paper, but is presented as an additional illustration of the basic theses and objectives of the paper, so accordingly, numerical data on the frequency of occurrence of keywords in the selected papers are not provided here.

blioterapijom koja koristi čitanje fikcionalnih i nefikcionalnih djela u svrhu liječenja psihičkih smetnji s jedne, te obogaćivanje kvalitete života s druge strane, što sve zajedno utječe na percepciju subjektivne dobrobiti.

Sličnosti u istraživačkim naglascima upućuju na mogućnost integriranog pristupa proučavanju ovih tema. Konačno, istraživanje ukazuje na važnost kontinuiranog promicanja znanstvenih istraživanja koja doprinose razvoju strategija za poboljšanje mentalnog zdravlja i dobrobiti pojedinaca u hrvatskom društvu, osobito uzimajući u obzir otvoreni pristup znanstvenim i stručnim radovima kao ključni element širenja znanja i dostupnosti informacija relevantnih za širu javnost. Otvoreni pristup i građanska znanost mogli bi poslužiti kao dobrodošli alati u daljnjoj popularizaciji znanstvenih spoznaja o mentalnom zdravlju. U tom kontekstu je daljnja svrha ovoga rada upravo širenje svjesnosti o važnosti samopomoći i biblioterapije u postizanju subjektivne dobrobiti što dovodi u konačnici do očuvanja mentalnog zdravlja kako pojedinaca tako i šireg društva.

## ZAHVALA

Zahvaljujemo studentima Informacijskih i komunikacijskih znanosti pri Filozofskom fakultetu Sveučilišta u Zagrebu, polaznicima kolegija Digitalna knjižnica 2 koji su u akademskoj godini 2022/2023 sudjelovali u aktivnosti građanske znanosti „Samopomoć i dobrobit u akademskom mrežnom okruženju“ i svojim radom prikupili podatke potrebne za provedbu ovog istraživanja. Zahvaljujemo i izv. prof. dr. sc. Tomislavu Ivanjku koji je podržao provedbu istraživanja i osigurao za to potrebne prostor i alate.

one hand, and enriching the quality of life on the other hand, which altogether effects the perception of subjective well-being.

Similarities in research emphasis suggest the possibility of an integrated approach to the study of these topics. Finally, the research points to the importance of continuous promotion of scientific research that contributes to the development of strategies for improving the mental health and well-being of individuals in the Croatian society, especially taking into account open access to scientific and professional papers as a key element in the dissemination of knowledge and the availability of information relevant to the general public. Open access and citizen science could serve as welcome tools in the further popularization of scientific knowledge on mental health. In this context, the further purpose of this paper is to spread awareness about the importance of self-help and bibliotherapy in achieving subjective well-being, which ultimately leads to the preservation of mental health of both individuals and the wider society.

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# **Analiza posterske aktivnosti do kraja 2006. godine u svrhu sagledavanja stručno-znanstvene aktivnosti u Psihijatrijskoj bolnici Vrapče**

## ***/ An Analysis of Poster Activities Until the End of 2006 for the Purpose of Reviewing the Professional-Scientific Activities at the Psychiatric Hospital Vrapče***

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Cilj ovog rada bio je analizirati stručno-znanstvenu aktivnost u Psihijatrijskoj bolnici Vrapče prema posterskoj produkciji od osnutka Bolnice do 2006. godine. Analizirani su podatci vezani uz postere prikazane na različitim znanstvenim i stručnim skupovima, od prvog pronađenog postera iz 1978. do zaključno završetka 2006. godine. Posteru su podijeljeni u dvije skupine: posteru prikazani na skupovima do završetka 1996. godine i posteru od 1997. do završetka 2006. godine. Razdoblja su formirana tako da obuhvaćaju po 10 godina. Knjiga postera pokazuje kako stručnjaci Bolnice Vrapče, vrlo često i u suradnji s kolegama izvan Bolnice, stručno i znanstveno promišljaju o praktički svim područjima psihijatrije. Putem postera autori su svoja istraživanja i stručna zapažanja komunicirali s kolegama na vizualni način te tako omogućili svakom zainteresiranom pojedincu koncentraciju na zanimljive teme. Vidljivo je da je vremenom rastao broj izlaganja putem postera što se pripisuje povećanom interesu za ovaj način stručne i znanstvene komunikacije, širenju Bolnice, povećanju broja zaposlenika različitih struka, te većim mogućnostima za izlaganje na domaćim i međunarodnim skupovima.

*/ The aim of this paper was to analyze the professional-scientific activities at the Psychiatric Hospital Vrapče according to the poster production since the foundation of the Hospital until the year 2006. Data relating to the posters displayed at various scientific and professional conferences were analyzed, from the first discovered poster dating back to 1978 until the end of 2006. The posters were divided into two groups: posters displayed at conferences until the end of 1996 and posters from 1997 until the end of 2006. The periods were formed so as to cover a time span of 10 years. The Book of Posters depicts how professionals from the Vrapče Hospital, often in cooperation with their colleagues outside of the Hospital, view practically all areas of psychiatry in a professional and scientific manner. The authors used the posters to communicate their research findings and professional observations to their colleagues in a visual manner, thus enabling any interested individual to concentrate on topics of interest. It is evident that the number of poster presentations grew over time, which can be attributed to the increased interest in this form of professional and scientific communication, expansion of the Hospital, an increase in the number of its employees of different professions, and greater opportunities for presentation at domestic and international conferences.*

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## KOMUNIKACIJA PISANJEM

Međusobna komunikacija najvažnija je ljudska osobina koja nas razlikuje od ostalih bića.

Komunikacija je možda najvažnija i najteža aktivnost kojom se čovjek može baviti. To je osjetljiva membrana kroz koju ljudi mogu dijeliti misli, ideje, osjećaje, snove i razočaranja.

Komunikacija je ključna komponenta u međusobnom djelovanju (1). Dobru komunikaciju ostvarujemo razvijanjem temeljnih komunikacijskih vještina. O vještini prenošenja vlastitih ideja i osjećaja drugima ovisi hoće li nas oni razumjeti na točan način, dok nam vještine slušanja i promatranja drugih omogućuju razumijevanje njihovih poruka (2).

Pisanje teksta je akt komunikacije te društveni događaj između autora i publike za koju je tekst namijenjen. Zbog toga svaki autor bilo koje vrste i oblika teksta treba unaprijed razmisliti o karakteristikama publike za koju tekst piše, odnosno o njenim očekivanjima u svezi s tekstom (3).

## ŠTO JE PISANJE?

Pisanje teksta je vrlo kompleksna i kognitivno zahtjevna aktivnost. To je dinamički sklop kognitivnih procesa više i niže razine koji se često odvijaju istodobno. Ne izvodi se u koracima,

## WRITTEN COMMUNICATION

Mutual communication is the most important human trait that distinguishes us from other beings. Communication might be the most important and the most difficult activity humans can engage in. It is a sensitive membrane through which people can share thoughts, ideas, feelings, dreams and disappointments. Communication is the key component of interaction (1). Good communication is achieved through the development of fundamental communication skills. Our ability to communicate our ideas and feelings to others dictates whether they will understand us correctly, while the abilities to listen and observe others enable us to understand their messages (2). Writing a text is an act of communication and a social event which occurs between the author and the audience for which the text is intended. For this reason, any author of any type and form of text should think in advance about the characteristics of the audience for which the text is being written, that is, about their expectations in relation to the text (3).

## WHAT IS WRITING?

Writing a text is a very complex and cognitively demanding activity. It is a dynamic set of higher and lower level cognitive processes which often occur simultaneously. It is not performed in steps, but rather requires a simultaneous combination and coordination of writing strategies and techniques, i.e. the activation, selection and

već zahtijeva simultanu kombinaciju i koordinaciju strategija i tehnika pisanja, odnosno aktivaciju, odabir i primjenu različitih kognitivnih procesa. Autor/i teksta treba/ju jasno odrediti prirodu, cilj i komunikacijsku funkciju teksta. Pisanje je obrnuti proces od čitanja, ali je od čitanja složeniji (4).

Znanje zašto se tekst piše i poznavanje potencijalne publike teksta znatno utječu na procese pisanja te u konačnici na ukupnu kvalitetu napisanog teksta (5). Autor bi trebao dobro poznavati temu o kojoj piše te bi trebao znati uopćiti važne ideje (teze) koje tekstom želi izraziti (6).

Kvalitetno pisanje teksta znači učinkovito korištenje glavnih ili primarnih strategija pisanja, sekundarnih strategija pisanja i tehnika pisanja (7). Ključne ili primarne strategije za kvalitetu pisanih uradaka jesu: planiranje (određenje teme, publike i svrhe pisanja), skiciranje ili pravljenje nacрта te ispravljanje teksta. Ovdje se još ubrajaju: razvoj ključne ili glavne ideje (teze), ton teksta (koji se usaglašava s temom i publikom), analiza, argumentacija, uzrok i posljedica, klasifikacija, usporedba i kontrast, definicija, opis, davanje primjera, pripovijedanje, proces. U sekundarne strategije pisanja (koje se rjeđe koriste) ubrajaju se: anticipiranje kritike, postavljanje pitanja, dijagrami i slike, figurativni jezik, povijesni podatci, humor, hiperbola, vlastito iskustvo, pisanje u navodnicima, reference autora, ponavljanje, retoričko pitanje, statistika. Razvoj kompetentnosti u pisanju kao stvaranju teksta se zasniva, prema tome, na razvoju i povezivanju konceptualnog i proceduralnog znanja (8).

