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Utjecaj duhovnosti na subjektivni osjećaj zdravlja

/ Influence of Spiritual Life on the Subjective Perception of Health

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Cilj ovog rada bio je istražiti utječe li duhovni život na subjektivni osjećaj zdravlja pojedinaca i je li taj utjecaj značajan. *Metode:* Anketom SF-36 istražili smo mišljenje o vlastitom zdravlju pripadnika molitvene zajednice u odnosu na one koji to nisu. Anketiran je 51 član molitvene zajednice i isto toliko ljudi u kontrolnoj skupini. *Rezultati:* Analiza je pokazala da molitvena zajednica pokazuje više vrijednosti u svim ljestvicama zdravlja u odnosu na kontrolnu skupinu i hrvatsku populaciju. Statistički značajne razlike molitvena skupina pokazuje u odnosu na kontrolnu skupinu u ljestvici općeg zdravlja, vitalnosti, emocionalnog ograničenja, psihičkog zdravlja i zbirnog mentalnog zdravlja. U odnosu na hrvatsku populaciju molitvena grupa pokazuje statistički značajne razlike u svim ljestvicama osim u socijalnom funkcioniranju. *Zaključak:* Istraživanje je ukazalo na kvalitetu vjerskog života kao bitnog čimbenika u percepciji osobe svog mentalnog i fizičkog zdravlja.

/ The goal of this study was to investigate whether spiritual life influences the subjective feeling of health in individuals and whether this influence was significant. Methods: We used the SF-36 questionnaire to investigate the opinions of a religious prayer group on their personal health in comparison with participants who were not members. The questionnaire was completed by 51 members of the prayer group and as many participants in the control group. Results: The analysis showed that the prayer group had higher ratings in all scales on subjective health perception in comparison with the control group and the general population in Croatia. There were statistically significant differences in the prayer group in comparison with the control group on the scales for general health, vitality, emotional limitations, mental health, and mental component summary. In comparison with the Croatian population, the prayer group had statistically significant differences in all scores except social functioning. Conclusion: The study indicates that the quality of religious life is an important factor in a person's perception of their own mental and physical health.

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Istraživanja čimbenika duhovnosti u zdravlju i kvaliteti življenja dovelo je do cjelovitijeg razumijevanja ljudskog zdravlja koje uključuje i nematerijalnu dimenziju, drugim riječima odnos duhovnog, psihičkog i somatskog (1-3). Otavska povelja definirala je unaprjeđenje zdravlja kao proces kojim ljudi preuzimaju kontrolu nad svojim zdravljem i tako ga unaprjeđuju (4). Unaprjeđenje zdravlja ima za cilj da se pojedincima i zajednicama omogući povećana kontrola nad čimbenicima koji uvjetuju zdravlje. Brojni čimbenici utječu na zdravlje: naslijeđe, radno mjesto, obitelj, okolina, socioekonomski uvjeti, demografski uvjeti (5,6). Svjetska zdravstvena organizacija uključila je proteklih godina preko 30 međunarodnih centara u svoju studiju kvalitete življenja, koja je definirana sa šest sljedećih dimenzija: tjelesno i psihičko zdravlje, osobna neovisnost, socijalni odnosi, okoliš, te duhovnost i religijski običaji (7). Cilj ovog rada bio je istražiti utjecaj duhovne dimenzije na zdravlje pa smo glede toga analizirali mišljenje o vlastitom zdravlju kod ljudi prepoznatljive duhovne orijentacije, kao što su članovi karizmatičke katoličke molitvene zajednice.

Važnost duhovne dimenzije ljudskog bića najčešće dolazi do izražaja prigodom teških iskušenja, kao što su sučeljavanja s bolešću i smrću. Opće je poznato da je psihijatar Viktor Frankl, otac treće bečke psihoterapijske škole, logoterapije, tijekom II. svjetskog rata proveo tri godine kao zatočenik Auschwitza i Dachaua i o tom svojem iskustvu je kazivao: "Istina je da među onima koji su preživjeli strahote koncentracijskih logora, broj onih kojima se vjera probudila unatoč užasu kojem su bili izloženi, uvelike prelazi broj onih koji su vjeru izgubili" (8).

Tijekom posljednjih godina života Hudolin je govorio o uvođenju antropološke spiritualnosti, a posebno njene vjerske dimenzije u klubove liječenih alkoholičara (9). Pitanje holističke

Research into the effects of spirituality on health and quality of life has led to a more holistic understanding of human health that also includes the non-material dimension, i.e. the relationship between the spiritual, mental, and physical (1-3). The Ottawa Charter for Health Promotion defined health promotion as the process of enabling people to increase control over and to improve their health (4). Health promotion has the goal of allowing individuals and communities to exert more control over factors that influence health. Numerous factors can influence health: hereditary elements, the workplace, family, the environment, socioeconomic conditions, and demographic conditions (5,6). Over the last few years, the World Health Organization has included over 30 international centers in its study on quality of life, which is defined through the following six dimensions: physical and mental health, personal independence, social relationships, environment, and spirituality and religious customs (7). The goal of this study was to investigate the influence of the spiritual dimension on health, which lead us to analyze the subjective opinion on personal health in people with a recognizable spiritual orientation such as members of a Catholic charismatic prayer group.

The importance of the spiritual dimension of human beings usually comes to the fore during difficult challenges, such as facing disease and death. It is well-known that the psychiatrist Victor Frankl, the father of logotherapy, the third Viennese school of psychiatry, spent three years as a prisoner in Auschwitz and Dachau in World War II and said of his experience: "The truth is that among those who survive the horrors of the concentration camps, the number of those who had an awakening of faith despite the horrors they were exposed to was much greater than the number of those who lost their faith" (8).

In his final years, Hudolin spoke of the introduction of anthropological spirituality and its religious dimension in particular into clubs for

zdravstvene skrbi u onome što obuhvaća moderni hospicijski pokret odnosi se upravo na promicanje duhovne skrbi (10).

Razvijajući u sebi religijski pogled na život mnogi ljudi postaju otporniji na stresove, njihovo je psihičko zdravlje stoga manje ugroženo, a od toga društvo nesumnjivo ima velike koristi (3). Istraživanje sila koje mnogima nesumnjivo pomažu voditi svrhoviti život, a takve djeluju u duhovnom aspektu života, unatoč objektivno neizdrživim pritiscima životnih nesreća, može biti za društvo od daleko veće koristi od mnogih etabliranih modela primarne prevencije bolesti i poremećaja i to kako somatskih, tako i onih psihičkih (11).

Duhovnost se često uzima kao širi pojam od religioznosti. Prema tome duhovnost obuhvaća u sebi i sve koncepte religioznosti (12). Od početka 21. stoljeća nastoji se povući jasniju granicu duhovnosti prema religioznosti kao kategoriji koju je lakše definirati u odnosu na širi pojam duhovnosti (13-15). Religioznost se odnosi na klaster religioznog ponašanja i vjerovanja, koji je institucionaliziran i organiziran, dok je duhovnost okrenuta doživljaju više razine sebstva i nad-materijalnog unutar sebe (16, 17).

CILJ

Cilj studije bio je istražiti postoje li razlike u mišljenju o vlastitom zdravlju, koristeći se psihometrijskim instrumentom SF-36, kod ljudi koji su uključeni u molitvenu zajednicu u odnosu na one koji to nisu.

ISPITANICI I METODE

Ispitanici

Istraživanje je provedeno standardiziranom anketom SF-36 (18) kod 54 člana molitvene zajednice koji su bili prisutni na evangelizacijskom seminaru. Svi anketirani članovi trebali

recovering alcoholics (9). The issue of holistic healthcare in the modern hospice movement specifically relates to the promotion of spiritual care (10).

When developing a religious view of life, many people become more resistant to stress, resulting in less endangered mental health, which is certainly very useful to society as a whole (3). Study of the forces that indubitably help many in leading meaningful lives, which act in the spiritual aspect of life despite objectively unbearable pressures of life's misfortunes, can be much more useful to society than many established methods of primary prevention models for diseases and disorders, including both physical and mental ones (11).

Spirituality is often considered a wider concept than religiousness. According to this view, spirituality also encompasses all religious concepts (12). Since the start of the 21st century, there have been attempts to draw a clearer distinction between spirituality and religiousness, with religiousness as a category that is easier to define in relation to the wider concept of spirituality (13-15). Religiousness refers to a cluster of religious behaviors and beliefs that are institutionalized and organized, whereas spirituality is the experience of a higher level of the self and the supra-material within oneself (16,17).

AIM

The goal of the present study was to investigate if there are any difference in subjective opinion of personal health based on the SF-36 tool in people who were part of a prayer group compared with people who were not.

PARTICIPANTS AND METHODS

Participants

The study was conducted using the standardized SF-36 questionnaire (18) on 54 members of a prayer group that attended an evangeliza-

su zadovoljiti uvjete da su u zajednici duže od godinu dana i da su stariji od 18 godina. Uz SF-36 priložen je upitnik o socioekonomskom statusu ispitanika koji je sadržavao: dob, spol, stručnu spremu, bračno stanje, radni status, obitelj, stambeno pitanje, posjedovanje automobila, primanja po članu obitelji, stambeno okruženje i zadovoljstvo sa svojom socioekonomskom situacijom. Zbog nepotpunih podataka na upitniku, tri ankete nisu obrađene.

Ista anketa provedena je na kontrolnoj skupini koja je izabrana među zdravstvenim osiguranicima upisanima u dvije ordinacije opće medicine iz mjesta Sveti Ivan Žabno, Hrvatska. Kriteriji za izbor kontrolne skupine bili su dob, spol, stručna sprema, radni odnos, bračno stanje i obitelj, odgovarajući ispitanicima molitvene zajednice.

Svim ispitanicima je u detalje objašnjena svrha i postupak istraživanja i svi su dragovoljno iskazali suglasnost za istraživanje. Istraživanje je bilo potpuno usklađeno s etičkim standardima postavljenim Helsinškom deklaracijom iz 1964. godine.

Struktura ispitanika i kontrolne skupine prema karakteristikama iz upitnika prikazana je u tablici 1.

U nekoliko slučajeva nije se moglo u potpunosti zadovoljiti istovjetnost svih kriterija za odgovarajući par u kontrolnoj skupini (npr. osoba u kontrolnoj skupini odgovarala je onoj u molitvenoj zajednici u značajkama da je rastavljena, nezaposlena i ima djecu, ali nije odgovarala po godinama ili stručnoj spreml). Zato u skupini molitvene zajednice i kontrolnoj skupini nisu potpuno identične značajke po dobnoj strukturi i stručnoj spreml.

Metode

Anketa SF-36 je najčešće upotrebljavani upitnik zdravlja u studijama za evaluaciju tretmana različitih bolesti, praćenju subjektivnog osje-

tion seminar. All participants had to fulfil inclusion criteria that consisted of being in the prayer group for over a year and being older than 18 years of age. In addition to SF-36, participants also received a questionnaire on their socioeconomic status that included information on: age, sex, education, marital status, employment status, family, living arrangements, car ownership, income per family member, living environment, and satisfaction with their socioeconomic situation. Due to incomplete data in the questionnaire, three participants were excluded from the study.

The same questionnaire was used in the control group which was chosen among people with health insurance who were registered at two general medicine clinics in Sveti Ivan Žabno, Croatia. The criteria for enrollment in the control group were age, sex, education, employment status, marital status, and family, which were matched to participants in the prayer group.

All participants received a detailed explanation of the goal and methods of the study and all of them voluntarily agreed to participate. The study was fully in line with the ethical standards established by the Declaration of Helsinki of 1964.

The demographic data on the prayer group and the control group that was gathered using the additional questionnaire is shown in Table 1.

In a few cases it was not possible to fully match all criteria to a corresponding member in the control group (i.e. a person in the control group matched the person in the prayer group in being divorced, unemployed, and having children, but did not match in age or education). As a result, not all data are completely identical between the control and prayer groups regarding age structure and education.

Methods

The SF-36 questionnaire is the most widely used health questionnaire in studies evaluating the treatment of various diseases, monitoring the

TABLICA 1. Struktura ispitanika i kontrolne grupe
TABLE 1. Demographic data for the prayer group and the control group

	Struktura ispitanika / Demographic data	Molitvena / Prayer group	Kontrolna / Control group
Spol / Sex	Muški / Male	18	18
	Ženski / Female	33	33
Dob (god.) / Age (years)	18-35	18	18
	36-45	18	16
	46-55	11	12
	56-65	3	4
	65+	1	1
Stručna sprema / Education	OŠ / Primary school	4	5
	SSS / Secondary Education	33	33
	VŠS / Bachelor degree	11	9
	VSS / Master degree	3	4
Bračno stanje / Marital status	Oženj./Udane / Married	24	24
	Neož./Neud. / Unmarried	19	19
	Rastavljeni / Divorced	4	4
	Udovice / Widowed	2	2
	Žive u vanbr. zajednici / Domestic partnership	2	2
Obitelj / Family	S djecom / With children	29	29
	Bez djece / Without children	22	22
Radni status / Employment status	Zaposleni / Employed	30	30
	Studira / Student	7	11
	U mirovini / Retired	3	3
	Domaćica / Housewife	1	1
	Nezaposleni / Unemployed	10	6

ćaja zdravlja različitih kliničkih i sociodemografskih uzoraka, te u studijama zdravlja na nacionalnoj razini. Ona reprezentira teorijski utemeljenu i empirijski provjerenu operacionalizaciju dvaju generalnih koncepata zdravlja: fizičko i psihičko zdravlje, te dviju njegovih općenitih manifestacija: funkcioniranje i dobrobit. Na manifestnoj razini svaka od čestica ankete odnosi se na jedno od osam različitih područja zdravlja unutar dva općenita koncepta zdravlja: fizičkog i psihičkog. Na taj način anketa SF-36 sadrži osam različitih ljestvica zdravlja, a ukupne rezultate prikazuje u obliku profila (18).

Pojedini odgovori na svaku od čestica različito se boduju prema unaprijed utvrđenim empirijskim normama. Pojedine ljestvice ili manifestacije zdravlja obuhvaćene su različitim brojem čestica, pa se broj bodova zabilježen na svakoj ljestvici upitnika transformira u standardne vrijednosti i baždari na jedinstvenu ljestvicu čiji teorijski minimum iznosi 0, a maksimum 100 bodova. Na taj je način moguće

subjective perception of health in various clinical and sociodemographic populations, and in health studies on the national level. The questionnaire represents a well-founded and empirically tested operationalization of two general concepts of health – physical and mental health – and two of its general manifestations: functioning and well-being. Each unit in the questionnaire refers to one of the eight different health scores classified under the two general concepts of health: physical and mental. Thusly, the SF-36 questionnaire has eight different health scores and represents the total score in the form of a profile (18).