Kao i kod ostalih sposobnosti i vještina, tako i kod pisanja postoje strategije dobrog pisanja koje nam mogu pomoći kako bismo što bolje savladali ovaj, prema istraživanjima, jedan od najtežih kognitivnih procesa (4).

Potreba za pisanjem javlja se od rane predškolske dobi, prisutna je tijekom osnovne i srednje

application of different cognitive processes. The author/s of a text must clearly define the nature, aim and communicational function of the text. Writing is a process opposite from reading, but it is also more complex than reading (4).

Knowing the reason why a text is being written and who the potential audience of the text is has a significant impact on the writing processes, and finally, on the overall quality of the written text (5). The author should have a good knowledge of the topic discussed, and should know how to present the important ideas (theses) that they want to convey through the text (6).

Good quality text writing requires an efficient use of the main or primary writing strategies, secondary writing strategies and writing techniques (7). The key or primary strategies for writing quality papers are the following: planning (defining the topic, audience and purpose of writing), sketching or drafting, and correcting the text. The aforementioned also includes: the development of the key or main idea (thesis), the tone of the text (consistent with the topic and the audience), analysis, argumentation, cause and consequence, classification, comparison and contrast, definition, description, provision of examples, narration, process. Secondary writing strategies (used less frequently) include the following: anticipating criticism, asking questions, provision of diagrams and images, figurative language, historical data, humor, hyperbole, own experience, writing in quotation marks, author references, repetition, rhetorical question, statistics. The development of competence in writing for the purpose of text creation is, therefore, based on the development and connection of conceptual and procedural knowledge (8).

As in other abilities and skills, when it comes to writing, good writing strategies exist that may help us master this process, which according to research, is one of the most difficult cognitive processes (4).

The need for writing develops in early preschool age, it is present throughout the primary and secondary schooling, higher education, and in fact, remains present throughout one's life if it is required by the individual's occupation, professional training purposes, self-education, their hobbies or en-

škole, visokog obrazovanja te se zapravo zadržava cijeloga života ako to zahtijeva radno mjesto, potreba za usavršavanjem i samoobrazovanjem, hobi ili zabava. Postignuće u pisanju iznimno je važno, kako tijekom obrazovanja, tako i kasnije u profesionalnom i društvenom angažmanu. Pisanje, kao visok stupanj apstrakcije, ne slijedi govorenje u cijelosti i ono zahtijeva kontekstualizaciju. Kada govorimo o procesu pisanja zapravo govorimo o većem broju strategija koje su potrebne da bi svladali taj proces. Te se strategije odnose na razumijevanje, učenje i uvježbavanje u nizu faza procesa pisanja (9-11).

## POSTERI U KOMUNIKACIJI PISANJA

Polazeći od stare izreke da “više govori jedna slika nego tisuću riječi”, plakat odnosno poster, raobljen je još u antičko doba (Egipat, Grčka, Rim) u oglašivačke svrhe. Prema Bratoljubu Klaiću riječ plakat (hol. *placken* - lijepiti) označuje veliki oglas, izvješten na sveopće čitanje; objavu; proglas; afiš (od franc. *affiche*), odnosno štampani kazališni program, a riječ plakaturati objašnjava se riječima objaviti plakatima, afiširati. S druge strane, riječ poster (engl.) znači oglas, plakat, a prema Wikipediji, slobodnoj enciklopediji, dolazi od imenice post (poštanska postaja), jer je u davno doba to bilo mjesto gdje su se oglasi najčešće stavljali jer se radilo o vrlo prometnom mjestu (12). Prije svega bitno je napomenuti kako se u literaturi često poistovjećuju pojmovi poster i plakat, no oni u hrvatskom jeziku nemaju isto značenje. „Poster je prezentacija (predstavljanje) stručnog rada, nastavne cjeline ili jedinice, projekta, radionice i sl. na „posterni“ način“ (13). On je „grafički prikaz određenog rada (14). Dakle poster nam služi za prenošenje većeg broja informacija o nekoj temi ili predmetu uz pomoć grafičkih efekata, slika, fotografija, teksta i sl. Pri izradi postera potrebno je paziti na iste elemente kao i kod plakata, ali je količina teksta veća jer je na-

tainment. Writing achievements are of utmost importance, both during education and later in the professional and social engagements. Writing, as a high level of abstraction, does not entirely follow speech and it requires contextualization. In terms of the writing process, we are actually referring to a higher number of strategies that are necessary in order to master this process. These strategies refer to understanding, learning and training throughout a series of phases in the writing process (9-11).

## POSTERS IN WRITTEN COMMUNICATION

As referenced in the old saying “a picture is worth a thousand words”, posters have been used for advertising purposes since the antiquity (Egypt, Greece, Rome). According to Bratoljub Klaić, the Croatian word *plakat* (hol. *placken* - to glue; Eng. “placard”) denotes a big advertisement presented for the general public to read; an announcement; proclamation; in French *affiche*, i.e. a printed theater playbill, while the word *plakaturati* is explained as publishing via placards, *to affiche*. On the other hand, the English word “poster” denotes an advertisement, placard, and according to Wikipedia, the free encyclopedia, it is derived from the noun “post” (i.e. postal station) due to the fact that in the past this was the place where all the advertisements were published because it was a very busy location (12). In particular, it should be noted that in literature the Croatian terms *poster* and *plakat* are often used as synonyms, but they do not have the same meaning. “A poster is a presentation (demonstration) of a professional work, teaching unit or component, a project, workshop etc. in a ‘poster’ manner” (13). It is a “graphic representation of a specific work” (14). Therefore, a poster serves the purpose of conveying a larger amount of information about a certain topic or subject with the use of graphic effects, images, photographs, text etc. When creating a poster, attention should be paid to the same elements as in a placard, but it contains more text and the emphasis is on the text itself since it is the primary means of conveying information (14). A poster presentation can also

glasak na samom tekstu budući da se pomoću njega u prvom redu prenose informacije (14). U postersku prezentaciju moguće je uključiti veći broj aktivnih sudionika na određenom skupu, poglavito mladih stručnjaka, veća je interaktivnost, kolege se mogu lakše i neformalnije upoznavati s autoritetima iz struke. Nadalje, posterske prezentacije omogućuju bolji i lakši uvid u cjelokupno područje kojim se netko bavi, jer s obzirom na to da su postereri najčešće prikazani po temama, svakom zainteresiranom pojedincu moguće je relativno lako i brzo dobiti recentni pregled područja kojim se bavi ili se želi baviti. Također, u današnje doba, kada je vremena uvijek premalo, važna je i činjenica da su postereri izloženi tijekom dužeg vremena, što omogućuje svima da ih pogledaju kada im to najviše odgovara, za razliku od predavanja koja imaju svoju određenu satnicu (12).

Sagledavajući dosadašnju stručno-znanstvenu aktivnost stručnjaka Psihijatrijske bolnice Vrapče, urednici Knjige postera su zaključili da ovaj značajan segment aktivnosti nije nigdje sustavno zabilježen. Kada su počeli sakupljati i analizirati posterere, koje su 83 stručnjaka Psihijatrijske bolnice Vrapče, zajedno s brojnim suradnicima (186), od osnutka bolnice Vrapče prikazali po svijetu, bili su ugodno iznenađeni brojem pronađenih postera (244) i brojem raznorodnih skupova (112) na kojima su bili prezentirani.

Tragajući za najstarijim posterom, došli su do 1978. godine i do postera prof. dr. sc. Vere Dürriegl i sur., koji je bio prikazan u Rumunjskoj. Neupitan stručnjak iz Bolnice Vrapče, rekorder po broju postera, a koje je izradila u suradnji s brojnim suradnicima, jest prof. dr. sc. Vera Folnegović-Šmalc. Svi postereri uvršteni u Knjigu postera imaju jednu poveznicu, a to je da je barem jedan od autora, u vrijeme nastanka toga postera, bio zaposlenik Psihijatrijske bolnice Vrapče. Osim psihijatara autori/koautori tiskanih postera su brojni stručnjaci različitih profila, kao što su neuroznanstveni-

include a larger number of active participants at a certain conference, mainly young experts, it is more interactive, and it enables the colleagues to become better and less formally acquainted with the authorities from their profession. Furthermore, poster presentations enable a better and easier insight into the overall area of one's expertise, considering that posters are usually presented according to topics, and any interested individual can relatively easily and quickly obtain a recent overview of the field they are engaged in or which they wish to engage in. Moreover, in this day and age, when there is never enough time, the fact that posters are displayed over a longer period is also important because it enables everyone to view them at their most convenient time, as opposed to lectures that have their own set hours (12).