Individual answers for each unit are scored according to previously established empirical norms. Individual scores or health manifestations are determined by different numbers of units, and the number of points on each scale of the questionnaire is transformed into standard values and calibrated to a single score with a theoretical minimum of 0 and a maximum of 100. This allows quantitative comparison of different manifestations of health that the

kvantitativno uspoređivati različite manifestacije zdravlja koje upitnik mjeri, interpretirati ukupnu razinu i diferenciranost osam točaka profila (18).

Anketa obuhvaća osam područja zdravlja, uz dodatak dva zbirna, dakle ukupno deset.

1. Fizičko funkcioniranje
2. Ograničenje zbog fizičkih tegoba
3. Tjelesni bolovi
4. Opće zdravlje
5. Vitalnost
6. Socijalno funkcioniranje
7. Ograničenje zbog emocionalnih tegoba
8. Psihičko zdravlje
9. Zbirno fizičko zdravlje
10. Zbirno mentalno zdravlje

Pet ljestvica (područja) ankete (*Fizičko funkcioniranje, Ograničenje zbog fizičkih tegoba, Tjelesni bolovi, Socijalno funkcioniranje, Ograničenje zbog emocionalnih tegoba*) definiraju zdravlje kao odsutnost ograničenja i nesposobnosti kontinuirane su jednodimenzionalne mjere zdravlja. Tri ljestvice (*Opće zdravlje, Vitalnost, Psihičko zdravlje*) ocjenjuju kompleksniji doživljaj pojedinca, koji je rezultat utjecaja više aspekata zdravlja (18). Maksimalnih 100 bodova na svakoj od navedenih ljestvica postižu ispitanici koji ne primjećuju bilo kakva ograničenja ili nesposobnosti.

Statistika

Rezultate iz ankete SF-36 uobičajeno je prikazivati u obliku profila, ovdje definiranog s 10 točaka. One prezentiraju prosječne rezultate prema područjima zdravlja. Viši rezultat ukazuje na bolji doživljaj zdravlja (18).

Podatci su obrađeni standardiziranom statističkom obradom za SF-36 anketu. U analizi značajnosti razlika koristio se t-test. Razina značajnosti α postavljena je na 0,05.

questionnaire measures as well as interpretation of the total level and differentiation of the eight points in the profile (18).

The questionnaire has eight health scores and two additional general scores, for a total of ten.

1. Physical functioning.
2. Physical role limitations.
3. Bodily pain.
4. General health.
5. Vitality.
6. Social functioning.
7. Emotional role limitations.
8. Mental health.
9. Physical component summary.
10. Mental component summary.

Five scores in the questionnaire (physical role limitations, physical functioning, bodily pain, social functioning, emotional role limitations) define health as the absence of limitations and disability and represent continuous one-dimensional health scores. Three scores (general health, vitality, mental health) score the more complex subjective experience of the individual that is the result of influence from multiple aspects of personal health (18). The maximum of 100 on all of the above scores is achieved by respondents who perceive no limitations or disabilities.

Statistics

Results from the SF-36 questionnaire are usual presented as profiles, which we defined using 10 scores. They represent average results in health scores. Higher results indicate a better perception of personal health (18).

Data were analyzed using standardized statistical analysis for SF-36 questionnaires. The T-test was used to analyze statistical significance in score differences. The significance level α was set at 0.05.

U istraživanje je bio uključen 51 član karizmatičke molitvene zajednice i isti broj ispitanika u kontrolnoj skupini izabranih prema upitniku o socioekonomskom statusu. Članovi molitvene zajednice morali su ispuniti uvjet da su u zajednici duže od godinu dana i da su stariji od 18 godina. Bitna je značajka članova molitvene zajednice da su naglašeno aktivni u organiziranim aktivnostima unutar katoličke crkve, što uključuje i redovno sudjelovanje u evangelizacijskim seminarima, te da se redovito tjedno sastaju u zajedničkoj molitvi, što se nastavlja u slavlju euharistije. U anketi je sudjelovalo više žena nego muškaraca, većina je bila mlađa od 45 godina i pretežito su bili sa srednjom i višom stručnom spremom u odnosu na osnovnu školu i visoku stručnu spremu.

U tablici 2. prikazane su značajke obih skupina glede primanja po članu obitelji i zadovoljstvu vlastitom materijalno-financijskom situacijom.

U obim skupinama jednak je broj zadovoljnih s vlastitom materijalno-financijskom situacijom, po približno petina ispitanika. Ostali su srednje zadovoljni i nezadovoljni, s tim da je nešto veće nezadovoljstvo u kontrolnoj skupini. Prema primanjima po članu obitelji većina je u skupini od 1 000 do 3 000 kn, nešto više ispitanika u kontrolnoj skupini ima primanja iznad 3 000 kn po članu obitelji.

U tablici 3. prikazani su odgovori kontrolne skupine na pitanja o vjeri.

Od 51 ispitanika kontrolne skupine 46 se izjasnilo vjernikom, od toga 13 ide u crkvu redovito nedjeljom, a nikada 20. Kod kuće moli svaki dan 23,

The study included 51 members of a charismatic prayer group and the same number of participants in the control group chosen based on a questionnaire on socioeconomic status. Members of the prayer group had to fulfil the inclusion criterion of being members of the prayer group for more than one year and being older than 18 years of age. An important characteristic of the members of the prayer group was that they were especially active in organizational activities within the Catholic Church, including regular participation in evangelization seminars and regular weekly group prayer meetings which continued in eucharistic celebration. More women than men participated in the study, and most participants were younger than 45 years of age, predominantly with secondary and graduate education in comparison with primary and postgraduate education.

Table 2 shows characteristics of both groups with regard to income per family member and satisfaction with their personal material-financial situation.

The number of participants who were content with their personal material-financial situation was the same in both groups, representing approximately a fifth of the participants. The rest were moderately satisfied and unsatisfied, with slightly higher dissatisfaction in the control group. Regarding income per family member, most participants were in the 1000 to 3000 HRK group, with somewhat more participants in the control group reporting income above 3000 HRK per family member.

TABLICA 2. Socioekonomske karakteristike grupa
TABLE 2. Socioeconomic characteristics of the groups

	Socioekonomske značajke / Socioeconomic characteristics	Molitvena / Prayer group	Kontrolna / Control group
Primanja po članu obitelji / Income per family member	ispod 1000 kn / Below 1000 HRK	10	8
	1000-3000 kn / 1000-3000 HRK	30	27
	iznad 3000 kn / Above 3000 HRK	11	16
Zadovolj. materijal. situacijom / Satisfaction material-financial situation	zadovoljno / Satisfied	11	11
	osrednje / Moderately satisfied	25	20
	nezadovoljno / Unsatisfied	15	20

TABLICA 3. Struktura odgovora kontrolne grupe na pitanja o vjeri
TABLE 3. Responses on questions about religion in the control group

Struktura odgovora kontrolne grupe o vjerskom životu / Responses on questions about religion in the control group		
Vjernik / Religious beliefs	da / Yes ne / No	46 5
Ide u crkvu / Attends church	redovito nedjeljom / Occasionally on Sundays povremeno / Occasionally nikada / Never	13 18 20
Moli kod kuće / Prays at home	svaki dan / Every day povremeno / Occasionally samo u teškim situacijama / Only in difficult times nikada / Never	23 16 2 10
Zdravlje i vjera su povezani / Health and religiousness are related	da / Yes nije siguran/na / Not sure ne / No	30 16 5

a 30 smatra da su vjera i zdravlje povezani. Odgovori ukazuju da ispitanici iz kontrolne skupine također sebe većinom doživljavaju vjernicima.

U tablici 4. prikazani su rezultati ankete SF-36 provedeni u molitvenoj zajednici i kontrolnoj skupini.

Rezultati su prikazani u 10 područja zdravlja. Dobivene vrijednosti prikazane su bodovima. Prikazane su statističke razlike, a gdje je p-vrijednost manja od 0,05 pretpostavili smo postojanje statistički značajne razlike.

U svim manifestacijama zdravlja dobivene su veće vrijednosti u molitvenoj zajednici. Statistički značajne razlike pokazale su se u korist

Table 3 shows responses on questions about religion in the control group.

Out of a total of 51 participants in the control group, 46 reported having religious beliefs and 13 reported regularly attending church on Sundays, whereas 20 reported that they never attend church services. Praying at home every day was reported by 23 participants, and 30 participants believed that faith and health are related. The answers indicated that participants in the control group also mostly saw themselves as religious.

Table 4 shows the results of the SF-36 questionnaire in the prayer and control groups.

TABLICA 4. Rezultati ankete SF-36 u molitvenoj zajednici i u kontrolnoj grupi prikazani u 10 manifestacija zdravlja i P-vrijednost
TABLE 4. Results of the SF-36 questionnaire in the prayer and control groups shown as 10 health scores and P-value

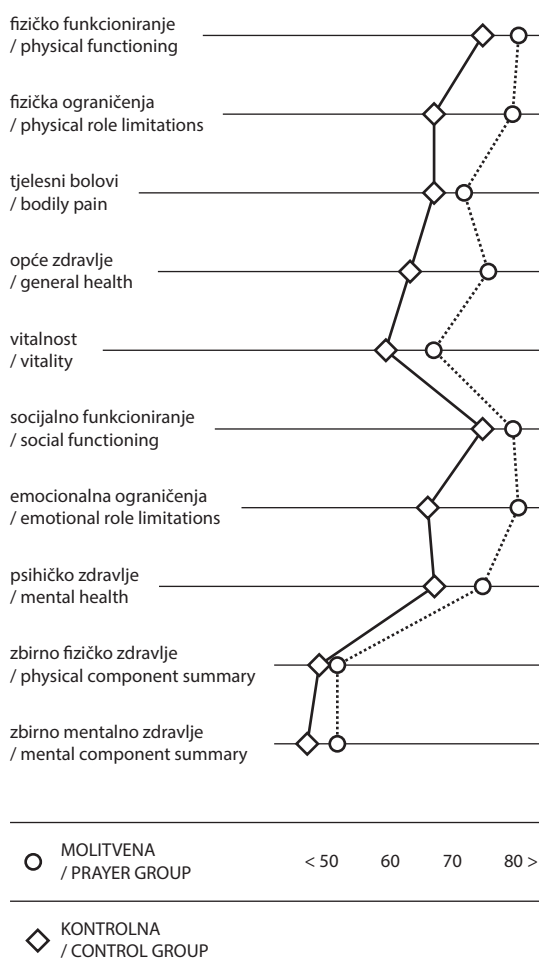
Manifestacija zdravlja / Health score	Molitvena / Prayer group	Kontrolna / Control group	P-vrijednost / P-value
Fizičko funkcioniranje / Physical functioning	80,490	74,510	0,2302
Fizička ograničenja / Physical role limitations	79,902	67,157	0,0627
Tjelesni bolovi / Bodily pain	72,157	67,059	0,2669
Opće zdravlje / General health	75,431	62,686	0,0004
Vitalnost / Vitality	67,255	58,725	0,0129
Socijalno funkcioniranje / Social functioning	80,000	74,510	0,1577
Emocionalna ograničenja / Emotional role limitations	81,046	66,667	0,0322
Psihičko zdravlje / Mental health	74,588	67,137	0,0145
Zbirno fizičko zdravlje / Physical component summary	50,799	48,192	0,1656
Zbirno mentalno zdravlje / Mental component summary	50,562	46,029	0,0199

molitvene zajednice kod općeg zdravlja, vitalnosti, emocionalnih ograničenja, psihičkog zdravlja i zbirnog mentalnog zdravlja.

Na sl. 1. prikazan je profil rezultata u molitvenoj zajednici i kontrolnoj skupini u 10 točaka.

Na svim ljestvicama su viši rezultati u molitvenoj zajednici nego u kontrolnoj skupini. U fizičkom funkcioniranju, fizičkim ograničenjima, tjelesnim bolovima, socijalnom funkcioniranju i zbirnom fizičkom zdravlju razlika postoji, ali je statistički nesigifikantna, premda sva u korist molitvene zajednice. U zbirnom fizičkom zdravlju rezultat je gotovo identičan u obje skupine.

Važna je činjenica da je 2003. godine ista anketa SF-36 provedena na hrvatskoj populaciji (12). U tablici 5. prikazani su rezultati te an-



GRAF 1. Profil rezultata molitvene zajednice i kontrolne grupe.

FIGURE 1. Result profile for the prayer and control groups.

Results are shown based on the 10 health scores. The score values are shown as numbers. Statistical differences are presented as well, and where the P-value was lower than 0.05 we assumed the existence of a statistically significant difference.

All health scores were higher in members of the prayer group. Statistically significant differences were in favor of the prayer group in general health, vitality, emotional role limitations, mental health, and mental component summary.

Figure 1 shows the result profile for the prayer and control groups for 10 scores.

The results for all health scores were higher in the prayer group than in the control group. A difference was observed for physical functioning, physical role limitations, bodily pain, social functioning, and physical component summary, but it was not statistically significant despite being in favor of the prayer group. For physical component summary, the score was nearly identical in both groups.

It is important to note that the same SF-36 questionnaire was used on a Croatian population in 2003 (12). Table 5 shows the results of that survey in comparison with the results from our prayer group.

Statistically significant differences were in favor of the prayer group in all health scores except social functioning.

Figure 2 shows a profile of the results of the 2003 SF-36 survey in the Croatian population and the prayer group results from the present study.