Upon reviewing the previous professional and scientific activities of the experts working at the Psychiatric Hospital Vrapče, the editors of the Book of Posters reached the conclusion that this significant segment of activity had not been systematically recorded. When they started collecting and analyzing the posters which a total of 83 experts working at the Psychiatric Hospital Vrapče and their associates (186) had presented around the world since the foundation of the Hospital, they were pleasantly surprised by the number of posters found (244), as well as the number of diverse conferences (112) at which they were presented. In their search for the oldest poster, they reached the year 1978 and the poster prepared by prof. Vera Dürriegl, MD, PhD, and her associates, which was presented in Romania. The undisputed expert at the Vrapče Hospital and the record holder in terms of posters created in cooperation with numerous associates is prof. Vera Folnegović-Šmalc, MD, PhD. All posters incorporated into the Book of Posters have one thing in common, the fact that least one of the authors, at the time when the subject poster was created, was an employee of the University Psychiatric Hospital Vrapče. In addition to psychiatrists, numerous other experts of different profiles created/co-created printed posters, which includes neuroscientists, psychologists, neurologists, defectologists, internists,

ci, psiholozi, neurolozi, defektolozi, internisti, liječnici opće medicine, socijalni radnici, biokemičari, molekularni biolozi, medicinske sestre i tehničari, radni terapeuti i brojni drugi (12).

Sama Bolnica davala je i daje potporu svojim stručnjacima u pisanju, priređivanju i izdavanju knjiga. Knjige afirmiraju Bolnicu, a Bolnica afirmira knjige i njihove autore. Da nije bilo potpore Bolnice pisanju i izdavanju ovih knjiga, uvjereni smo da bi mnogi važni podatci o Bolnici Vrapče, kao i mnoga promišljanja njezinih stručnjaka, bili zaboravljeni.

## CILJ

Cilj ovoga rada bio je analizirati stručno-znanstvenu aktivnost djelatnika Psihijatrijske bolnice Vrapče kroz njihovu postersku produkciju od osnutka Bolnice do 2006. godine.

## METODA

U radu su analizirani podatci vezani uz postere prikazane na različitim znanstvenim i stručnim skupovima, od prvog pronađenog postera iz 1978. godine do zaključno kraja 2006. godine. Posteru su podijeljeni u dvije skupine: oni prikazani na skupovima do kraja 1996. godine i od 1997. do kraja 2006. godine. Razdoblja su formirana tako da obuhvaćaju po 10 godina. Kako su prije 1986. godine evidentirana samo dva postera (jedan 1985. i jedan 1978. godine), priključeni su u razdoblje do 1996. godine.

## REZULTATI

### Zastupljenost postera po temama i kategorijama

Tematike kojima su se bavili posteru prikazani su u tablici 1. U prvom promatranom razdoblju evidentirano je samo 45 postera za razliku od

general practitioners, social workers, biochemists, molecular biologists, nurses and technicians, occupational therapists and many others (12).

The Hospital itself has supported and continues to support its experts in the process of writing, editing and publishing of books. The books promote the Hospital, and the Hospital promotes the books and their authors. Had the Hospital not supported the writing and publishing of these books, we are certain that a lot of important information about the Psychiatric Hospital Vrapče, as well as numerous other reflections of its experts, would have been forgotten.

## AIM

The aim of this paper was to analyze the professional-scientific activities of the employees of the Psychiatric Hospital Vrapče through their poster production since the establishment of the Hospital until the year 2006.

## METHOD

Data relating to the posters displayed at various scientific and professional conferences were analyzed in this paper, starting from the first poster discovered, which dates back to 1978, until the end of 2006. The posters were divided into two groups: posters displayed at conferences until the end of 1996, and posters from 1997 until the end of 2006. The periods were formed so as to cover a time span of 10 years. Since only two posters were created before 1986 (one in 1985 and the other in 1978), they were included in the period up until 1996.

## RESULTS

### Poster representation according to topics and categories

The topics addressed in the posters are presented in Table 1. Only 45 posters were recorded in the first period observed, as opposed to the second



**TABLICA 1.** Tematika postera**TABLE 1.** Poster topics

Tema postera / Poster topic	do 1996. god. / until 1996		1997. - 2006. god. / 1997 - 2006	
	N	%	N	%
Shizofrenija / Schizophrenia	13	29	25	13
Afektivni poremećaji / Affective disorders	2	4	4	2
PTSP / PTSD	7	16	12	6
Demencije / Dementias	1	2	22	11
Ovisnosti / Addictions	0	0	11	6
Psihofarmaci / Psychopharmaceuticals	11	24	64	32
Forenzika / Forensics	0	0	19	10
Neuropsihofiziologija / Neuropsychophysiology	8	18	10	5
Ostalo / Other	3	7	32	16
Ukupno / Total	45	100	199	100

drugog razdoblja u kojem ih je sakupljeno 199. Posteru u razdoblju do 1996. godine bavili su se različitim temama, no pretežno temama koje se odnose na shizofreniju (29 %) i psihofarmake (24 %). U razdoblju od 1997. do 2006. godine najviše postera bilo je iz područja psihofarmaka (32 %).

U tablici 2. prikazana je analiza postera prema kategoriji rada (pregledni, znanstveni, prikaz bolesnika). Vidljivo je da je u razdoblju od 1997. do 2006. godine u odnosu na ranije razdoblje porastao broj preglednih radova prikazanih na posteru te broj postera koji su bili prikaz bolesnika, dok se smanjio broj postera koji su prikazivali znanstveni rad ( $hi^2 = 8,058$ ;  $p = ,018$ ).

period which contains a total of 199 posters. The posters from the period until 1996 addressed various topics, but they mostly referred to schizophrenia (29%) and psychopharmaceuticals (24%). In the period from 1997 to 2006, most of the posters addressed the topic of psychopharmaceuticals (32%).

An analysis of the posters according to the category of the associated papers (review, scientific, case reports) is presented in Table 2. It can be observed that, as opposed to the earlier period, the period from 1997 to 2006 had an increased number of review papers presented on posters, as well as posters presenting case reports, while the number of posters addressing scientific papers was lower ( $hi^2 = 8.058$ ;  $p = .018$ ).

**TABLICA 2.** Analiza postera za razdoblje do 1996. godine (N= 45) i za razdoblje od 1997. do 2006. godine (N= 199) prema kategoriji rada**TABLE 2.** Poster analysis for the period until 1996 (N=45) and the period from 1997 to 2006 (N=199) according to the paper categories

	do 1996. / until 1996	1997. - 2006. / 1997 - 2006
	%	%
Pregledni rad / Review paper	11,1	27,1
Znanstveni rad / Scientific paper	84,4	62,3
Prikaz bolesnika / Case report	4,5	10,6

## Broj i spol autora postera

U razdoblju do 1996. godine najčešći broj autora po pojedinom posteru bio je pet autora, odnosno takvih je bilo 22 % postera. U razdoblju od 1997. do 2006. godine također je najčešći broj autora bio pet (20 % postera).

Prosječan broj autora zaposlenika Bolnice Vrapče u razdoblju do 1996. godine iznosio je dva autora po posteru (2,49 +- 3,12), dok je u narednom razdoblju od 1997. do 2006. prosječan broj autora zaposlenika Bolnice Vrapče bio tri autora (3,12 +- 1,62), što je statistički značajno povećanje ( $t = -2,45$ ;  $p = 0,015$ ). Broj autora koji nisu zaposlenici Vrapča bio je u oba razdoblja podjednak po posteru (za razdoblje do 1996. godine  $M = 1,78$ ;  $SD = 2,46$ ; za razdoblje od 1997. - 2006.  $M = 1,45$ ;  $SD = 2,29$ ;  $t = 0,85$ ;  $p < ,05$ ). Postotak autora zaposlenika Bolnice Vrapče bio je podjednak u oba razdoblja, odnosno 68 % u prvom i 75 % u drugom razdoblju ( $t = -1,45$ ;  $p < ,05$ ).

Broj autorica po posteru kretao se u prvom razdoblju od 0 do 6 ( $M = 1,91$ ;  $SD = 1,362$ ), a u drugom razdoblju od 0 do 13 ( $M = 2,52$ ;  $SD = 1,69$ ). Razlika između dva razdoblja po učestalosti autorica odnosno autora je značajna ( $hi^2 = 6,80$ ;  $p < ,05$ ). U oba razdoblja na poziciji prvog autora bilo je više žena, odnosno 60 % u prvom razdoblju te 65 % u drugom razdoblju ( $hi^2 = 0,454$ ;  $p < ,05$ ).

## Profil stručnjaka autora postera

U tablici 3. prikazani su profili autora postera u odnosu na njihovu struku. Po pojedinom posteru najčešće su sudjelovala dva specijalista zaposlenika Bolnice Vrapče, odnosno jedan specijalist psihijatrije. Razlike između dva razdoblja vidljive su po broju neuropsihijatarata kojih je kao autora postera bilo značajno više u prvom nego u drugom razdoblju, budući da

## The number and gender of poster authors

In the period before 1996, most of the posters had five authors, i.e. 22% of posters were of this type. In the period from 1997 to 2006, most of the posters had five authors as well (20% posters).

In the period until 1996, the average number of authors who were employees of the Vrapče Hospital was two authors per poster (2.49 +- 3.12), while in the following period, from 1997 to 2006, the average number of authors employed at the Vrapče Hospital was three authors (3.12 +- 1.62), which is a statistically significant increase ( $t = -2.45$ ;  $p = 0.015$ ). The number of authors per poster who were not employed at the Vrapče Hospital was similar in both periods (for the period before 1996  $M = 1.78$ ;  $SD = 2.46$ ; for the period from 1997 to 2006  $M = 1.45$ ;  $SD = 2.29$ ;  $t = 0.85$ ;  $p < .05$ ). The percentage of authors who were employed at the Vrapče Hospital was similar in both periods, i.e. it amounted to 68% in the first, and 75% in the second period ( $t = -1.45$ ;  $p < .05$ ).

The number of female authors per poster was between 0 and 6 ( $M = 1.91$ ;  $SD = 1.362$ ) in the first period, while in the second period it amounted to between 0 and 13 ( $M = 2.52$ ;  $SD = 1.69$ ). There is a significant difference between these two periods in terms of the frequency of female or male authors ( $hi^2 = 6.80$ ;  $p < .05$ ). In both periods, more women were listed as the first author, i.e. 60% in the first period and 65% in the second period ( $hi^2 = 0.454$ ;  $p < .05$ ).

## Profiles of experts who were poster authors

The profiles of poster authors with regard to their profession are presented in Table 3. In most cases, two specialists employed at the Vrapče Hospital, that is, one specialist psychiatrist, participated in the making of a specific poster. Differences between the two periods are also evident in the number of neuropsychiatrists, whose participation as poster authors was by far greater in the first period than in the second, primarily due to

**TABLICA 3.** Profil stručnjaka autora postera za razdoblje do 1996. godine (N = 45) i za razdoblje od 1997. do 2006. godine (N = 199)  
**TABLE 3.** Profiles of experts who were poster authors for the period until 1996 (N=45) and the period from 1997 to 2006 (N=199)

Struka autora postera / Profession of poster author	Razdoblje / Period		t test
	do 1996. / until 1996	1997. - 2006. / 1997 to 2006	
	M (SD)	M (SD)	
Specijalist psihijatar / Specialist psychiatrist	1,71 (1,22)	1,99 (1,28)	-1,33
Neuropsihijatar / Neuropsychiatrist	1,00 (0,67)	0,54 (0,55)	4,29***
Neurolog / Neurologist	0,36 (2,09)	0,13 (0,48)	0,72
Ostali liječnici specijalisti / Other specialist doctors	0,53 (0,94)	0,41 (0,93)	0,79
Vrapčanski specijalisti / Specialists from Vrapče Hospital	2,42 (1,22)	2,39 (1,40)	0,20
ne-Vrapčanskih specijalisti / Specialists not from Vrapče Hospital	0,98 (2,33)	0,36 (0,87)	1,76
Specijalizanti psihijatrije / Psychiatry residents	-	0,77 (1,39)	-7,83***
Vrapčanski specijalizanti / Residents from Vrapče Hospital	-	0,53 (0,78)	-9,50***
ne-Vrapčanski specijalizanti / Residents not from Vrapče Hospital	-	0,25 (1,14)	-3,06**
Druge ne-liječničke struke / Other non-medical professions	0,56 (0,62)	0,71 (1,21)	-1,21

\*\*\*  $p < ,001$  \*\*  $p < ,01$

se specijalizacija iz neuropsihijatrije ukinula, odnosno razdvojila na specijalizaciju iz psihijatrije i specijalizaciju iz neurologije. Nadalje, u razdoblju do 1997. godine u Vrapču nije bilo specijalizanata koji bi dolazili u Vrapče na specijalizaciju iz psihijatrije jer u to doba ustanova nije bila za to ovlaštena, te je vidljiva i razlika u broju autora koji su specijalizanti iz psihijatrije na specijalizaciji u Vrapču, bilo da se radi o specijalizantima kojima je matična ustanova Vrapče ili neka druga ustanova. U svakom slučaju, rezultati pokazuju da se kao autori postera pojavljuju ne samo specijalisti psihijatrije, već i specijalizanti psihijatrije, a u posterima često sudjeluju i druge liječničke i ne-liječničke struke.

### Suradnja autora zaposlenika Bolnice Vrapče s drugim ustanovama i stranim autorima

U tablici 4. prikazani su autori postera u odnosu na ustanovu iz koje dolaze. U oba razdoblja najviše je postera izrađeno od autora koji su svi bili djelatnici Vrapča, ili u suradnji sa jednom

the fact that specialization in neuropsychiatry was canceled, i.e. it was separated into the specialization in psychiatry and specialization in neurology. Furthermore, there were no residents arriving to Vrapče Hospital to do their residency in psychiatry there in the period until 1997, due to the fact that the institution was not authorized for such activities at the time, and there is a noticeable difference in the number of authors who were residents in psychiatry doing their residency at the Vrapče Hospital, whether these were residents with their home institution being at Vrapče or another institution. In any case, the results indicate that not only psychiatry specialists appear as authors of the posters, they could also be psychiatry residents, as well as experts from other medical or non-medical professions who would often take part in the creation of the posters.

### Cooperation of authors employed at the Vrapče Hospital with other institutions and foreign authors

The authors of posters with regard to the institution of their employment are presented in Table 4. In both periods, the majority of posters were created by authors who were all employees of the

**TABLICA 4.** Suradnja stručnjaka Vrapča sa stručnjacima drugih ustanova na posterima za razdoblje do 1996. godine (N = 45) i za razdoblje od 1997. do 2006. godine (N = 199)

**TABLE 4.** Cooperation of Vrapče experts with experts from other institutions with the purpose of poster creation for the period until 1996 (N=45) and the period from 1997 to 2006 (N=199)

Ustanove zaposlenja autora / Institutions employing the authors	do 1996. / until 1996	1997. - 2006. / 1997 to 2006
	%	%
Svi autori iz Vrapča / All authors were employed at the Vrapče Hospital	28,9	45,2
Suautori iz 2 ustanove / Co-authors from two institutions	42,2	32,2
Suautori iz 3 ustanove / Co-authors from three institutions	11,2	14,2
Suautori iz 4 i više ustanova / Co-authors from four or more institutions	17,8	8,5

vanjskom ustanovom. Analiza rezultata pokazala je da postoje statistički značajne razlike za dva ispitana razdoblja po broju suautora iz drugih ustanova ( $hi^2 = 7,41$ ;  $p < ,05$ ).

## Vrsta skupova, jezik postera i nagrađivanost postera

U daljnjoj obradi analizirali smo vrste skupova na kojima su poster prikazani po kategorijama (nacionalni, nacionalni s međunarodnim sudjelovanjem ili međunarodni), prema profilu skupa (psihijatrijski, neurološki, farmakološki, nemedicinski, molekularno-biološki, biokemijski, psihološki, internistički), nagrađivanosti postera i jeziku na kojem je poster prikazan.

U tablici 5. prikazani su poster prema izloženosti na domaćim odnosno internacionalnim skupovima. Vidljivo je da je s tijekom vremena statistički značajno porastao udio postera izloženih na domaćim skupovima te na domaćim

Vrapče Hospital, or employees who cooperated with one external institution. An analysis of the results has shown that there are statistically significant differences between the two examined periods in terms of the number of co-authors from other institutions ( $hi^2 = 7.41$ ;  $p < .05$ ).

## Types of conferences, poster languages and rewards

In a further analysis, we examined the types of conferences where the posters were displayed according to categories (national, national with international participation or international), the conference profile (psychiatric, neurological, pharmacological, non-medical, molecular biological, biochemical, psychological, internist), the awards that the posters have won and the language in which they were displayed.

Posters according to their presentation at domestic i.e. international conferences are presented in Table 5. It can be observed that over time there was a statistically significant increase in the share

**TABLICA 5.** Vrsta skupa prema kategorijama na kojima su prikazani poster za razdoblje do 1996. godine (N = 45) i za razdoblje od 1997. do 2006. godine (N = 199)

**TABLE 5.** Types of conferences where posters were displayed according to category for the period until 1996 (N=45) and the period from 1997 to 2006 (N=199)

Vrsta skupa / Conference type	do 1996. / until 1996	1997. - 2006. / 1997 to 2006
	%	%
Nacionalni / National	8,9	33,7
S međunarodnim sudjelovanjem / With international participation	15,6	30,7
Međunarodni / International	75,6	35,7

skupovima s međunarodnim sudjelovanjem ( $hi^2 = 24,308$  ;  $p < ,000$ ).

U tablici 6. prikazana je analiza postera prema vrsti kongresa u odnosu na struku kojoj skup pripada. Vidljivo je da je najveći broj postera u oba razdoblja prikazan na psihijatrijskim kongresima (60 % svih postera u prvom razdoblju te oko 65 % postera u drugom razdoblju) te farmakološkim kongresima (8,9 % svih postera u prvom razdoblju te 14,1 % postera u drugom razdoblju). Između dva razdoblja nađena je značajna razlika ( $hi^2 = 17,640$  ;  $p = 0,024$ ) koja se inspekcijom tablice može pripisati smanjenju postera na neurološkim kongresima i povećanju izlaganja postera na farmakološkim kongresima.