In such profile comparisons, two data points are generally considered the most important: (1) the total profile level; (2) the shape of the profile. We can see that the total profile level of both the control group and the Croatian population in 2003 is lower than the profile of the prayer group. The control group and the 2003

TABLICA 5. Rezultati ankete SF-36 u Hrvatskoj 2003. godine i u molitvenoj zajednici te P-vrijednost
TABLE 5. Results of the 2003 SF-36 questionnaire Croatian survey in comparison with our prayer group with P-values

Manifestacija zdravlja / Health score	Molitvena / Prayer group	HZA 2003* / CHS 2003	P-vrijednost / P-value
Fizičko funkcioniranje / Physical functioning	80,490	70,198	0,0143
Fizička ograničenja / Physical role limitations	79,902	62,734	0,0004
Tjelesni bolovi / Bodily pain	72,157	65,509	0,0452
Opće zdravlje / General health	75,431	55,474	<0,0001
Vitalnost / Vitality	67,255	53,985	<0,0001
Socijalno funkcioniranje / Social functioning	80,000	74,569	0,0565
Emocionalna ograničenja / Emotional role limitations	81,046	70,659	0,0289
Psihičko zdravlje / Mental health	74,588	63,243	<0,0001
Zbirno fizičko zdravlje / Physical component summary	50,799	46,102	0,0043
Zbirno mentalno zdravlje / Mental component summary	50,562	45,667	0,0029

*HZA 2003 – Hrv. zdravstvena anketa 2003.
 / *CHS 2003 – Croatian Health Survey 2003

kete, usporedno s rezultatima naše ankete u molitvenoj zajednici.

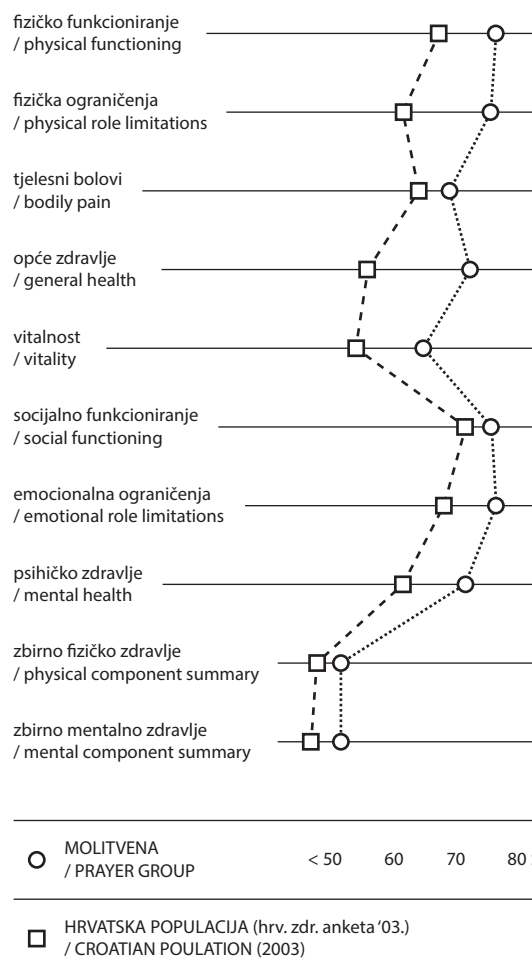
Statistički značajne razlike pokazale su se u korist molitvene zajednice u svim područjima zdravlja osim u socijalnom funkcioniranju.

U obliku profila na grafu u sl. 2. prikazani su rezultati ankete SF-36 u Hrvatskoj i u molitvenoj zajednici.

U ovakvim usporedbama profila općenito se najvažnijim smatraju dva podatka : 1. ukupna razina profila, 2. njegov oblik (18). Tako uočavamo da je ukupna razina kako profila kontrolne skupine, tako i hrvatskog profila, niža od profila molitvene zajednice. Na svim ljestvicama kontrolne skupine i hrvatskog profila zabilježeni su niži rezultati nego na ljestvicama molitvene zajednice.

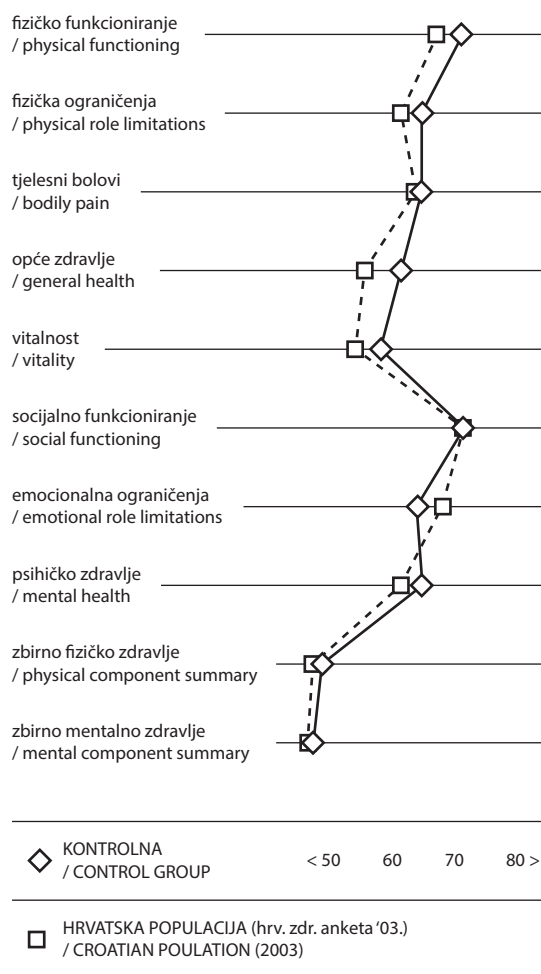
Oblik krivulje molitvene zajednice ne prati trend kontrolne skupine i hrvatske populacije. Profil molitvene zajednice ne pokazuje pad u fizičkim ograničenjima, u općem zdravlju ima snažniji trend porasta u odnosu na druga dva profila te ne pokazuje trend pada u emocionalnim ograničenjima, koji je vidljiv u profilu kontrolne skupine.

Sl. 3. prikazuje profil kontrolne skupine i hrvatske populacije. Očito je da je razina profila tu



GRAF 2. Profil rezultata molitvene zajednice i hrvatske populacije 2003. godine.

FIGURE 2. Profile of the results from the prayer group and the Croatian population in 2003.



GRAF 3. Profil rezultata kontrolne grupe i hrvatske populacije 2003. godine.

FIGURE 3. Result profile for the control group and the Croatian population from 2003.

gotovo podjednaka, te i oblik profila u kontrolnoj skupini prati trend profila hrvatske populacije. Rezultati na ljestvicama zbirnog fizičkog i zbirnog mentalnog zdravlja su podjednaki, s tim da su rezultati na ljestvicama općeg zdravlja i vitalnosti u prosjeku najniži.

RASPRAVA

Kvaliteta i intenzitet duhovnog života u odnosu na različite aspekte doživljaja zdravlja mora biti tema od interesa za javno zdravstvo (19,20). Važno je zamijetiti da je unutar okvira duhovnog života u velikom broju studija ove vrste naglasak na vjerskom životu, budući da je

Croatian population had lower results in all scores than in the prayer group.

The shape of the curve for the prayer group does not follow the trends of the control group and the 2003 population. The profile of the prayer group does not show a reduction in physical role limitations, it shows a stronger increase in general health in comparison with the other two profiles, and does not show a reduction in emotional role limitations that can be observed in the control group profile.

Figure 3 shows the profile of the control group and the Croatian population from 2003. It is clear that the profile levels are almost identical, as are the shapes of the profiles, with the control group profile following the trends of the 2003 profile. Results on the physical component summary and mental component summary scales were almost identical, whereas the scores for general health and vitality were the lowest on average for both profiles.

DISCUSSION

The quality and intensity of spiritual life in relation to different aspects of subjective health perception should be a topic of interest to public health (19,20). It is important to note that many of these studies on spiritual life emphasize religious life, since it is possible to precisely define religious life within the broader spectrum of spirituality using established measurement tools (21,22), such as DUREL (The Duke University Religion Index) and RCOPE (Religious Coping Scale). Using these instruments, it is possible to correlate the intensity and quality of religious life with various aspects of subjective perception of personal health, which can also be quantified (23). No quantification of the quality and intensity of spiritual life was performed in the present study due to the increase in technical complexity this would have resulted in, but we attempted to ameliorate this

unutar spektra duhovnosti vjerski život moguće precizno definirati za što postoje etablirani mjerni instrumenti (21,22), kao što su DUREL (The Duke University Religion Index) i RCOPE (Religious Coping Scale). Koristeći mjerne instrumente moguće je postaviti u korelaciju intenzitet i kvalitetu vjerskog života s različitim aspektima doživljaja zdravlja, koji se također mogu kvantificirati (23). U ovom istraživanju kvantifikacija kvalitete i intenziteta duhovnog života nije učinjena zbog usložnjavanja tehničkih zadaća istraživačima, pa se dizajnom studije nastojalo ublažiti ovaj nedostatak izborom ispitanika za koje se može pretpostaviti s dostatnom razinom sigurnosti da predstavljaju skupinu intenzivnog i naglašeno kvalitetnog vjerskog života kakva je karizmatična molitvena zajednica. Intenzivan vjerski život pretpostavlja često sudjelovanje u organiziranom životu crkve kao i u osobnim vjerskim aktivnostima. Članovi molitvene zajednice trebali bi imati, osim intenzivnijeg vjerskog života od članova kontrolne skupine, i drugačiju kvalitetu religijskog života od članova kontrolne skupine, iako se i ta sastoji gotovo u cijelosti od vjernika (24,25). Drugačija bi kvaliteta vjerskog života kod članova molitvene zajednice podrazumijevala višu razinu intrinzične religioznosti u odnosu na članove kontrolne skupine, što je usmjerena prije svega prema ispunjenju vjerske životne aktivnosti (21,23). Za članove kontrolne skupine pretpostavka je da su vjerske aktivnosti dominantno ekstrinzične, dakle korištene su kao medijator što pomaže ostvarenju nekih drugih važnih životnih ciljeva, npr. osjećaju pripadnosti, postizanju socijalnih i ekonomskih ciljeva (21,26).

Drugim riječima, cilj se ovog istraživanja može postaviti kao odgovor na pitanje postoje li razlike u doživljaju vlastita zdravlja u skupini ljudi intenzivnog i naglašeno intrinzičnog vjerskog života u odnosu na kontrolnu skupinu kod koje je intenzitet vjerskog života znatno niži i više ekstrinzičan.

limitation by selecting participants who could be reasonably assumed to represent a population with intensive and higher quality religious life that would be expected from a charismatic prayer group. Intensive religious life implies regular participation in organized church activities as well as personal religious activities. Prayer group members were assumed to have more intensive religious life than members of the control group but also a different quality of religious life than members of the control group, although participants in the control group were also almost all religious (24,25). Different quality of religious life in the prayer group would include a higher level of intrinsic religiosity in comparison with members of the control group, primarily manifesting as faith permeating every activity in the members' lives (21,33). Members of the control group were assumed to engage in religious activity as a predominantly extrinsic activity, i.e. using them as a mediator that facilitates the achievement of other important life goals such as a feeling of belonging and other social and economic goals (21,26).

In other words, the goal of this study was to answer the question whether there were differences in the subjective perception of personal health in a sample population with an intensive and decidedly intrinsic religious life in comparison with the control group in which the intensity of religious life was significantly lower and more extrinsic.

The results of the SF-36 survey in the prayer group found nominally better results in all 10 health scores in comparison with the control group and the Croatian population. There was a statistically significant difference between participants from the prayer group and participants in the control group in scores on general health, vitality, emotional role limitations, mental health, and mental component summary, whereas there was a statistically significant difference between the

Rezultati ankete SF-36 u molitvenoj zajednici pokazuju u svih 10 ljestvica zdravlja nominalno bolje rezultate u odnosu na kontrolnu skupinu i hrvatsku populaciju. Statistički značajna razlika između ispitanika molitvene skupine i ispitanika kontrolne skupine postoji kod manifestacija općeg zdravlja, vitalnosti, emocionalnih ograničenja, psihičkog zdravlja i zbirnog mentalnog zdravlja, dok se između ispitanika molitvene zajednice i ispitanika hrvatske populacije pronašla statistički značajna razlika u svim manifestacijama zdravlja osim u socijalnom funkcioniranju. S druge strane, statistički značajne razlike nema između molitvene i kontrolne grupe u fizičkim ograničenjima, fizičkom funkcioniranju, tjelesnim bolovima, socijalnom funkcioniranju i zbirnom fizičkom zdravlju. Dakle, unatoč tome da se doživljava fizičkog zdravlja i socijalnog funkcioniranja kod pripadnika molitvene zajednice statistički značajno ne razlikuje od kontrolne skupine, pripadnici molitvene zajednice osjećaju se emocionalno i mentalno zdravijima, vitalnijima, vezujući uz vlastito zdravlje očito pozitivniju percepciju od pripadnika kontrolne skupine, kao i hrvatske populacije (18). Podatak da je u molitvenoj zajednici ukupno mentalno zdravlje statistički značajno bolje u odnosu na kontrolnu skupinu i hrvatsku populaciju možemo objasniti time da fizički bolovi u njenih pripadnika manje utječu na opći osjećaj dobrog bivstvovanja (27-29).

Između ispitanika molitvene zajednice i hrvatske populacije statistički značajna razlika postoji u svim ljestvicama zdravlja osim u socijalnom funkcioniranju. Pronašlo se da ni hrvatska populacija nema jednaki profil u svim dijelovima države. Najpovoljniji profil pokazala je zapadna Hrvatska (18), iz koje upravo potječu članovi kontrolne skupine u ovom istraživanju. Kako nema statistički značajne razlike u socijalnom funkcioniranju niti molitvene, niti kontrolne skupine prema hrvatskoj populaciji, nameće se zaključak da socijalno funkcioniranje ovisi u manjoj mjeri o duhov-

prayer group and the Croatian population in all health scores except for social functioning. On the other hand, there were no statistically significant differences between the prayer and control groups in physical role limitations, physical functioning, bodily pain, social functioning, and physical component summary. Therefore, despite the fact that general health and social functioning were not statistically significantly different in comparison with the control group, members of the prayer group felt emotionally and mentally more healthy, more vital, and clearly had a more positive perception of their personal health in comparison with both the control group and the Croatian population (18). The fact that the mental component summary score was statistically significantly better in the prayer group in comparison with the control group and the Croatian population can be explained by physical pain in the members of the prayer group having less of an impact on the general feeling of wellbeing (27-29).

There was a statistically significant difference in all health scores except social functioning when comparing members of the prayer group with the Croatian population. We also found that the Croatian population does not have the same profile in all parts of the country. The best profile was found in western Croatia (18), which is where the control group participants were from in our study. As there was no statistically significant difference in social functioning when comparing the prayer and control group with the Croatian population, we are led to conclude that social functioning depends on the spirituality of the individual only to a lesser extent and is more influenced by other factors such as general societal conditions, the influence of family, career satisfaction, and membership in some social groups. According to the available literature, spiritual life could also influence the success of social adaptation, which was not confirmed in the

noj usmjerenosti pojedinca, koliko o drugim čimbenicima npr. općim društvenim uvjetima, utjecaju obitelji, profesionalnom zadovoljstvu, pripadnosti nekim društvenim skupinama. Prema dostupnoj literaturi duhovni život bi mogao utjecati i na uspješnost socijalne adaptacije, što u ovom istraživanju nismo potvrdili (30,31). Na ograničenja vezana uz socijalni život i ostvarenje životnih uloga očito je vrlo teško utjecati. Razvijen duhovni život, iako nije značajnije promijenio socijalno funkcioniranje moguće je povezati sa smanjenjem negativnog utjecaja ograničenog "socijalnog blagostanja" na psihičko zdravlje. Kod hrvatske populacije i kontrolne skupine vitalnost i opće zdravlje (uz zbirno mentalno i zbirno fizičko zdravlje) imaju najnižu razinu na profilu. Prema literaturi to je karakteristično za opću i ne-kliničku populaciju (18). U molitvenoj zajednici osjećaj vitalnosti i općeg zdravlja su značajno pozitivniji nego što su u kontrolnoj skupini i hrvatskoj populaciji, s time da je razina tjelesnih bolova u molitvenoj zajednici ispod razine općeg zdravlja u profilu rezultata, za razliku od kontrolne skupine i hrvatske populacije gdje je osjećaj općeg zdravlja negativnije percipiran od osjećaja tjelesnih bolova. Može li se to objasniti ispunjenijim duhovnim životom? Negativno formuliran odgovor na ovo pitanje donosi glavno ograničenje istraživanja da nađene razlike u subjektivnom osjećanju zdravlja između promatranih skupina, detektirane upitnikom SF-36, moguće nisu povezane s kvalitetom duhovne usmjerenosti članova, već s nekom drugom značajkom koja razlikuje promatrane skupine.

ZAKLJUČCI

Ovim istraživanjem pokazalo se da unatoč tome što je od 51 ispitanika u kontrolnoj grupi čak 46 vjernika, od čega 30 vjeruje u povezanost vjere i zdravlja, 23 redovito moli, a 13 ide redovito u crkvu, postoji statistički značajna razlika u percepciji zdravlja, odnosno postoji

present study (30,31). Limitations concerning social life and achieving life roles are obviously very hard to influence. A developed spiritual life, despite not significantly changing social functioning, can be associated with a reduction in the negative effect of limited "social wellbeing" on mental health. In both the Croatian population and the control group, the scores for vitality and general health (in addition to mental and physical component summary) were the lowest in the profile. According to the literature, this is characteristic for the general and non-clinical population (18). In prayer group members, the feelings of vitality and general health were significantly more positive than in the control group and the Croatian population, with the bodily pain score in the prayer group being below the level of general health in the results profile, in contrast to the control group and Croatian population where the general health was perceived more negatively than bodily pain. Can this be explained by a more fulfilled spiritual life? A negative answer to this question highlights the main limitation of the study, which is that the differences found in the subjective feeling of health between the observed groups using the SF-36 questionnaire might not be associated with the spirituality of participants but may instead be associated with some other factor that differentiates the observed groups.

CONCLUSIONS

This study has shown that despite the fact that 46 out of 51 participants in the control group expressed religious beliefs, of which 30 believed in a connection between faith and health, 23 prayed regularly, and 13 attended church regularly, there was a statistically significant difference in health perception, i.e. there was a significant difference in general health, vitality, emotional role limitations, mental

značajna razlika u percepciji općeg zdravlja, vitalnosti, emocionalnog ograničenja, psihičkog zdravlja i zbirnog mentalnog zdravlja između te skupine i skupine molitvene zajednice. Istraživanje ukazuje na kakvoću vjerskog života kao bitnog razlikovnog čimbenika između skupina, što dovodi do zamijećene razlike.

health, and mental component summary between the control group and the group formed from members of a prayer group. Therefore, this study indicates that the quality of religious life was a significant differentiating factor between the groups that resulted in the observed differences.

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Rodne i dobne razlike u socijalnoj anksioznosti mjerene hrvatskom inačicom Liebowitzevog upitnika socijalne anksioznosti na reprezentativnom uzorku stanovnika Republike Hrvatske

/ Gender and Age Differences in Social Anxiety as Measured by the Croatian Version of the Liebowitz Social Anxiety Scale on a Representative Sample of the Population of the Republic of Croatia

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Osnovna svrha istraživanja bila je provjeriti rodne i dobne razlike u socijalnoj anksioznosti te metrijske karakteristike hrvatske inačice Liebowitzeve ljestvice socijalne anksioznosti (1). Provedeno je istraživanje na reprezentativnom uzorku od 1000 građana i građanki Republike Hrvatske korištenjem Hendalovog on line panela istraživanja. Rezultati pokazuju da se podljestvicom straha objašnjava 52,1 % varijance za strah i podljestvicom izbjegavanja 47,5 % za izbjegavanje. Na obje ljestvice dobivena su 4 ista faktora s podudaranjem u 20 od 24 tvrdnje te se tri faktora mogu nazvati istim imenom kao faktori iz originalne Liebowitzeve ljestvice. Rezultati na svih 7 predloženih mjera koje se dobivaju upitnikom ukazuju na statistički značajno veći rezultat kod žena u odnosu na muškarce te kod mlađih osoba u odnosu na starije sa srednjim veličinama efekta za ukupne rezultate, a udio socijalno anksioznih sudionika (14,4 %) blizak je podacima iz literature. Zaključno se ljestvica može smatrati adekvatnom te primjenjivom u daljnjim istraživanjima.

/The main purpose of this study was to examine gender and age differences in social anxiety and the metric characteristics of the Croatian version of the Liebowitz Social Anxiety Scale (1). The study was conducted on a representative sample of 1000 citizens of the Republic of Croatia using Hendal's online research panel. The results show that the fear subscale explains 52.1% of the variance for fear and the avoidance subscale explains 47.5% for avoidance. Four of the same factors were obtained on both scales; matching in 20 of the 24 statements, and three factors could be called by the same name as the factors from the original Liebowitz scale. The results of all seven proposed questionnaire measures indicate a statistically significantly higher score for women compared with men and for younger people compared with the elderly, with average effect sizes for overall results, and a proportion of socially anxious participants (14.4%) that was similar to the literature data. In conclusion, the scale can be considered adequate and applicable in further research.

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Socijalna anksioznost je kronično stanje u kojem je pojedinac obuzet strahom od socijalnih kontakata. Strah se odnosi na situacije koje uključuju socijalne kontakte s nepoznatim osobama, aktivnosti koje podrazumijevaju druge ljude, formalna i neformalna okupljanja i izlaganja kao i sve ostalo što uključuje ponašanje u kontaktu s drugim ljudima (1). Osnovna podloga socijalne anksioznosti leži u zabrinutosti zbog opažanja i procjenjivanja od drugih. Socijalno anksiozne osobe su u stalnom strahu da ih okolina procjenjuje te ih stoga frustriraju sve situacije koje uključuju druge, posebno nepoznate osobe. Situacije koje izazivaju anksioznost prema Holtu i sur. (2) mogu se podijeliti na situacije koje zahtijevaju formalni govor, neformalnu interakciju, razgovor (izražavanje neslaganja) s osobama od autoriteta i promatranje od strane drugih tijekom izvođenja neke radnje.

Prevalencija socijalne anksioznosti, prema DSM-IV, kreće se oko 13,3 % i obilježena je smanjenom općom kvalitetom života pojedinca zbog ometanja svakodnevnog života socijalno anksiozne osobe kao i povećanog rizika od suicidalnih misli i suicidalnosti općenito (1). Dijeli se na negeneraliziranu i generaliziranu socijalnu anksioznost, a glavna razlika između dvaju tipova anksioznosti pronalazi se u tome da je kod generalizirane socijalne anksioznosti osoba anksiozna u većini životnih situacija, a kod negeneralizirane se to odnosi na manji broj socijalnih situacija. Sukladno navedenom, u prvom slučaju utjecaj se primjećuje na većini sfera života pojedinca i znatnije pogađa njegovo svakodnevno funkcioniranje. Socijalna anksioznost se manifestira fiziološkim, emocionalnim, kognitivnim te bihevioralnim aspektima odnosno reakcijama. U fiziološke reakcije ubrajaju se npr. znojenje, crvenjenje, drhtanje i vrtoglavica. Od emocionalnih reakcija pojavljuju se strah, nelagoda, nervoza, povlačenje u sebe i osjećaj usamljenosti. Slijede kognitivne

Social anxiety is a chronic condition in which an individual is overwhelmed by fear of social contact. Fear refers to situations involving social contacts with strangers, activities that involve other people, formal and informal gatherings and presentations, as well as anything else that involves behavior in contact with other people (1). The underlying basis of social anxiety lies in apprehension toward being observed and evaluated by others. Socially anxious persons are in constant fear of being evaluated by their environment and therefore frustrated by all situations involving other, especially unknown persons. Situations that cause anxiety, according to Holt and colleagues (2), can be divided into situations that require formal speech, informal interaction, talking (expressing disagreement) with authority figures, and observing others while performing an action.

The prevalence of social anxiety, according to DSM-IV, is around 13.3% and is characterized by a diminished overall quality of life for the individual that interferes with the daily life of the socially anxious person, as well as an increased risk of suicidal thoughts and suicidality in general (1). It is divided into non-generalized and generalized social anxiety, and the main difference between the two types of anxiety is that in generalized social anxiety the person is anxious in most life situations, whereas non-generalized social anxiety refers to a smaller number of social situations. Accordingly, the influence of the former is noticeable in most spheres of life of the individual and significantly affects their daily functioning. Social anxiety manifests in physiological, emotional, cognitive, and behavioral aspects, i.e. reactions. Physiological reactions include, for example, sweating, redness, shivering, and dizziness. Emotional reactions include fear, discomfort, nervousness, withdrawal, and a sense of loneliness. These reactions are followed by cognitive reactions, for

reakcije kao npr. razmišljanja o negativnim posljedicama poput ismijavanja od drugih. I na kraju bihevioralne reakcije odnosno izbjegavanje situacija koje bi mogle dovesti do socijalne anksioznosti, skrivanje od drugih, nemogućnost stvaranja novih prijateljstava i slično.

Teorije socijalne anksioznosti podrazumijevaju postojanje različitih rizičnih čimbenika koji su relevantni za sklonost ovom psihičkom poremećaju (3). Čimbenici su mnogobrojni, a osim genetskih i okolinskih uključuju i jednostavne demografske čimbenike poput dobi i spola.

Istraživanja rodni razlika u socijalnoj anksioznosti uglavnom potvrđuju izraženiju socijalnu anksioznost kod žena (djevojaka/djevojčica) u odnosu na muškarce (mladiće/dječake) i na svjetskoj razini (4-7) i u istraživanjima na Hrvatskoj populaciji (3). Ipak postoje istraživanja koja daju drugačije nalaze i ukazuju da je socijalna anksioznost podjednako izražena kod žena i muškaraca (8, 9).

Rodne razlike, odnosno pretpostavke o izraženijoj socijalnoj anksioznosti kod žena, povezuju se najviše s pretpostavkom o genetičkim i neurobiološkim čimbenicima (10) te se pokazalo da su djevojke sklonije neuroticizmu koji je usko vezan i uz socijalnu anksioznost, ali također mogu biti vezane i uz psihosocijalne čimbenike te odgoj djevojčica u odnosu na dječake.

Što se tiče istraživanja socijalne anksioznosti ovisno o dobi, istraživanja pokazuju da se socijalna anksioznost najviše pojavljuje u razdoblju rane i srednje adolescencije te da je prosječna dob pojave ovog poremećaja između 10. i 13. godine (8). U odrasloj dobi je ovaj poremećaj znatno rjeđi i ako postoji najčešće je u komorbiditetu s depresijom ili paničnim poremećajem. S druge strane, ako se javi u ranijoj dobi (npr. u dobi od oko 8 godina), rizični je faktor za pojavu generalizirane socijalne anksioznosti (4).

Teorijska podloga za dob kao jedan od čimbenika socijalne anksioznosti i jasan pokazatelj

example thinking about negative consequences such as ridicule by others. Finally, there are behavioral reactions, i.e. avoiding situations that could lead to social anxiety, hiding from others, inability to form new friendships, etc.

Theories of social anxiety imply the existence of various risk factors that are relevant to the propensity for this psychological disorder (3). The factors are numerous, and besides genetic and environmental they also include simple demographic factors such as age and gender.

Studies of gender differences in social anxiety generally confirm more pronounced social anxiety in women/girls than men/boys both globally (4, 5, 6, 7) and in studies in the Croatian population (3). However, there are studies that reported different findings and suggest that social anxiety is equally pronounced in women and men (8, 9).

Gender differences, or the assumption of more pronounced social anxiety in women, are primarily associated with the assumption of genetic and neurobiological factors (10), and girls have been shown to be more prone to neuroticism, which is also closely related to social anxiety but may also be related to psychosocial factors and the different upbringing of girls in comparison with that of boys.

With regard to age-dependent social anxiety research, research has shown that social anxiety most commonly occurs during the period of early and middle adolescence and that the average age of onset of this disorder is between the age of 10 and 13 (8). In adulthood, this disorder is much less common and, if present, is most commonly in comorbidity with depression or panic disorder. On the other hand, if it occurs at an earlier age (e.g. around the age of 8) it is a risk factor for the onset of generalized social anxiety (4).

The theoretical basis for age as one of the factors of social anxiety and a clear indicator of the most common diagnosis in the pre-ado-

o najčešćoj dijagnostici u predadolescentskom i adolescentskom razdoblju života leži u pretpostavci o povećanim potrebama za socijalnim interakcijama, a ne u većoj razini stresa unutar tih interakcija (11). To je životno razdoblje obilježeno povećanim potrebama za socijalnim interakcijama kao i dokazivanjem i ostvarivanjem vlastitog identiteta unutar tih interakcija te samim time interferira s ostalim potrebama. Također je važno spomenuti da su strahovi u socijalnim situacijama u određenoj dobi opravdani i poželjni (poput npr. straha od stranaca i sl.) te da se pojedinci znatno razlikuju po strahu u socijalnim situacijama, ali u trenutku kada ti strahovi počnu narušavati kvalitetu života možemo govoriti o socijalnoj anksioznosti.