Nagrađenih postera bilo je podjednako u oba razdoblja (4,4 % u prvom razdoblju, a u drugom 3,5 % ( $hi^2 = 0,089$  ;  $p = 0,673$ ). Za razliku od toga, u prvom razdoblju najviše postera bilo je prikazano na engleskom jeziku (88,9 %) a samo manji dio na hrvatskom jeziku (11,1 %), dok je u drugom razdoblju bilo podjednako postera prikazano na engleskom (55,8 %) i hrvatskom jeziku (44,2 %) ( $hi^2 = 17,057$  ;  $p < ,001$ ).

of posters displayed at domestic conferences and domestic conferences with international participation ( $hi^2 = 24.308$ ;  $p < .000$ ).

An analysis of posters according to the congress type in relation to the profession addressed at the conference is presented in Table 6. It is evident that the majority of posters in both periods were displayed at psychiatric congresses (60% of all posters in the first period and approx. 65% of posters in the second period) and pharmacological congresses (8.9% of all posters in the first period and 14.1% of posters in the second period). There was a significant difference ( $hi^2 = 17,640$ ;  $p = 0,024$ ) between the two periods which, upon table inspection, could be attributed to the reduced number of posters at neurological congresses and an increased presentation of posters at pharmacological congresses.

The number of posters that received awards was similar in both periods (4.4% in the first period and 3.5% in the second period ( $hi^2 = 0.089$ ;  $p = 0.673$ )). By contrast, most of the posters in the first period were displayed in the English language (88.9%), and only a small portion was in Croatian (11.1%), while in the second period the number of posters displayed in English (55.8%) and in Croatian (44.2%) was roughly equal ( $hi^2 = 17.057$ ;  $p < .001$ ).

**TABLICA 6.** Vrsta skupa na kojima su prikazani poster za razdoblje do 1996. godine (N = 45) i za razdoblje od 1997. do 2006. godine (N = 199)

**TABLE 6.** Types of conferences where posters were displayed for the period until 1996 (N=45) and the period from 1997 to 2006 (N=199)

Vrsta skupa / Conference type	do 1996. / until 1996	1997. - 2006. / 1997 to 2006
	%	%
Psihijatrijski / Psychiatric	60,0	64,8
Neurološki / Neurological	15,6	3,5
Farmakološki / Pharmacological	8,9	14,1
Medicinski / Medical	6,7	7,0
Nemedicinski / Non-medical	0,0	3,5
Molekularno-biološki / Molecular biological	6,7	1,5
Biokemijski / Biochemical	0,0	3,5
Psihološki / Psychological	0,0	0,5
Internistički / Internist	2,2	1,5

## RASPRAVA

Knjiga postera svjedoči o jednom prvijencu što na svjetlo dana donosi Bolnica Vrapče. Naime, ovakva knjiga ne postoji na našim prostorima. Pažljiv će čitatelj u njoj naći još zanimljivih podataka od kojih neki upućuju na još neka prvenstva naše Bolnice. No puno je važnije da ova knjiga pokazuje kako stručnjaci Bolnice Vrapče, a ovdje ih je pozamašan broj - 83, vrlo često u suradnji sa 186 kolega izvan bolnice, stručno i znanstveno promišljaju o praktički svim područjima psihijatrije (12).

Stručnjaci Klinike za psihijatriju Vrapče u različitim razdobljima i vremenima u kojima su djelovali pisali su o različitim temama vezanima uz psihijatrijsku struku. Tijekom vremena osnivaju se različiti časopisi, a prema podatcima iz časopisa *Socijalna psihijatrija* prvih godina izlaženja ovog časopisa dominiraju radovi iz područja socijalne psihijatrije jer se u to vrijeme socijalna psihijatrija u našoj zemlji počela razvijati. To je vrijeme u kojem se održavaju razni stručni skupovi posvećeni socijalnoj psihijatriji, a otvaraju se socijalno-psihijatrijski zavodi u klinikama i odjeli u psihijatrijskim bolnicama (15,16).

Teme iz užeg područja socijalne psihijatrije u ratnom i poratnom razdoblju bivaju potisnute na treće mjesto prema učestalosti pojavljivanja, a počinju dominirati teme iz područja biologijske psihijatrije (16). Tome je nekoliko razloga. Jedan od njih je veliki napredak u područnu neuroznanosti i biologijskoj psihijatriji u zadnjem desetljeću prošlog i prvom desetljeću ovog stoljeća. Mnogi se psihijatri, poneseni tim razvojem, okreću biologijskoj psihijatriji, psihofarmacima i psihofarmakoterapiji (16). Logično je da u ratno i poratno vrijeme dominiraju radovi iz područja ratne psihijatrije. U poratnom razdoblju na visokoj drugoj poziciji nalaze se radovi iz forenzične psihijatrije. Razlog je donošenje Zakona o zaštiti osoba s duševnim smetnjama i njegova

## DISCUSSION

The Book of Posters is the first of its kind, brought to light by the Vrapče Hospital. More precisely, this type of book does not exist in our region. An attentive reader will be able to find even more interesting information in this book, some of which will point to other achievements of our hospital. More importantly, however, this book shows how experts from the Vrapče Hospital, and there is an impressive number of them here - 83, often in collaboration with some of their 186 colleagues outside of the hospital, view practically all areas of psychiatry in a professional and scientific manner (12).

In the different periods and times when they worked there, experts from the University Psychiatric Hospital Vrapče wrote about a wide variety of topics relating to the psychiatric profession. Various journals were founded over time, and according to the data derived from the journal "Social Psychiatry", in its first years of publication, papers from the field of social psychiatry dominated among the articles because that was the period in which social psychiatry started developing in our country. Different kinds of professional conferences dedicated to social psychiatry were being held at the time, and social-psychiatric departments were introduced in clinics, as well as wards in psychiatric hospitals (15, 16).

In the war and post-war periods, topics more narrowly associated with social psychiatry were relegated to third place in terms of frequency of appearance, and topics associated with the field of biological psychiatry started to dominate (16). There were several reasons for this occurrence, one of which was great progress in the field of neuroscience and biological psychiatry in the last decade of the last century and the first decade of this century. Driven by these developments, many psychiatrists turned to biological psychiatry, pharmaceuticals and psychopharmacotherapy (16). It is logical that during the war and postwar periods papers from the domain of war psychiatry would dominate. Papers addressing topics from forensic psychiatry held a high second place in the post-war period as well. The reason for this lay in

primjena od 1. siječnja 1998. godine. Psihijatre je to motiviralo da se intenzivnije bave pravno-psihijatrijskim pitanjima te o tome pišu. Inače su teme iz forenzične psihijatrije u ostalim razdobljima pravilno distribuirane (16). Radovi iz područja bolesti ovisnosti zauzimaju značajno mjesto zbog važnosti teme i problema vezanih uz liječenje alkoholizma i drugih ovisnosti (16).

Protekom vremena rastao je broj izlaganja putem postera što se može pripisati povećanom interesu za taj način stručne i znanstvene komunikacije, širenju Bolnice i povećanju broja djelatnika te većim mogućnostima za izlaganje na domaćim i međunarodnim kongresima.

Teme postera u razdoblju do 1996. godine bile su različite, no pretežno su to teme koje se odnose na shizofreniju (29 %) i psihofarmake (24 %). U razdoblju od 1997. do 2006. godine najviše postera bilo je iz područja psihofarmaka (32 %). Prosječan broj autora - zaposlenika Bolnice Vrapče u razdoblju do 1996. godine iznosio je dva autora po posteru (2,49 +/- 3,12), dok je u narednom razdoblju od 1997. do 2006. prosječan broj autora zaposlenika Bolnice Vrapče bio tri autora (3,12 +/- 1,62), što je statistički značajno povećanje. Razlika između dva promatrana razdoblja po učestalosti ženskih odnosno muških autora nije značajna ( $hi^2 = 6,80$ ;  $p < ,05$ ). U oba razdoblja na poziciji prvog autora bilo je više žena, odnosno njih 60% u prvom razdoblju te 65% u drugom razdoblju ( $hi^2 = 0,454$ ;  $p < ,05$ ).

Vidljivo je da je su po pojedinom posteru najčešću sudjelovala dva specijalista zaposlenika Bolnice Vrapče, odnosno jedan specijalist psihijatrije. Razlike između dvaju razdoblja vidljive su po broju neuropsihijatarata kojih je kao autora postera bilo značajno više u prvom nego u drugom razdoblju, budući da se navedeni tip specijalizacije ukinuo, odnosno razdvojio na specijalizaciju iz psihijatrije i specijalizaciju iz neurologije. Nadalje, u

the adoption of the Act on the Protection of Persons with Mental Disorders and its application as of 1 January 1998. This encouraged psychiatrists to pay more attention to the legal psychiatric issues and to write about them. The topics pertaining to the field of forensic psychiatry were otherwise properly distributed in the other periods (16). Papers addressing addiction diseases hold an important position due to the importance of the topic and the problems relating to the treatment of alcoholism and other addictions (16).

The number of poster presentations grew over time, which can be attributed to the increased interest in this form of professional and scientific communication, Hospital expansion and an increase in the number of its employees, as well as greater opportunities for presentation at domestic and international congresses.

Posters from the period until 1996 addressed various topics, but they mostly dealt with schizophrenia (29%) and psychopharmaceuticals (24%). In the period from 1997 to 2006, most of the posters addressed the topic of psychopharmaceuticals (32%). In the period until 1996, the average number of authors who were employees of the Vrapče Hospital was two authors per poster (2.49 +/- 3.12), while in the following period, from 1997 to 2006, the average number of authors employed at the Vrapče Hospital was three authors (3.12 +/- 1.62), which is a statistically significant increase. There is no significant difference between these two periods in terms of the frequency of female or male authors ( $hi^2 = 6.80$ ;  $p < .05$ ). In both periods, more women were listed as the first author, i.e. 60% in the first period and 65% in the second period ( $hi^2 = 0.454$ ;  $p < .05$ ).

It can be observed that in most cases two specialists employed at the Vrapče Hospital, that is, one specialist psychiatrist, participated in the making of a specific poster. Differences between the two periods are evident in the number of neuropsychiatrists, whose participation as poster authors was by far greater in the first period than in the second, primarily due to the fact that this specialization was canceled, i.e. separated into the specialization in psychiatry and specialization in neurology.

razdoblju do 1997. godine u Vrapču nije bilo specijalizanata koji bi dolazili u Vrapče na specijalizaciju iz psihijatrije, te je vidljiva i razlika u broju autora koji su specijalizanti iz psihijatrije na specijalizaciji u Vrapču, bilo da se radi o specijalizantima kojima je matična ustanova Vrapče ili neka druga ustanova. U svakom slučaju, rezultati pokazuju da se kao autori postera pojavljuju ne samo specijalisti psihijatrije, već i specijalizanti psihijatrije, a u posterima često sudjeluju i druge struke, liječničke i ne-liječničke. U oba razdoblja najviše je postera izrađeno od autora koji su svi bili djelatnici Vrapča, ili u suradnji s jednom vanjskom ustanovom. Vidljivo je da je s protekom vremena statistički značajno porastao udio postera izloženih na domaćim skupovima te na domaćim skupovima s međunarodnim sudjelovanjem. Najveći je broj postera u oba razdoblja prikazan na psihijatrijskim kongresima (60 % svih postera u prvom te 65 % postera u drugom razdoblju) te farmakološkim kongresima. Nagrađenih postera bilo je podjednako u prvom razdoblju, 4,4 %, a u drugom razdoblju je nagrađenih postera bilo 3,5 % ( $hi^2 = 0,089$  ;  $p = 0,673$ ). Za razliku od toga, u prvom razdoblju najviše postera bilo je prikazano na engleskom jeziku (88,9 %) a samo manji dio na hrvatskom (11,1 %), dok je u drugom razdoblju bilo podjednako postera prikazano na engleskom (55,8 %) i hrvatskom jeziku.

U posterima su autori ispričali priču o svom istraživanju, odnosno što je važnije, a što je i smisao postera, pokazali svoju priču. Znanstveni poster je dokument kojim istraživanje komunicira na vizualni način s publikom. Prezentacije putem postera poželjne su, a vidljivo je kako je tijekom vremena to postalo značajno, jer štede vrijeme na stručnim skupovima, veća je mogućnost izlaganja, prilagodljivi su svakom prostoru, bolje se prostor koji je dostupan može iskoristiti (hodnici, prostori za odmor, restorani postaju prostori stručnih

Furthermore, there were no residents arriving to Vrapče Hospital to do their residency in psychiatry there in the period until 1997, and there is a noticeable difference in the number of authors who were residents in psychiatry doing their residency at the Vrapče Hospital, whether these were residents with their home institution being at Vrapče or another institution. In any case, the results indicate that not only psychiatry specialists appear as authors of the posters, they could also be psychiatry residents, as well as experts from other medical or non-medical professions who would often take part in the creation of the posters. In both periods, the majority of posters were created by authors who were all employees of the Vrapče Hospital, or employees who cooperated with one external institution. It can be observed that over time there was a statistically significant increase in the share of posters displayed at domestic conferences and domestic conferences with international participation. The majority of posters in both periods were displayed at psychiatric congresses (60% of all posters in the first period and 65% of posters in the second period) and pharmacological congresses. The number of posters that received awards was similar, with 4.4% in the first period and 3.5% in the second period ( $hi^2 = 0.089$ ;  $p = 0.673$ ). By contrast, most of the posters in the first period were displayed in the English language (88.9%), and only a small portion was in Croatian (11.1%), while in the second period the number of posters displayed in English (55.8%) and in Croatian was roughly equal.

The authors used the posters to present the stories of their research, or more importantly, which is the point of the posters, they used them to display their stories. A scientific poster is a document by means of which research is communicated to the audience in a visual manner. Presentations via posters are recommendable, and it is evident that over time they have become an important aspect because they save time at professional conferences, they provide a greater opportunity for presentation, they can be adapted to any type of space, and the available premises can be used more effectively (hallways, rest facilities, restaurants become premises for professional presentations). We can return



izlaganja). Posteru se možemo vraćati, čitati ga iznova, ali može ga se i preskočiti. Poster budi zanimanje i omogućuje pojedincu koncentraciju na zanimljive teme (17). Upravo te elemente važnosti prezentacije putem postera prepoznali su autori postera opisani u ovom radu.

U međuvremenu je objavljena druga Knjiga postera, u tiskanom obliku (18) i na DVD-u (19), a koja je obuhvatila desetogodišnje razdoblje od 2007. do 2016. godine. Treća Knjiga postera koja je ukoričila šestogodišnje razdoblje od 2017. do 2022. godine) (20) nedavno je tiskana, a interaktivna pdf verzija besplatno je dostupna na internetu (21). U sljedećim publikacijama planiramo obraditi i ove novije podatke te vidjeti što se sve promijenilo, koji su trendovi nastupili i jesu li posterske prezentacije i nadalje popularan oblik stručno-znanstvene aktivnosti (22).

## ZAKLJUČAK

Knjiga postera pokazuje kako stručnjaci bolnice Vrapče, vrlo često i u suradnji s kolegama izvan bolnice, stručno i znanstveno promišljaju o praktički svim područjima psihijatrije. Posterima su autori svoja istraživanja i stručna zapažanja komunicirali na vizualni način s kolegama te tako omogućili svakom zainteresiranom pojedincu koncentraciju na zanimljive teme. Vidljivo je da je tijekom vremena rastao broj izlaganja putem postera što pripisujemo povećanom interesu za ovaj način stručne i znanstvene komunikacije, širenju Bolnice i povećanju broja djelatnika različitih struka, te većim mogućnostima za izlaganje na domaćim i međunarodnim skupovima.

to view a poster, we can read it again, but we can also skip it. Posters can spark interest and enable an individual to concentrate on topics they find interesting (17). Precisely these elements that show the importance of presentation via posters were recognized by the poster authors described in this paper.

A second Book of Posters was published in the meantime, in printed form (18) and on DVD (19), and it encompassed the ten-year period between 2007 and 2016. The third Book of Posters, printed to represent the six-year period from 2017 to 2022 (20), was recently published and a free interactive pdf version of the book is available online (21). In the publications that follow, we are planning to process these recent data, analyze all the aspects that have changed and the trends that have appeared, and examine whether the poster presentations are still a popular form of scientific professional activity (22).

## CONCLUSION

The Book of Posters depicts how the professionals from the Vrapče Hospital, in cooperation with their colleagues outside the Hospital, view practically all areas of psychiatry in a professional and scientific manner. The authors used the posters to communicate their research findings and their professional observations to their colleagues in a visual manner, thus enabling any interested individual to concentrate on topics they find interesting. It is evident that the number of poster presentations grew over time, which can be attributed to the increased interest in this form of professional and scientific communication, expansion of the Hospital, an increase in the number of its employees of different professions, and greater opportunities for presentation at domestic and international conferences.

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## In memoriam

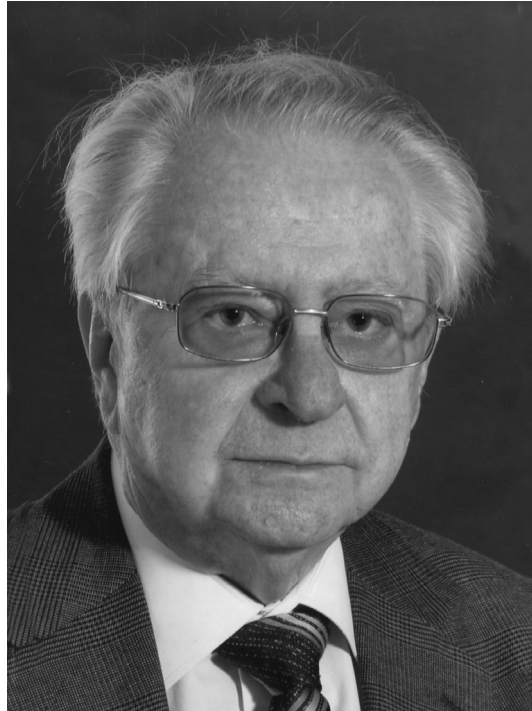
### / *Obituary*

#### Vasko Muačević

Prof. dr. sc. / Prof., PhD

(22. veljače 1928. – 19. siječnja 2024.)