Jedna od mjera socijalne anksioznosti koja se temelji na Holtovoj (2) definiciji situacija koje izazivaju socijalnu anksioznost, tj. one koje zahtijevaju formalni govor, neformalnu interakciju, razgovor (izražavanje neslaganja) s osobama od autoriteta i promatranje od strane drugih tijekom izvođenja neke radnje je i Liebowitzev Upitnik socijalne anksioznosti (*Liebowitz Social Anxiety Scale* --LSAS-SR; Liebowitz, 1987; 1). Ovaj upitnik odabran je za prijevod te primjenu na reprezentativnom uzorku stanovnika Republike Hrvatske zbog nepostojanja adekvatnih ljestvica za mjerenje socijalne anksioznosti u Republici Hrvatskoj. Postojeće ljestvice odnose se na anksioznost općenito, ali ne i na ovu specifičnu vrstu anksioznosti. Radi toga je ova ljestvica prevedena kako bi se koristila u ovom i drugim istraživanjima.

Ljestvica se sastoji od 24 čestice te je razvijena na način da mjeri socijalnu interakciju i socijalnu izvedbu kojih se socijalno anksiozne osobe boje ili ih izbjegavaju. Socijalna interakcija obuhvaća sve situacije koje se tiču verbalne ili neverbalne komunikacije s drugim osobama poput tvrdnji koliko vas je strah (ili koliko izbjegavate situacije) razgovaranja s ljudima koje dobro ne poznajete te koliko vas je strah (ili koliko izbjegavate situacije) upoznavanja

lescent and adolescent stages of life lies in the assumption of increased need for social interactions rather than greater levels of stress within these interactions (11). This period of life is characterized by an increased need for social interactions as well as proving and realizing one's identity within those interactions, and thus interferes with other needs. It is also important to mention that fears in social situations at a certain age are justified and desirable (such as fear of strangers, etc.) and that individuals differ significantly in their level of fear in social situations. However, at the point when these fears begin to impair quality of life it can be said we are dealing with social anxiety.

One of the measures of social anxiety based on Holt's (2) definition of situations that cause social anxiety, i.e. those requiring formal speech, informal interaction, talking (disagreeing) with authority figures, and being observed by others while performing an action, is the Liebowitz Social Anxiety Scale – LSAS-SR; Liebowitz, 1987 (1). This questionnaire was selected for translation and application on a representative sample of the population of the Republic of Croatia due to the lack of adequate scales for measuring social anxiety in the Republic of Croatia. Existing scales refer to anxiety in general, but not to this specific type of anxiety. For this reason, this scale was translated for use in this and other studies.

The scale consists of 24 statements and was developed to measure the social interaction and social performance that socially anxious persons fear or avoid. Social interaction covers all situations concerning verbal or non-verbal communication with others, such as statements about how much you are afraid (or how much you avoid situations) of talking to people you do not know well and how much you are afraid (or how much you avoid situations) of meeting strangers. Social performance refers to situations where you perform some activities in the presence of others, such as statements on how

nepoznatih ljudi. Socijalna izvedba odnosi se na situacije obavljana nekih aktivnosti u prisutnosti drugih osoba kao kod tvrdnji koliko vas je strah (ili koliko izbjegavate situacije) pisanja dok vas netko promatra te koliko vas je strah (ili koliko izbjegavate situacije) glumljenja, izvođenja ili držanja govora ispred publike. Ljestvica socijalne interakcije ima 11 čestica, a ljestvica socijalne izvedbe 13 i na svakoj od čestica osoba treba procijeniti koliki joj je strah (1 – nema straha, 2 – mali strah, 3 – srednji strah i 4 – jaki strah) od te situacije i koliko ju izbjegava (1 – nikada, 2 – ponekad, 3 – često i 4 – vrlo često). Time ljestvica daje 7 rezultata: strah od socijalne interakcije, strah od socijalne izvedbe, izbjegavanje socijalne interakcije, izbjegavanje socijalne izvedbe, ukupni strah, ukupno izbjegavanje te ukupnu socijalnu anksioznost.

Provjere psihometrijskih karakteristika ljestvice socijalne anksioznosti u Kolumbiji, gdje je ljestvica i konstruirana, pokazuju da je ljestvica socijalne interakcije više povezana s Ljestvicom socijalne anksioznosti, a Ljestvica socijalne izvedbe sa Ljestvicom socijalne fobije Matticka i Clarkea (1998, prema 1), a obje ljestvice su valjane i pouzdane. Ljestvica socijalne anksioznosti i Ljestvica socijalne fobije Matticka i Clarka već su prevedene i korištene na hrvatskom govornom području (npr. Juretić, 2018) (12) te na hrvatskom uzorku daju visoke Cronbach alfa koeficijente pouzdanosti (0,90 i 0,91). Dodatno se pokazalo da su Liebowitzeve ljestvice visoko pouzdane te Cronbach alfa koeficijenti iznose od 0,81 za strah od izvedbe pa sve do 0,96 za ukupnu socijalnu anksioznost, a interkorelacije između pojedinih rezultata su vrlo visoke i manje između ljestvica interakcije i izvedbe nego unutar ljestvice interakcije i unutar ljestvice izvedbe. Autori također potvrđuju visoku stabilnost u mjerenju nakon 12 tjedana te značenju konvergentne valjanosti u povezanosti s ostalim ljestvicama socijalne anksioznosti i izbjegavanja (0,35 – 0,77). Osim naznačenih mjera dobivenih na klinič-

much you are afraid (or how much you avoid situations) of writing while people watching you and how much you are afraid (or how much you avoid situations) of acting, performing, or speaking in front of an audience. The social interaction scale has 11 statements and the social performance scale has 13, with a participant having to estimate for each statement how much he or she is afraid (1 – no fear, 2 – small fear, 3 – medium fear, and 4 – severe fear) and how much they avoid it (1 – never, 2 – sometimes, 3 – often, and 4 – very often). Thus, the scale gives 7 results: fear of social interaction, fear of social performance, avoidance of social interaction, avoidance of social performance, total fear, total avoidance, and total social anxiety.

Examination of the psychometric characteristics of the Social Anxiety Scale in Columbia, where the scale was created, showed that the Social Interaction Scale was more related to the Social Anxiety Scale and the Social Performance Scale was more related to the Social Phobia Scale of Mattick and Clarke (1998, according to 1), and both scales were valid and reliable. The Mattick and Clark Social Anxiety Scale and the Social Phobia Scale have already been translated and used in the Croatian speaking area (e.g. Juretić, 2018) (12) and have high Cronbach's alpha coefficients (0.90 and 0.91). In addition, Liebowitz's scales were found to be highly reliable and the Cronbach's alpha coefficients ranged from 0.81 for fear of performance to 0.96 for overall social anxiety, with intercorrelations between scores being very high and lower between the interaction and performance scales than within the interaction scale and within the performance scale. The authors also confirmed the high stability in a measurement after 12 weeks and the importance of convergent validity through correlation with other scales of social anxiety and avoidance (0.35-0.77). In addition to the indicated measures obtained from clinical trials, all of these psychometric characteristics were confirmed by

kim ispitivanjima sve navedene psihometrijske karakteristike potvrđene su i na verziji upitnika za samoprocjenu (13) te se pokazalo da obje verzije pokazuju znatnu konvergentnu te diskriminantnu valjanost u smislu veće povezanosti s mjerama socijalne anksioznosti nego s mjerama depresije. Ukupan rezultat na ljestvici najčešće se koristi kao mjera socijalne anksioznosti te provjere ljestvice na socijalno anksioznim pojedincima ukazuju da granične vrijednosti koje najbolje razlikuju generaliziranu te negeneraliziranu anksioznost iznose 30 i 60 bodova.

CILJ

Prijevod Ljestvice socijalne anksioznosti omogućava korištenje u budućim istraživanjima kao i provjeru još uvijek nejednoznanih rezultata malobrojnih istraživanja na velikim reprezentativnim uzorcima povezanih s rodnim te dobim razlikama na hrvatskoj populaciji.

Stoga je osnovni cilj istraživanja provjeriti metrijske karakteristike hrvatske inačice Liebowitzvog Upitnika socijalne anksioznosti te ispitati postoje li razlike u izraženosti socijalne anksioznosti prema dobi i spolu sudionika.

METODA

Sudionici

Istraživanje je provedeno na reprezentativnom uzorku građana i građanki Republike Hrvatske (N = 1000) starijih od 15 godina prema 4 kriterija: veličina naselja, regija, spol i dob sudionika. Uzorak je rađen temeljem dvostruke stratifikacije prema 6 regija Republike Hrvatske (Zagreb, Sjeverna Hrvatska, Slavonija, Lika, Kordun i Banija, Istra, Hrvatsko primorje i Gorski kotar te Dalmacija) i 4 veličine naselja (Više od 100 000 stanovnika, 10 001 – 100 000, 2001 – 10 000 i do 2000 stanovnika).

the self-completion questionnaire version (13), and both versions were shown to exhibit considerable convergent and discriminate validity in terms of greater association with measures of social anxiety than with measures of depression. The total score on the scale was most commonly used as a measure of social anxiety, and scale checks on socially anxious individuals indicate that thresholds that best distinguish between generalized and non-generalized anxiety are 30 and 60 points, respectively.

AIM

Translation of the Social Anxiety Scale in order to enable its use in future research as well as to check the still inconsistent results of a few studies on large representative samples related to gender and age differences in the Croatian population.

Therefore, the main objective of the study was to check the metric characteristics of the Croatian version of the Liebowitz Social Anxiety Scale and to examine whether there are differences in social anxiety by age and gender of the participants.

METHOD

Participants

The study was conducted on a representative sample of citizens of the Republic of Croatia (N = 1000) older than 15, according to 4 criteria: settlement size, region, gender, and age of the participant. The sample was based on double stratification according to 6 regions of the Republic of Croatia (Zagreb, Northern Croatia, Slavonia, Lika, Kordun and Banija, Istria, Croatian Littoral, and Gorski kotar and Dalmatia) and 4 settlement sizes (More than 100 000 inhabitants, 10 001-100 000, 2001-10 000 and up to 2000 inhabitants).

U tablici 1 prikazan je ostvareni uzorak u ovom istraživanju s obzirom na dob i spol sudionika istraživanja.

Postupak prijevoda ljestvice

Prije provođenja istraživanja na populaciji građana i građanki Republike Hrvatske Liebowitzeva ljestvica je prevedena na hrvatski jezik. Da bismo bili sigurniji u točnost prijevoda ljestvice korišten je postupak dvostrukog prijevoda. Tako je autorica ljestvicu prvo prevodila s engleskog na hrvatski jezik te je nakon toga napravljen ponovni prijevod ljestvice s hrvatskog jezika na engleski. Ponovni prijevod s hrvatskog na engleski napravila je psihologinja s dobrim znanjem engleskog jezika. Nakon dvostrukog prijevoda uspoređene su dvije

Table 1 shows the sample used in this study by age and gender of study participants.

Scale translation procedure

Before conducting the study on the population of citizens of the Republic of Croatia, the Liebowitz scale was translated into Croatian. In order to assure the accuracy of the translation, a double translation procedure was used. Thus, the author first translated the scale from English into Croatian and after that the scale was re-translated from Croatian into English. The re-translation from Croatian into English was performed by a psychologist with a good knowledge of English. After the double translation, the two English versions of the questionnaire were compared (the original and the ver-

TABLICA 1. Uzorak sudionika s obzirom na spol i dob sudionika istraživanja
TABLE 1. Participants sample according to gender and age

Dob / Age	Spol / Gender	Broj sudionika / Number of participants	Udio sudionika (%) / Percentage of participants
15 – 24	M	48	5
	Ž / F	91	9
	Ukupno / Total	139	14
25 – 34	M	67	7
	Ž / F	94	9
	Ukupno / Total	161	16
35 – 44	M	72	7
	Ž / F	85	9
	Ukupno / Total	157	16
45 – 54	M	89	9
	Ž / F	84	8
	Ukupno / Total	173	17
55 – 64	M	70	7
	Ž / F	91	9
	Ukupno / Total	161	16
65+	M	131	13
	Ž / F	78	8
	Ukupno / Total	209	21
Ukupno Hrvatska / Total Croatia		1000	100

M – Male
F – Female

engleske verzije upitnika (originalna i verzija prevedena iz hrvatske inačice) i ustanovljeno je da se nova engleska verzija razlikuje od stare u dvije riječi. Kako su razlike u engleskom govornom području sinonimi, prijevod se smatrao u potpunosti adekvatnim. U svrhu veće sigurnosti u ispravnost prijevoda sve tri verzije ljestvice (originalna engleska verzija, verzija prevedena na hrvatski te verzija ponovno prevedena na engleski) su poslana na reviziju magistri znanosti s područja socijalne i razvojne psihologije (*University of Cambridge*) s dugogodišnjim iskustvom i radom u struci na engleskim govornim područjima izvan Hrvatske, a čiji materinski jezik je hrvatski. Nakon navedene revizije u ljestvici su pojašnjeni diskutabilni dijelovi vezani uz razlike u zakonodavstvu i običajima u Kolumbiji i Hrvatskoj na način da su pojašnjene dvije riječi. Radilo se o tvrdnji „Razgovaranje s osobama na vlasti“ koja je dodatno pojašnjena i promijenjena u „Razgovaranje s osobama koje predstavljaju državu (vlast) poput policije, sudstva i sl.“ te tvrdnji „Govorenje na sastanku“ koja je promijenjena u „Izražavanje vlastitog mišljenja na sastanku“. Također je riječ „pokupiti“ u tvrdnji 21. promijenjena u „zbariti“ koja se činila prikladnija.

Razumijevanje čestica na ljestvici provjereno je telefonskim istraživanjem na 1000 sudionika nacionalno reprezentativnog uzorka Republike Hrvatske.