(22 February 1928 – 19 January 2024)



Prof. prim. dr. sc. Vasko Muačević preminuo je 19. siječnja 2024. godine u Zagrebu. Otišao je doajen hrvatske psihijatrije i jedan od njezinih utemeljitelja. Prof. Muačević je početkom devedesetih godina prošlog stoljeća sudjelovao u oblikovanju hrvatske psihijatrije, u formiranju ratne psihijatrije tijekom Domovinskog rata te u reformiranju hrvatske psihijatrijske službe kao i psihijatrijske edukacije.

Dao je veliki doprinos u pozicioniranju hrvatske psihijatrije kako u europskim tako i u svjetskim psihijatrijskim asocijacijama.

Rođen je 22. veljače 1928. godine u Zagrebu, gdje je završio osnovnu školu i IV. mušku gimnaziju. Medicinski fakultet Sveučilišta u Zagrebu upisao je 1947. godine, a diplomirao 1953. godine kao jedan od najboljih studenata generacije. Nakon završetka vojnog roka obavio je obvezni liječnički staž, a potom radi kao liječnik opće medicine u ambulanti tvornice „Jugokeramika“ kod Zaprešića.

Specijalizaciju iz neurologije i psihijatrije započeo je 1957. godine na Odjelu za neuropsihija-

Prof. Prim. Vasko Muačević, PhD passed away on 19 January 2024 in Zagreb. A doyen of Croatian psychiatry and one of its founders has left us. In the early 1990s, Prof. Muačević participated in the shaping of Croatian psychiatry, the formation of war psychiatry during the War of Independence, and the reforming of the Croatian psychiatric service and psychiatric education.

He greatly contributed to the positioning of Croatian psychiatry both in the European and the global psychiatric associations.

He was born on 22 February 1928 in Zagreb, where he completed elementary school and the IV. Grammar School for Boys. He enrolled into the University of Zagreb School of Medicine in 1947, and graduated in 1953 as one of the best students of his generation. After finishing his military service, he completed his mandatory medical internship and then worked as a general practitioner in the infirmary of the “Jugokeramika” factory near Zaprešić.

He began his specialization in neurology and psychiatry in 1957 at the Department of Neuropsychiatry in the “Dr. Mladen Stojanović Hospital”, better known as “Vinogradska Hospital”, which

triju tadašnje bolnice „Dr. Mladen Stojanović“, poznatije kao Vinogradska bolnica, danas KBC Sestre milosrdnice.

Specijalistički ispit iz neuropsihijatrije položio je 1960. godine pred povjerenstvom čiji je predsjednik bio prof. Radoslav Lopašić.

Doktorsku disertaciju „Utjecaj aktualnog konflikta na kliničku sliku psihoneuroze“, pod mentorstvom prof. Duške Blažević obranio je 1965. godine, a potom odlazi na stručno usavršavanje iz socijalne psihijatrije kod prof. Philippea Paumelle u Parizu.

Na Neuropsihijatrijsku kliniku na Rebro prelazi 1968. godine, te zajedno s prof. Peršićem i prim. Berghoferom pokreće subspecializaciju iz socijalne psihijatrije. Sudjelovao je u preuređenju i organizaciji otvorenog dijela psihijatrijskog odjela kao i u različitim socijalno-psihijatrijskim aktivnostima (terapijska zajednica, grupna psihoterapija shizofrenih bolesnika, okupaciona terapija). Uveo je tzv. timsku sintezu, postupak otpusta i plana aktivnosti nakon njega, u kojem su osim liječnika sudjelovali i medicinske sestre, psiholozi, socijalni radnici, okupacioni terapeuti.

Otvoreni dio psihijatrijskog odjela nakon nekog vremena preimenovan je u Odjel socijalne psihijatrije, čiji voditelj postaje 1975. godine kao prvi subspecialist socijalne psihijatrije s mentalnom higijenom.

Predstojnik Klinike za psihijatriju postaje 1990. godine, te ostaje na tom mjestu do umirovljenja.

Osim socijalnom psihijatrijom i rehabilitacijom prof. Muačević bavio se prevencijom psihičkih smetnji, kao i destigmatizacijom duševne bolesti. Zalagao se za multidisciplinarni i integrativni pristup osobama s psihičkim smetnjama i članovima njihovi obitelji.

Asistent na Katedri za psihijatriju Medicinskog fakulteta Sveučilišta u Zagrebu postao je 1968. godine. Za naslovnog docenta habilitirao je 1971. godine s temom „Promatranje interak-

today bears the name the “Sisters of Charity Teaching Hospital”.

He passed the specialist examination in neuropsychiatry before the committee headed by Prof. Radoslav Lopašić in 1960.

Under the mentorship of Prof. Duška Blažević, in 1965 he completed his doctoral dissertation entitled “The Impact of the Current Conflict on the Clinical Picture of Psychoneurosis”, after which he continued his professional training in social psychiatry with Prof. Philippe Paumelle in Paris.

He transferred to the Neuropsychiatric Clinic of the University Hospital Centre Zagreb in 1968, and together with Prof. Peršić and Prim. Berghofer he initiated the subspecialization in social psychiatry. He participated in the rearrangement and organization of the open part of the psychiatric ward, as well as in various social-psychiatric activities (therapeutic community, group psychotherapy of schizophrenic patients, occupational therapy). He introduced the so-called team synthesis, with the discharge procedure and activity plan after it in which nurses, psychologists, social workers and occupational therapists participated along with the doctors.

After a while, the open part of the psychiatric ward was renamed the Department of Social Psychiatry, and in 1975 he became department head as the first subspecialist in social psychiatry with mental hygiene.

He became Head of the Department of Psychiatry in 1990, and held the position until his retirement.

In addition to social psychiatry and rehabilitation, Prof. Muačević was also involved in the prevention of mental disorders, as well as the destigmatization of mental illnesses. He advocated a multidisciplinary and integrative approach to individuals suffering from mental disorders and their family members.

He became a teaching fellow at the Clinical Department of Psychiatry of the University of Zagreb School of Medicine in 1968. He was habilitated as a titular assistant professor in 1971, with the thesis entitled “Observation of Interactions in a Family of Schizophrenic Patients Through Comparative Group Psychotherapy”. He became

cija u obitelji shizofrenih bolesnika kroz uspo- rednu grupnu psihoterapiju“. Naslovni profesor postao je 1975., a redoviti profesor u kumula- tivnom radnom odnosu 1979. godine.

Od 1986. do 1988. godine obnaša dužnost Pro- čelnika Katedre za psihijatriju.

Napisao je brojne članke, poglavlja u zbornici- ma i knjigama.

Uredio je prvi hrvatski udžbenik iz psihijatri- je 1995. godine. To je prva knjiga u Hrvatskoj koja se temeljila na klasifikaciji MKB-10 i DSM- IV. Na tu su se knjigu referirali svi kasniji psihi- jatrijski udžbenici, ne samo u nas.

Bio je član Hrvatskog liječničkog zbora, osnivač i prvi predsjednik Psihijatrijske sekcije HLZ-a, osnivač i prvi predsjednik Hrvatskog psihija- trijskog društva, član Europskog psihijatrijskog društva, član Američke akademije za medicinu i psihijatriju, počasni član Austrijskog neurop- sihijatrijskog društva, član Kuratorija međuna- rodnih neuropsihijatrijskih simpozija u Puli, redoviti član Akademije medicinskih znanosti Hrvatske, jedan od osnivača i član Hrvatskog katoličkog liječničkog društva.

Napisao je više od 40 znanstvenih i preko 50 stručnih radova objavljenih u zemlji i inozem- stvu. Sudjelovao je na brojnim kongresima i stručnim skupovima. Održao je brojna pozvana predavanja čiji su sažetci objavljeni u zbornici- ma radova.

Znanstveni interes prof. Muačevića bio je u raz- nim područjima socijalne psihijatrije i rehabi- litacije, kliničke psihijatrije te farmakoterapije.

Tijekom Domovinskog rata bavio se psihičkim problemima branitelja i njihovih obitelji. Isku- stva iz toga razdoblja objavljena su u Sjedinjenim Američkim Državama u knjizi „*Beyond invisible walls*“ koju su uredili Jacob Lindy i Robert Lifton.

Preko Hrvatskog psihijatrijskog društva orga- nizirao je provođenje psihocijalne i psihijatrijs- ke pomoći raseljenim osobama i prognanicima diljem Hrvatske, te psihijatrijsku i psihološku

titular professor in 1975, and full professor in cumulative employment in 1979.

In the period between 1986 and 1988, he held the position of the Head of the Psychiatry Chair.