Postupak istraživanja

Istraživanje je provedeno na prethodno opisanom uzorku sudionika odabranom iz populacije Hendlavog *online* panela. U trenutku povodjenja istraživanja panel je brojao oko 12.000 članova koji su regrutirani vodeći se standardima ESOMAR-a te ISO normom 20252 prema kojoj je Hendl standardiziran i temeljem koje posluje u svim dijelovima istraživačkog procesa. Pri odabiru članova poseban

translation translated from the Croatian version) and it was found that the new English version differed from the old one in two words. As these differences are synonyms in the English-speaking world, the translation was considered fully adequate. For the sake of greater certainty in the correctness of the translation, all three versions of the scale (the original English version, the Croatian translation and the English version translated from Croatian) have been submitted for revision to the Master of Science in Social and Developmental Psychology (*University of Cambridge*) with years of experience and work in profession in English-speaking areas outside Croatia and whose mother tongue is Croatian. Following the revision, the debatable sections of the scale were clarified regarding differences in legislation and customs in Columbia and Croatia in such a way that these two words were explained. These were the statements “Talking to a person in authority” which was further clarified and changed to “Talking to a person in authority (government) such as police, the judiciary, etc.” and “Speaking up at the meeting” which was first translated more as speaking rather than as speaking up. Additionally, the word “pick up” in statement 21 was changed to a more appropriate Croatian word.

Participant comprehension of the statements in the scale was checked by a telephone survey of 1000 participants from a nationally representative sample of the Republic of Croatia.

Research procedure

The study was conducted on the previously described sample of participants selected from the population of Hendl's online panel. At the time of the study, the panel had about 12 000 members who were recruited following ESOMAR standards and the ISO 20252 standard, according to which Hendl is standardized and based on which the company operates in

naglasak se stavlja na kvalitetu članova provodeći veći niz kontrola u svrhu verifikacije članova i otklanjanja mogućnosti višestruke registracije. U procesu registracije članovi daju podatke o socio-demografskim obilježjima te korištenju različitih proizvoda i usluga. Kao i za druga istraživanja, za ovo su istraživanje članovi regrutirani putem poziva koji im je stigao na adresu e-pošte te su temeljem linka mogli pristupiti anketi. Iako je prema ESOMAR-ovom kodeksu dozvoljeno prikupljanje podataka u svrhu istraživanja na sudionicima starijim od 15 godina bez dozvole roditelja, s obzirom da se radilo o istraživanju socijalne anksioznosti koja potencijalno može uznemiriti sudionike istraživanja, osim sudionika istraživanja e-poštom su o svrsi i ciljevima istraživanja te dodatnoj garanciji anonimnosti obaviješteni i njihovi roditelji. Nakon pristanka roditelja, linkovi za istraživanje proslijeđeni su sudionicima mlađima od 18 godina. Sudionici određenih obilježja pozivali su se na sudjelovanje u istraživanju sve do ispunjenja pojedine kvote. Za ispunjavanje ovog upitnika bilo im je potrebno 8 (od 5 do 20) minuta unutar kojih su sudionici odgovorili na 24 tvrdnje vezane uz strah te 24 vezane uz izbjegavanje situacija. Nakon završetka istraživanja sudionicima panela su dodijeljeni bodovi koji se nakon dogovorenog prikupljenog iznosa mijenjaju za poklon bonove trgovačkih lanaca ili drogerija.

Statistička analiza

U istraživanju su korištene parametrijske statističke metode. U svrhu opisa rezultata napravljene su deskriptivne analize, a za provjeru faktorske strukture provedena je eksploracijska faktorska analiza metodom glavnih komponenta te su izračunati Cronbachovi koeficijenti pouzdanosti. Kako bi se provjerile razlike u rezultatima ovisno o dobi korištene su jednostavne analize varijance, a u svrhu provjere razlike ovisno o spolu sudionika t-testovi.

all parts of the research process. When selecting members, special emphasis was put on the quality of members by conducting a number of controls to verify members and eliminate multiple registration options. In the registration process, members provided information on socio-demographic characteristics and the use of different products and services. As for other surveys, members for this study were recruited through a call sent to their e-mail address and were able to access the survey using the link. Although according to the ESOMAR Code it is allowed to collect data for the purpose of research on participants older than 15 without parental consent, since this was a study of social anxiety that can potentially upset research participants, parents as well as participants were also informed by e-mail about the purpose and objectives of the study and an additional guarantee of anonymity. After parental consent, research links were forwarded to participants younger than 18. Participants of certain characteristics were invited to participate in the survey until the fulfilment of a particular quota. It took 8 minutes (5 to 20) to complete this questionnaire, and within that time the participants rated 24 fear-related and 24 situation-avoidance statements. Upon completion of the survey, panel participants were awarded points which, after the agreed amount had been collected, can be exchanged for gift certificates from retail chains or drugstores.

Statistical analysis

Parametric statistical methods were used in the study. Descriptive analyses were performed for the purpose of describing the results and exploratory factor analysis was performed using the principal components method to verify the factor structure; and Cronbach's reliability coefficients were calculated. One-way ANOVA was used to check for differences in age-dependent scores, and t-tests were used to test for gender-dependent differences.

Faktorska struktura hrvatske inačice Liebowitzeve ljestvice socijalne anksioznosti

Iako Liebowitz dijeli ljestvicu na dvije podljestvice interakcije i izvedbe, nije uspio faktorskom analizom dobiti dva faktora koja bi definirala dvije navedene ljestvice nego je proveo zasebnu faktorsku analizu za strah i izbjegavanje i na svakoj dobio po četiri faktora: socijalna interakcija, javni govor, promatranje od drugih te jedenje i pijenje u javnosti (14). Kao i autor, proveli smo faktorsku analizu (EFA) posebno na ljestvici straha i posebno na ljestvici izbjegavanja. Analize prikladnosti podataka pokazuju da su podatci prikladni za provedbu faktorske analize: KMO iznosi 0,94 za ljestvicu straha i 0,93 za ljestvicu izbjegavanja, a Bartlettov test sferičnosti je statistički značajan, uz 1 % rizika za obje ljestvice. Dobiveno je objašnjenje od 52,1 % varijance za strah i 47,5 % za izbjegavanje te po 4 faktora na svakoj od ljestvica: promatranje od drugih, javni govor, socijalna interakcija i potencijalna zaraza. Tri od četiri faktora su tvrdnjama i imenom dosta podudarni dobivenome na originalnoj ljestvici uz dodatni četvrti faktor koji smo nazvali potencijalna zaraza. Ovaj faktor se sastoji od tvrdnji koje bi mogle biti vezane uz strah od zaraze: mokrenje u javnom zahodu, pijenje s drugima na javnim mjestima te pokušaj da se nekoga „zbari“. Rezultati faktorske analize na ljestvicama su prikazani u tablici 2.

I kod podljestvice straha i kod podljestvice izbjegavanja je uočljivo da se ne izdvajaju zasebno interakcija i izvedba nego da se kod svakog od 4 faktora pojavljuju i čestice socijalne interakcije i čestice socijalne izvedbe. Postoji podudaranje u položaju velikog broja čestica između ljestvice straha i ljestvice izbjegavanja (20 čestica) na hrvatskoj inačici ljestvice, a također postoji visoko podudaranje u dobivenim faktorima s originalnom Liebowitzevom lje-

Factor structure of the Croatian version of the Liebowitz social anxiety scale

Although Liebowitz divides the scale into two subscales of interaction and performance, factor analysis was not able to obtain two factors that would define the said two scales, but instead carried out a separate factor analysis for fear and avoidance and obtained four factors for each: social interaction, public speaking, being observed by others, and eating and drinking in public (14). Like the author, we conducted factor analysis (EFA) separately on the fear scale and on the avoidance scale. Data analyses showed that the data were appropriate to perform a factor analysis: the KMO was 0.94 for the fear scale and 0.93 for the avoidance scale, and the Bartlett's Test of Sphericity was statistically significant with 1% of risk for both scales. The results provided an explanation of 52.1% of variance for fear and 47.5% for avoidance and 4 factors on each scale: being observed by others, public speaking, social interaction, and potential contagion. Three of the four factors were quite similar to the statements and name given on the original scale, with an additional fourth factor called potential contagion. This factor consists of statements that may be related to the fear of contagion: urinating in a public restroom, drinking with others in public places, and trying to "pick up" someone. The results of factor analysis on the scales are presented in Table 2.

In both the fear subscale and the avoidance subscale, it was evident that interaction and performance were not singled out but that social interaction and social performance particles appeared for each of the 4 factors. There was a high number of matching statement positions between the fear scale and the avoidance scale (20 particles) in the Croatian version of the scale, and there was also a high level of matches in the resulting factors with the orig-

TABLICA 2. Faktorska struktura* Ljestvice straha i Ljestvice izbjegavanja Liebowitzevog upitnika socijalne anksioznosti
TABLE 2. Factor structure of the* Scale of Fear and of the Scale of Avoidance of the Liebowitz Social Anxiety Scale

Tvrdnje / Statements	Faktori / Factors							
	Promatranje od strane drugih / Observation by others		Javni govor / Public speech		Socijalna interakcija / Social interaction		Potencijalna zaraza / Potential contagion	
	Strah / Fear	Izbjegav. / Avoid.	Strah / Fear	Izbjegav. / Avoid.	Strah / Fear	Izbjegav. / Avoid.	Strah / Fear	Izbjegav. / Avoid.
11. razgovaranje s ljudima koje dobro ne poznajete (I) / talking to people you do not know very well (I)	.731	.658						
12. upoznavanje nepoznatih ljudi (I) / meeting strangers (I)	.654	.685						
1. telefoniranje u javnosti (P) / telephoning in public (P)	.643	.392						
19. gledanje u oči ljudi koje ne poznajete dobro (I) / looking to someone you do not know very well in the eyes (I)	.627	.735						
8. raditi dok vas netko promatra (P) / working while being observed (P)	.605	.472	.437					
10. zvanje nekoga koga ne poznajete (I) / calling someone you do not know very well (I)	.546	.619	.442					
2. sudjelovanje u malim grupama (P) / participating in small groups (P)	.532	.460						
22. vraćanje namirnica u dućan (I) / returning goods to a store (I)	.456	.565						
9. pisanje dok vas netko promatra (P) / writing while being observed (P)	.445	.430						
6. glumljenje, izvođenja ili držanja govora ispred publike (P) / acting, performing or giving a talk in front of an audience (P)			.779	.745				
16. izražavanje vlastitog mišljenja na sastanku (P) / speaking up in a meeting (P)	.414	.450	.671	.614				
20. davanje izvještaja skupini (P) / giving a report to a group (P)			.651	.739				
5. razgovaranje s osobama koje predstavljaju državu (vlast) poput policije, sudstva i sl. (I) / talking to a person in authority (government) such as police, the judiciary, etc. (I)		.428	.569					
15. biti u centru pažnje (I) / being the centre of attention (I)			.562	.554				
14. ulazak u prostoriju dok ostali već sjede (P) / entering a room while others are already seated (P)	.438	.418	.561	.451				
17. pisanje testa (P) / taking a test (P)			.527	.436				
18. izražavanje vlastitog neslaganja ili neodobravanja osobama koje dobro ne poznajete? (I) / expressing disagreement or disapproval to people you do not know very well (I)	.431		.476	.466				
7. odlazak na zabavu (I) / going to a party (I)					.664	.765		
24. odolijevanje velikom pritisku prodavača (I) / resisting a high pressure of a sales person (I)					.591			.700

TABLICA 2. Nastavak
TABLE 2. Continued

Tvrdnje / Statements	Faktori / Factors							
	Promatranje od strane drugih / Observation by others		Javni govor / Public speech		Socijalna interakcija / Social interaction		Potencijalna zaraza / Potential contagion	
	Strah / Fear	Izbjegav. / Avoid.	Strah / Fear	Izbjegav. / Avoid.	Strah / Fear	Izbjegav. / Avoid.	Strah / Fear	Izbjegav. / Avoid.
3. objedovanje na javnim mjestima (P) / eating in public places (P)					.552	.434		.488
23. priređivanje zabave (I) / giving a party (I)					.501	.580		
13. mokrenje u javnom zahodu (P) / urinating in a public bathroom (P)						.374	.775	
4. pije s drugima na javnim mjestima (P) / drinking with others in public places (P)						.585	.629	
21. pokušati „zbariti“ nekoga (P) / trying to “pick up” someone (P)							.555	.773
Karakteristični korijen / Eigen value	8.813	7.437	1.361	1.533	1.243	1.226	1.082	1.206
% objašnjene varijance / % of explained variance	17.77	16.63	17.62	13.61	9.22	8.90	7.46	8.37

*- nisu prikazane saturacije niže od 0,350 / Loadings lower than 0.350 are excluded
I – socijalna interakcija (social interaction) / Social interaction
P – socijalna izvedba / Social performance

stvicom. Manje razlike možda su i rezultat više-značnosti tvrdnji koje bi se istovremeno mogle svrstati u više faktora. Tako se naprimjer čestica „Koliko vas je strah sudjelovanja u malim grupama?“, koja se u našem istraživanju nalazi unutar faktora promatranja od strane drugih, kod Liebowitza smjestila u faktor javni govor. Istovremeno, ova čestica bi mogla biti i dio faktora socijalne interakcije.

Što se tiče faktorskih analiza provedenih na drugim populacijama, istraživanje na djeci i adolescentima u Španjolskoj također daje 4 faktora na cjelokupnoj ljestvici, ali nešto drugačije strukture i naziva: javni nastup, asertivnost, strah i izbjegavanje / bijeg od socijalnih susreta te kognitivni i psihofiziološki utjecaji (15). Na isti način, odnosno faktorском analizom obje ljestvice istovremeno, u Portugalu se na kliničkoj populaciji dobiva 5 faktora: govor u grupi, javna aktivnost, socijalna interakcija s nepoznatim osobama, iskazivanje stavova neslaganja ili neodobravanja te socijalna interakcija u dokolici / slobodnom vremenu (16).

inal Liebowitz scale. Minor differences may also be due to the ambiguity of the statements, which could at the same time be categorized into several factors. For example, the statement “How much do you fear participating in small groups?”, which is within the factor of observation by others in our research, was placed on the factor of public speech in Liebowitz. At the same time, this statement could be a part of the social interaction factor.

Regarding factor analyses conducted on other populations, research on children and adolescents in Spain also reported 4 factors on the overall scale, but with somewhat different structure and names: public performance, assertiveness, fear and avoidance / escape in social encounters, and cognitive and psychophysiological interferences (15). In the same way, i.e. by factor analysis of both scales at the same time, 5 factors are obtained on a clinical population in Portugal: speaking in a group, activity in public, social interaction with an unknown person, attitude of disagreement or disapproval, and social interaction in leisure activity (16).

Rezultati na podljestvicama

Podljestvice na kojima se računaju rezultati definirane temeljem Liebowitzevih pretpostavki i ranije opisanih metrijskih karakteristika pojedinih podljestvica na isti način su izračunate i na hrvatskoj inačici ljestvice. Deskriptivna obilježja i pouzdanosti hrvatskih inačica podljestvica Liebowitzeve ljestvice socijalne anksioznosti prikazane su u tablici 3.

Rezultati u tablici 3. donose informacije da su prosječni rezultati za strah nešto niži nego prosječni rezultati za izbjegavanje kod sve tri mjere: ukupan rezultat (16,2 < 20,2), socijalna interakcija (6,9 < 9,0) i socijalna izvedba (9,2 < 11,2). Dodatno se pokazalo da ukupan rezultat na ljestvici iznosi 36,4 odnosno pokazuje da su u prosjeku sudionici istraživanja socijalno anksiozni (rezultat viši od 30). Nisu pronađeni rezultati na reprezentativnim uzorcima koji bi usporedili hrvatsku i kolumbijsku populaciju, kao ni populacije u drugim bližim zemljama korištenjem Liebowitzeve ljestvice socijalne anksioznosti. Istraživanja Liebowitzevom ljestvicom socijalne anksioznosti su uglavnom provedena na studentskoj populaciji ili kliničkoj populaciji te nisu usporediva s našim rezultatima. Rezultati su analizirani dodatno da bi se ustanovilo koliki postotak sudionika istraživanja nema anksioznih pokazatelja (ukupni rezultat na

Results on subscales

The subscales that calculate the results defined based on Liebowitz assumptions and the previously described metric characteristics of each subscale were calculated in the same way for the Croatian version of the scale. The descriptive characteristics and reliability of the Croatian versions of the Liebowitz social anxiety subscales are shown in Table 3.

The results in Table 3 show that average scores for fear were slightly lower than average scores for avoidance across all three measures: total score (16.2<20.2), social interaction (6.9<9.0), and social performance (9.2<11.2). In addition, the total score on the scale was 36.4, which indicates that the participants were socially anxious on average (score higher than 30). No results were found from representative samples comparing the Croatian and Colombian populations or populations in nearby countries using the Liebowitz social anxiety scale. Research using the Liebowitz Social Anxiety Scale has been conducted mainly on student populations or the clinical population and is not comparable with our results. However, the results were analysed further to determine what percentage of study participants had no anxiety indicators (overall score on a scale below 30), what percentage showed symptoms of non-generalized

TABLICA 3. Rezultati na podljestvicama hrvatske inačice Liebowitzeve ljestvice socijalne anksioznosti
TABLE 3. Scores on the subscales of the Croatian version of the Liebowitz social anxiety scale

Rezultat / Result	min	maks / max	M	σ	Broj čestica / Number of particles	Cronbach alfa / Cronbach's Alpha
Ukupan rezultat na ljestvici / Total score on the scale	0	121	36,4	21,83	48	0,95
Ukupan rezultat za strah / Total score for fear	0	59	16,2	11,34	24	0,92
Ukupan rezultat za izbjegavanje / Total score to avoidance	0	69	20,2	11,65	24	0,90
Strah od socijalne interakcije / Fear of social interaction	0	28	6,9	5,63	11	0,87
Strah od socijalne izvedbe / Fear of social performance	0	32	9,2	6,28	13	0,84
Izbjegavanje socijalne interakcije / Avoidance of social interaction	0	31	9,0	5,81	11	0,83
Izbjegavanje socijalne izvedbe / Avoidance of social performance	0	38	11,2	6,54	13	0,81

min – minimalan rezultat / Minimum result

maks – maksimalan rezultat / max – Maximum result

M – aritmetička sredina / Arithmetic mean

Cronbach alfa – koeficijent pouzdanosti tipa unutarnje konzistencije / Cronbach's Alpha – Internal consistency type reliability coefficient

σ – standardna devijacija / Standard deviation

ljestvici niži od 30), koliki postotak pokazuje simptome negeneralizirane anksioznosti (ukupni rezultat između 30 i 60 bodova) te koliko ih pokazuje simptome generalizirane anksioznosti (rezultat viši od 60). Rezultati pokazuju da je 44,9 % neanksioznih, 40,7 % sa simptomima negeneralizirane anksioznosti te da ih 14,4 % ima simptome generalizirane socijalne anksioznosti. Ovi rezultati su bliski rezultatima iz literature gdje se ukazuje na 13,3 % anksioznog poremećaja u SAD-u (1), a i u populaciji općenito diljem svijeta govori se o pojavnosti socijalne anksioznosti od 10 do 13 % (17).

Što se tiče pouzdanosti rezultati u tablici 3. donose informacije o visokoj pouzdanosti ljestvica i podljestvica (0,81-0,95) te u nekim dijelovima čak višim nego što je autor dobio u originalnoj ljestvici.

Razlike u rezultatima na ljestvici ovisno o spolu i dobi sudionika

Zanimalo nas je na kraju i kako se ljestvica ponaša na poduzorcima, te smo u skladu s našim drugim ciljem istraživanja napravili analize ovisno o spolu i dobi sudionika istraživanja. Analize su, prema preporukama autora i dosadašnjoj upotrebi ljestvice, računane na ukupno 7 rezultata. Ovo je odlučeno zbog svih prijašnjih preporuka i procjena pouzdanosti te valjanosti originalne ljestvice kao i tumačenja ukupnog broja bodova s obzirom na postojanje ili nepostojanje simptoma socijalne anksioznosti.

Provedene analize t-testom (tablica 4.) donose informaciju o očekivanoj statistički značajnoj razlici između muškaraca i žena na svih 7 mjera socijalne anksioznosti gdje žene u svim rezultatima postižu statistički značajno više vrijednosti u odnosu na muškarce.

Prema tablici 4. uočava se da su veličine efekta izražene Cohenovim d indeksom male za strah i izbjegavanje socijalne interakcije, bliske srednjoj veličini efekta kod ukupnog rezultata za izbjegavanje te srednje veličine kod ukupnog

anxiety (total score between 30 and 60 points), and how many showed symptoms of generalized anxiety (score higher of 60). The results show that 44.9% did not have anxiety, 40.7% had symptoms of non-generalized anxiety, and 14.4% had symptoms of generalized social anxiety. These results are similar to those reported in the literature, indicating a prevalence of 13.3% for anxiety disorder in the United States (1) and an incidence of social anxiety of 10 - 13% in the general global population (17).

In terms of reliability, the results in Table 3 show the high reliability of the scales and subscales (0.81-0.95) and in some parts even higher than the author obtained in the original scale.

Differences in scores based on the gender and age of the participants

Ultimately, our primary interest was to determine how the scale behaves on subsamples, and in accordance with our other research objective we performed analyses based on the gender and age of the research participants. According to the author's recommendations and the use of the scale so far, the analyses were calculated with a total of 7 results. This was decided on the basis of all the previous recommendations and assessments of the reliability and validity of the original scale, as well as the interpretation of the total score given the existence or absence of symptoms of social anxiety.

The t-test analyses (Table 4) showed the expected statistically significant differences between men and women on all 7 measures of social anxiety, where women achieve statistically significantly higher values than men in all results.

Table 4 shows that the effect sizes expressed by Cohen's d index are small for fear and avoidance of social interaction, close to the mean effect size for the total avoidance score, and at mean effect size for the total score on the scale,

TABLICA 4. Testiranje razlika u rezultatima na hrvatskoj inačici Liebowitzeve ljestvice socijalne anksioznosti ovisno o spolu sudionika**TABLE 4.** Testing differences in scores on the Croatian version of the Liebowitz Social Anxiety Scale depending on the gender of the participants

Rezultat / Result	Muško M (σ) / Male M (σ)	Žensko M (σ) / Female M (σ)	t	p	d
Ukupan rezultat na ljestvici / Total score on the scale	79,3 (20.24)	89,0 (22.20)	-7,29	0,001	0,46
Ukupan rezultat za strah / Total score for fear	37,4 (10.39)	42,7 (11.60)	-7,61	0,001	0,48
Ukupan rezultat za izbjegavanje / Total score to avoidance	41,9 (11.42)	46,4 (11.46)	-6,20	0,001	0,39
Strah od socijalne interakcije / Fear of social interaction	17,2 (5.31)	18,6 (5.83)	-4,20	0,001	0,25
Strah od socijalne izvedbe / Fear of social performance	20,2 (5.54)	24,0 (6.36)	-10,12	0,001	0,64
Izbjegavanje socijalne interakcije / Avoidance of social interaction	19,4 (5.84)	20,6 (5.74)	-3,29	0,001	0,21
Izbjegavanje socijalne izvedbe / Avoidance of social performance	22,5 (6.18)	25,8 (6.47)	-8,22	0,001	0,52

M – aritmetička sredina / Arithmetic mean
 σ – standardna devijacija / Standard deviation
 t – vrijednost t-testa / Value of t-test
 p – vjerojatnost pogreške / Probability of error
 d – Cohenov d - veličina efekta / Cohen's d - effect size

rezultata na ljestvici, ukupnog rezultata za strah, straha te izbjegavanja socijalne izvedbe.

Pri testiranju razlike u rezultatima na socijalnoj anksioznosti ovisno o dobi sudionika istraživanja korištena jednostavna analiza varijance (tablica 5.) pokazuje, kao što je i očekivano, da postoje statistički značajne razlike u svim rezultatima socijalne anksioznosti i to u istom smjeru, s višim rezultatima za mlađe u odnosu na starije sudionike istraživanja.

Općenito je iz pojedinačnih testiranja Scheffeovim testom vidljivo da je najmlađa skupina sudionika istraživanja (15-24 godine) na svim podljestvicama postigla statistički značajno više rezultate u odnosu na sudionike u dobi 35-44 godina, one u dobi od 45-54 godina te u odnosu na sudionike sa 65 ili više godina. Postoje i druge razlike koje upućuju na trendove smanjenja socijalne anksioznosti s dobi, poput razlike skupine s 25-34 godine u odnosu na starije. Ipak s obzirom na veliki broj parova rezultata ovisno o dobi sudionika pri testiranju razlika kod svih pojedinih rezultata na ljestvici, nisu prikazane sve pojedinačne vrijednosti Scheffeovog testa, no one su dostupne na upit.

Prema tablici 5. uočava se da su veličine efekta izražene Cohenovim f indeksom male za ukupan rezultat za izbjegavanje, izbjegavanje

total fear score, fear, and avoidance of social performance.

When testing the difference in scores on social anxiety depending on the age of the study participants, one-way ANOVA (Table 5) showed, as expected, that there were statistically significant differences in all social anxiety scores in the same direction, with higher scores for younger than older research participants.

In general, individual Scheffe's tests showed that the youngest group of study participants (aged 15-24) achieved statistically significantly higher scores on all subscales than participants aged 35-44, those aged 45-54, and those aged 65 or older. There were also other differences that indicate trends in the reduction of social anxiety with age, such as the difference between the 25-34 age group and older groups. However, given the large number of pairs of scores depending on the age of the participants, the differences for all individual scores on the scale are shown, but not all individual values of the Scheffe's test, which are however they available on request.

According to Table 5, the effect sizes expressed by Cohen's f index were small for the total score for avoidance, avoidance of social interaction, and avoidance of social performance, close to

TABLICA 5. Testiranje razlika u rezultatima na hrvatskoj inačici Liebowitzove Ljestvice socijalne anksioznosti ovisno o dobi sudionika**TABLE 5.** Testing differences in scores on the Croatian version of the Liebowitz Social Anxiety Scale depending on the age of the participants

Rezultat / Result	15-24 M (σ)	25-34 M (σ)	35-44 M (σ)	45-54 M (σ)	55-64 M (σ)	65+ M (σ)	F	p	f
Ukupan rezultat na ljestvici / Total score on the scale	93,9 (27,3)	88,2 (20,0)	81,6 (20,8)	81,4 (20,7)	84,7 (21,0)	79,3 (18,9)	10,14	0,001	0,21
Ukupan rezultat za strah / Total score for fear	45,9 (14,2)	42,4 (10,4)	38,6 (10,3)	38,1 (10,6)	40,2 (10,7)	37,5 (10,1)	13,33	0,001	0,25
Ukupan rezultat za izbjegavanje / Total score to avoidance	48,0 (13,8)	45,8 (10,6)	43,0 (11,7)	43,4 (11,2)	44,5 (11,1)	41,9 (10,9)	5,94	0,001	0,16
Strah od soc. interakcije / Fear of social interaction	20,7 (7,1)	18,9 (5,4)	16,8 (5,2)	16,8 (5,1)	17,9 (5,4)	17,1 (4,9)	11,69	0,001	0,23
Strah od soc. izvedbe / Fear of social performance	25,2 (7,6)	23,5 (5,6)	21,8 (5,8)	21,2 (6,0)	22,3 (5,9)	20,3 (5,8)	13,21	0,001	0,25
Izbjegavanje soc. interakcije / Avoidance of social interaction	21,6 (7,0)	20,7 (5,3)	19,2 (5,9)	19,3 (5,6)	20,2 (5,6)	19,4 (5,4)	4,35	0,001	0,13
Izbjegavanje soc. izvedbe / Avoidance of social performance	26,4 (7,5)	25,2 (6,2)	23,8 (6,6)	24,1 (6,3)	24,3 (6,1)	22,5 (6,1)	6,97	0,001	0,17

M – aritmetička sredina / Arithmetic mean
 σ – standardna devijacija / Standard deviation
 F – F omjer pri analizi varijance / ANOVA F-ratio
 p – vjerojatnost pogreške / Probability of error
 f – Cohenov f - veličina efekta / Cohen's f - effect size

socijalne interakcije te izbjegavanje socijalne izvedbe, bliske srednjoj veličini efekta kod ukupnog rezultata na ljestvici i straha od socijalne interakcije te srednje veličine kod ukupnog rezultata za strah i straha od socijalne izvedbe.