He wrote numerous articles, chapters in proceed- ings and books.

He was the editor of the first Croatian textbook in psychiatry, issued in 1995. It was the first book issued in Croatia that was based on the ICD-10 and DSM-IV classifications, and has been refer- enced in all subsequent psychiatric textbooks, not just in our country.

He was a member of the Croatian Medical Asso- ciation, founder and first president of the Psy- chiatric Section of the CMA, founder and first president of the Croatian Psychiatric Association, member of the European Psychiatric Association, member of the American Academy of Medicine and Psychiatry, honorary member of the Austrian Neuropsychiatric Society, Kuratorium member of the international Neuropsychiatric Symposia in Pula, regular member of the Croatian Academy of Medical Sciences, one of the founders and mem- ber of the Croatian Catholic Medical Society.

He wrote more than 40 scientific papers, and over 50 professional papers that were published in our country and abroad. He participated in numer- ous congresses and professional conferences. He held numerous invited lectures, the summaries of which have been published in their proceedings.

The scientific interests of Prof. Muačević lay in various areas of social psychiatry and rehabili- tation, clinical psychiatry and pharmacotherapy.

During the Croatian War of Independence, he dealt with the mental problems of veterans and their families. His experiences from the period were published in the United States of America in the book “*Beyond Invisible Walls*”, edited by Jacob Lindy and Robert Lifton.

With the help of the Croatian Psychiatric Associ- ation, he organized the implementation of psy- chosocial and psychiatric assistance to displaced persons and refugees throughout Croatia, as well as psychiatric and psychological care in several

skrb u nekoliko prognaničkih naselja. U tim programima sudjelovalo je preko 300 stručnjaka, ne samo psihijatar.

Prof. Muačević dobitnik je brojnih nagrada i priznanja od kojih su najznačajnije Počasno priznanje Slovačkog psihijatrijskog društva, Počasna diploma Češkog psihijatrijskog društva i Nagrada HLZ-a, dok je 2009. godine proglašen laureatom Akademije medicinskih znanosti Hrvatske.

Bio je tajnik uredničkog odbora više časopisa („Acta medica“, „Anali“ i „Socijalna psihijatrija“). U časopisu „Socijalna psihijatrija“ bio je glavni, a kasnije i počasni urednik. U tom razdoblju časopis je izrastao u najznačajniji psihijatrijski časopis koji objavljuje radove na hrvatskom jeziku.

Profesor Vasko Muačević bio je liječnik, neuropsihijatar, socijalni psihijatar, redoviti profesor, znanstveni savjetnik, voditelj projekata, autor, urednik, pročelnik Klinike i Katedre, ali prije svega bio je čovjek. Dobar, tih, miran, empatičan, spreman za suradnju, kolegijalan u najboljem smislu te riječi. Bio je iskren, topao, obiteljski posvećen i očinski brižan. Bio je spontan, neposredan, sa smislom za humor (i na vlastiti račun), katkad blago ironičan, kako to znaju biti ljudi sigurni u sebe. Omiljen u društvu, okupljao je ljude oko sebe, iskreno zainteresiran za druge i spreman pomoći kad god je to bilo potrebno. S visokom razinom tolerancije i empatije, nikada, ni u situacijama koje nisu bile lake i ugodne, nije povisio glas.

Bio je omiljen među svojim suradnicima, poštovan od kolega, cijenjen među bolesnicima.

Prof. dr. sc. Vasko Muačević zadužio je mnoge: svoje bolesnike, suradnike, studente, specijalizante, psihijatre, kolege drugih struka. Zadužio je hrvatsku psihijatriju.

Dragi profesore hvala Vam za sve što ste učinili i počivajte u miru!

Dražen Begić

refugee settlements. Over 300 experts, not only psychiatrists, participated in the implementation of these programs.

Prof. Muačević received numerous awards and recognitions, the most prominent of which are the Honorary Recognition of the Slovak Psychiatric Society, Honorary Degree of the Czech Psychiatric Society and the Croatian Medical Association Award, while in 2009 he was declared Laureate of the Croatian Academy of Medical Sciences.

He served as secretary of the editorial boards of several journals (“Acta Medica”, “Annals” and “Social Psychiatry”). He was the Editor in Chief and, later, Honorary Editor of the journal “Social Psychiatry”. In this period, the journal became the most important psychiatric journal which published papers in the Croatian language.

Professor Vasko Muačević was a doctor, neuropsychiatrist, social psychiatrist, full professor, scientific advisor, project manager, author, editor, Department and Clinical Department Head, but above all, he was a good man. He was kind, quiet, calm, empathetic, willing to cooperate, and a good colleague in the best sense of the word. He was honest, warm, family oriented and seen as a fatherly figure. He was spontaneous, direct, with a good sense of humor (even at his own expense), and at times mildly ironic as self-confident people sometimes tend to be. He was popular, people gathered around him, he had a genuine interest in others and was willing to help whenever necessary. Due to his high level of tolerance and empathy, he never raised his voice, even in situations that were not easy or pleasant.

He was a favorite among his co-workers, respected by his colleagues and valued by his patients.

Prof. Vasko Muačević, PhD helped numerous people: his patients, co-workers, students, residents, psychiatrists and colleagues from different professions. His contribution to Croatian psychiatry was immense.

Dear Professor, thank you for everything that you have done and may you rest in peace!

Dražen Begić

# Upute autorima

## O časopisu

*Socijalna psihijatrija* je recenzirani časopis koji je namijenjen objavljivanju radova iz područja socijalne psihijatrije, ali i iz kliničke psihijatrije i psihologije, biopsihijske psihijatrije, psihoterapije, forenzičke psihijatrije, ratne psihijatrije, alkoholologije i drugih ovisnosti, zaštite mentalnog zdravlja osoba s intelektualnim teškoćama i razvojnim poremećajima, epidemiologije, deontologije, organizacije psihijatrijske službe. Praktički nema područja psihijatrije iz kojeg do sada nije objavljen pregledni ili stručni rad.

Svi radovi trebaju biti pisani na hrvatskom i engleskom jeziku.

Svi zaprimljeni radovi prolaze kroz isti proces recenzije pod uvjetom da zadovoljavaju i prate kriterije opisane u Uputama za autore i ne izlaze iz okvira rada časopisa.

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Časopis objavljuje sljedeće vrste članaka: uvodnike, izvorne znanstvene, stručne i pregledne radove, prikaze bolesnika, lijekova i metoda, kratka priopćenja, osvrti, novosti, prikaze knjiga, pisma uredništvu i druge priloge iz područja socijalne psihijatrije i srodnih struka.

Iznimno Uredništvo časopisa može prihvatiti i drugu vrstu rada (prirodni rad, rad iz povijesti struke i sl.), ako ga ocijeni korisnim za čitateljstvo.

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*Socijalna psihijatrija* is a peer-reviewed journal intended for publication of manuscripts from the fields of social psychiatry, clinical psychiatry and psychology, biopsychology, psychotherapy, forensic psychiatry, war psychiatry, alcoholism and other addictions, mental health protection among persons with intellectual and developing disabilities, epidemiology, deontology and psychiatric service organisations.

All manuscripts must be written in the Croatian and English language.

All manuscripts undergo the same review process if they follow the scope of the Journal and fulfil the conditions according to the Author guidelines.

The Editorial board will not take the responsibility for the viewpoint of the Author's manuscript - it remains the exclusive responsibility of an Author.

*Socijalna psihijatrija* publishes the following types of articles: editorials, original scientific papers, professional papers, review's, case reports, reports on drugs and methods of treatment, short announcements, annotations, news, book review's, letters to the editor, and other papers in the field of social psychiatry.

Exceptionally, the Editorial board can accept other kinds of paper (social psychiatry event paper, social psychiatry history-related paper, etc.).

During the whole peer-reviewed process, the *Socijalna psihijatrija* journal follows the Committee of publication ethics (COPE) guidelines ([https://publicationethics.org/files/Code%20of%20Conduct\\_2.pdf](https://publicationethics.org/files/Code%20of%20Conduct_2.pdf)) as well as the "Recommendations for the conduct, reporting editing, and publication of scholarly work in medical journals" set by the International Committee of Medical Journal Editors (ICMJE - <http://www.icmje.org/journals-following-the-icmje-recommendations/>).

Editors at the *Socijalna psihijatrija* journal pay close attention to the integrity and visibility of scholarly publications as stated in Sarajevo Declaration (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5209927/>).

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Rad i svi prilozi dostavljaju se isključivo u elektroničkom obliku. Preporučena duljina teksta iznosi do 20 kartica (1 kartica sadrži 1800 znakova s razmacima). Tekstove treba pisati u Wordu, fontom postavljenim za stil Normal, bez isticanja unutar teksta, osim riječi koje trebaju biti u boldu ili italiku. Naslove treba pisati istim fontom kao osnovni tekst (stil Normal), u poseban redak, a hijerarhiju naslova može se označiti brojevima (npr. 1., 1.1., 1.1.1. itd.).

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U tekstu se literaturni podatak navodi arapskim brojem u zagradi.

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