RASPRAVA

Prijevod Liebowitzove ljestvice na hrvatski jezik rezultirao je ljestvicom koja se u ponovnom prijevodu pokazala gotovo identičnom u odnosu na originalnu ljestvicu, a primjena na reprezentativnom uzorku sudionika donijela je informacije da je populacija sudionika u prosjeku anksiozna s udjelom generalizirane socijalne anksioznosti od 14,4 %. Kako rezultati u literaturi navode uglavnom oko 13,3 % socijalno anksioznog poremećaja u SAD-u (1) odnosno 10-13 % općenito u populaciji u svijetu (17), možemo zaključiti da je prevalencija socijalne anksioznosti u našoj populaciji usporedna s podacima koji se dobivaju na drugim populacijama. Provjerom pouzdanosti podljestvica definiranih od autora može se detektirati visoka

the mean effect size for the total scale score and for fear of social interaction, and at mean effect size for the total score for fear and for fear of social performance.

DISCUSSION

Translating the Liebowitz scale into the Croatian resulted in a scale that, in re-translation, proved almost identical to the original scale, and the application on a representative sample of participants demonstrated that the population of the participants was anxious on average with a share of generalized social anxiety of 14.4%. As the results reported in the literature mainly found about 13.3% of social anxiety disorder in the USA (1) and 10-13% in the general population globally (17), we can conclude that the prevalence of social anxiety in our population is comparable to the results from other populations. Checking the reliability of the subscales defined by the authors demonstrated high reliability of the internal consistency type, even higher than in

pouzdanost tipa unutarnje konzistencije, čak i viša od originalne inačice na nekim podljestvicama, koja opravdava korištenje ljestvice u daljnjim istraživanjima.

Provedena faktorska analiza ljestvice daje donekle i potvrdu dobrog prijevoda ljestvice s obzirom da su se tvrdnje posložile dosta slično onima u originalnoj verziji ljestvice, a i samim time primjenjivosti na hrvatskoj populaciji. Provedena faktorska analiza zasebno na podljestvici straha i podljestvici anksioznosti donosi informacije o postojanju tri slična faktora kao i u originalnoj ljestvici: promatranje od strane drugih, javni govor, socijalna interakcija. Faktori su lako nazvani istim imenom kao i u originalnoj ljestvici te pokazuju postojanje nekih istih tvrdnji, ali ne u potpunosti. Četvrti dobiveni faktor originalne ljestvice: jedenje i pijeње u javnosti (14) nije se potvrdio u hrvatskoj inačici. Faktor koji je dobiven više se uklapa u faktor nazvan potencijalna zaraza. Problematična bi mogla biti čestica 21 (pokušati „zbariti” nekoga) jer je završila u faktoru s mokrenjem u javnom WC-u i pijenju na javnim mjestima u jednoj ljestvici te uz neke druge čestice u drugoj ljestvici. Iako je prethodnim telefonskim istraživanjem provjereno razumijevanje čestica u svim regijama Republike Hrvatske, moguće je da je ovu česticu trebalo detaljnije objasniti. Ovo se svakako predlaže u slučaju korištenja ove ljestvice u budućim istraživanjima.

Ukupno je dobiveno da se 20 od 24 tvrdnje nalazi u istom faktoru u podljestvici straha te podljestvici izbjegavanja. Iako ljestvice nisu sasvim podudarne s originalnom, na vjerodostojnost ljestvice upućuje sličnost između dviju podljestvica u hrvatskoj inačici ljestvice socijalne anksioznosti.

Što se tiče dobivenih rodni razlika u socijalnoj anksioznosti na svih sedam mjera predloženih od strane autora ljestvice, one su većinom i očekivane jer ipak znatniji broj istraživanja ukazuje na veću socijalnu anksioznost kod žena u odnosu na muškarce (3-7). Malo je istraživanja

the original version on some subscales, which justifies the use of the scale in further studies. Factor analysis of the scale provided some confirmation that the translation of the scale was good, given that the claims had quite similar positions to those in the original version of the scale, therefore indicating its applicability to the Croatian population. Factor analysis was conducted separately on the fear subscale and anxiety subscale and showed the existence of three similar factors as in the original scale: observation by others, public speech, and social interaction. The factors were easy to name as in the original scale and included some, but not all, of the same statements. The fourth factor obtained from the original scale, eating and drinking in public (14), was not confirmed in the Croatian version. The resulting factor fits better into a factor named potential contagion. Statement 21 could be the problematic one (trying to “pick up” someone) because it ended up in the factor with urinating in a public toilet and drinking in public places on one scale and with some other statements on another scale. Although a previous telephone survey verified the understanding of statements in all regions of the Republic of Croatia, it is possible that this statement needs to be explained in more detail. This is certainly a suggestion to consider when using this scale in future research.

In total, 20 out of 24 statements were found to be in the same factor in the fear subscale and the avoidance subscale. Although the scales do not quite match the original, the similarity between the two subscales in the Croatian version of the Social Anxiety Scale suggests that the scale is credible.

Regarding gender differences in social anxiety found on all seven measures proposed by the authors of the scale, they were mostly expected since a considerable amount of research indicates greater social anxiety in women than men (3, 4, 5, 6, 7). There is little research trying to clarify what would be the basis for these dif-

koja pokušavaju razjasniti koje bi bile osnove za te razlike u socijalnoj anksioznosti i iako neki autori spominju potencijalne genetičke i neurobiološke čimbenike (10), jako smo daleko od bilo kakvih jasnih zaključaka i teorija. S druge strane bliža su nam i za sada jasnija tumačenja koja se temelje na psihosocijalnim čimbenicima te odgoju djevojčica u odnosu na dječake. Pretpostavlja se da su djevojčice, a time i žene, introspektivnije i više analiziraju svakidašnje događaje pa tako i socijalne interakcije u koje se uključuju. Samim time razumljivo je da će lakše detektirati potencijalno „opasnu“ situaciju u nekoj socijalnoj interakciji koja bi mogla rezultirati nelagodnom za njih same. A zbog toga će ih češće biti strah socijalnih situacija te će ih također više izbjegavati. Općenito, podatci iz literature često ukazuju da je spol rizičan faktor za anksioznost te da su djevojke dva puta više depresivnije u odnosu na mladiće (18), a kako podatci koje 1971. navodi Clifford (19) također pokazuju i to da su djevojke sklonije tome da imaju neusklađenosti u različitim slikama o sebi, te da imaju niže samopoštovanje i da su manje zadovoljne svojim tjelesnim izgledom, vjerojatnije je i da su sklonije povlačenju (izbjegavanju) određenih socijalnih interakcija kao i povećanom strahu od njih.

I naposljetku, rezultati vezani uz dobne razlike u socijalnoj anksioznosti, očekivano, pokazuju da socijalna anksioznost s dobi pada. Kako se navodi u literaturi, socijalna anksioznost se javlja uglavnom u dobi rane i srednje adolescencije (10-13 godina) (8). U tom razdoblju života djeca (djevojke i mladići) imaju pojačanu potrebu za društvom i prihvaćanjem od vršnjaka te im je to jedan od elemenata za izgradnju vlastitog identiteta. Budući da im je socijalna interakcija važna za zadovoljenje ostalih potreba poput izgradnje identiteta i prihvaćanje od drugih, jasno je da su im te situacije socijalne interakcije dodatno stresne. Time se povećava i strah od njih, a onda i njihovo izbjegavanje. Rapee i Spence (11) naglašavaju da osnova za pojavu i

ferences in social anxiety, and although some authors have mentioned potential genetic and neurobiological factors (10), we are far from any clear conclusions and theories. On the other hand, the interpretations based on psychosocial factors and the upbringing of girls compared with the upbringing of boys are currently more convincing and clearer to us. It is assumed that girls, and thus women, are more introspective and analyze everyday events more, and thus also the social interactions they are involved in. It is therefore understandable that it is easier for them to detect a potentially “dangerous” situation in a social interaction that could result in discomfort for themselves. Due to this, they will more often be afraid of social situations and also avoid them more. In general, literature data often indicate that gender is a risk factor for anxiety, that girls are twice as depressed as boys (18), and since the data shown by Clifford in 1971 (19) also show that girls are more prone to having mismatches in their self-image, lower self-esteem, and are less satisfied with their physical appearance, they are more likely to be more inclined to withdraw from (avoid) certain social interactions and to be more fearful of them.

Finally, age-related differences in social anxiety in our study, as expected, showed that social anxiety decreases with age. According to the literature, social anxiety occurs mainly in early and middle adolescence (age 10 to 13) (8). During this period of life, children (girls and boys) have an increased need for companionship and acceptance by peers, and this is one of the elements for building their own identity. Because social interaction is important for them to meet other needs, such as identity building and acceptance by others, it is clear that these social interaction situations are more stressful for them. This also increases the fear of these situations and interactions, and thus their avoidance. Rapee and Spence (11) emphasized that the basis for the onset and expression of social anxiety in adolescence

izraženost socijalne anksioznosti u adolescenciji leži u pojačanoj potrebi za pozitivnim socijalnim interakcijama više nego u samoj razini stresa prigodom socijalnih interakcija.

Svi navedeni rezultati upućuju na adekvatnost hrvatske inačice Liebowitzove ljestvice socijalne anksioznosti koja se temeljem faktorske strukture pokazala bliskom originalnoj verziji ljestvice uz visoke koeficijente pouzdanosti podljestvica te očekivanu razinu poremećaja u populaciji kao i razliku ovisno o dobi i spolu sudionika istraživanja.

ZAKLJUČAK

Rezultati provjere rodni i dobnih razlika u socijalnoj anksioznosti na reprezentativnom uzorku građana Republike Hrvatske korištenjem Liebowitzove ljestvice socijalne anksioznosti ukazuju na očekivano statistički značajno viši rezultat na svim mjerama socijalne anksioznosti kod žena u odnosu na muškarce te kod mlađih u odnosu na starije sudionike istraživanja. Također se, u skladu s očekivanjima temeljem do sada provedenih istraživanja, dobio udio od 14,4 % socijalno anksioznih osoba u populaciji.

Korištena hrvatska verzija Liebowitzove ljestvice socijalne anksioznosti pokazala je dobre metrijske karakteristike s visokom pouzdanošću podljestvica (0,81 – 0,95) i 4 interpretabilna faktora od kojih su 3 (promatranje od drugih, javni govor i socijalna interakcija) vrlo slična onima u originalnoj ljestvici. Ljestvica straha i izbjegavanja podudaraju se u 20 od 24 tvrdnje i objašnjavaju ukupno 52,1 % (odnosno 47,5 % za izbjegavanje) varijance socijalne anksioznosti.

lies in the increased need for positive social interactions, more so than in the level of stress during social interactions.

All these results indicate the adequacy of the Croatian version of the Liebowitz Social Anxiety Scale, which, based on the factor structure, proved to be close to the original version of the scale with high coefficients of confidence of the subscales and the expected level of disturbance in the population, as well as the difference depending on the age and gender of the study participants.

CONCLUSION

The results of testing gender and age differences in social anxiety on a representative sample of citizens of the Republic of Croatia using the Liebowitz Croatian version of the Social Anxiety Scale showed the expected statistically significantly higher result on all measures of social anxiety in women compared with men and in younger compared with older participants. Furthermore, in line with expectations based on research conducted so far, a prevalence of 14.4% of socially anxious people in the population was found.

The Croatian version of the Liebowitz Social Anxiety Scale showed good metric characteristics with high subscale reliability (0.81-0.95) and 4 interpretable factors (observation by others, public speech, and social interaction) of which 3 are very similar to those in the original scale. The scales of fear and avoidance match in 20 of the 24 statements and explain a total of 52.1% (or 47.5% for avoidance) of variance in social anxiety.

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Socijalni aspekti odnosa narcisa i *borderline-a*

/ Social Aspects of the Relationship between Narcissistic and Borderline Personality Disorder

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Narcizam postaje sve veći problem suvremenog društva. Današnje društvo cijeni vanjsku, objektivnu uspješnost, pretjerivanje u hedonizmu i površnost više od unutarnjeg, emotivno obojenog života. Današnji čovjek suočen je s vlastitom prazninom pa su narcistične, grandiozne fantazije nekada i zadnji mehanizam obrane od tog bolnog suočavanja. *Borderline* je zavidan što nema snagu narcisa, pa se osjeća još praznije i nemoćnije. Kada postoje trauma i krivnja između dviju skupina ljudi, teško se s njima nositi, već je lakše preuzeti narcisoidnu poziciju i projicirati sve negativno u *borderline-a*. Tako nastaje toplo-hladan odnos koji se konstantno ponovo odigrava. Time dotičemo socijalne aspekte odnosa narcisa i *borderline-a* koje pokušava objasniti i približiti ovaj članak. Stvoriti okružje i kulturu oprosta težak je, ali ne i nemoguć put. Sastoji se od zdravog žalovanja, sublimacije agresije, poticanju dobrih iskustava i novih interesa. Također, treba poticati socijalizaciju i dijalog jer se samo njima može doći do empatije i altruizma koje želimo pobuditi i koji dovode do kvalitetnijih odnosa.

/ Narcissism is a growing issue in modern society. Society values external, objective successfulness, overindulgence in hedonism, and superficiality more than inner emotional life. Individuals in modern society are faced with an inner emptiness, resulting in narcissistic, grandiose fantasies sometimes being the last defensive mechanism against that painful confrontation. Persons with borderline disorder are envious because they lack the strength of the narcissists, causing them to feel even more empty and powerless. When there is trauma and guilt between two groups of people, it is hard to deal with the issues directly and it is easier to take a narcissistic position projecting everything that is negative onto a person with borderline disorder. This creates a hot-and-cold relationship that constantly replays itself. This brings us to the social aspects of the relationship between narcissistic and borderline personality disorder, which is the topic of this article. Creating an environment and culture of forgiveness is a difficult, but not impossible path. It consists of healthy mourning, sublimating aggression, and encouraging good experiences and new interests. Additionally, it is important to encourage socialization and dialogue because this is the only way to achieve the empathy and altruism that we are trying to evoke and which lead to a better relationship.

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Žalovanje / *Mourning*

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Poboljšanjem životnog standarda, razvojem tehnoloških mogućnosti, kao i pojavom široke ponude svega što je još nekoć nedostajalo, fokus društva, to jest suvremeni pojedinac okrenuo se samome sebi, te postaje posvećen novim ciljevima koji su usmjereni konzumerizmu i vlastitom hedonizmu. Također, koliko god imao nečega, nikada nije dosta. Još je Christopher Lasch 1979. u djelu „Narcistična kultura“ otvorio temu i postavio pitanje mijenja li se kultura i postaje li suvremeni čovjek sve površniji i prazniji (1).

Precizne podatke o epidemiologiji narcističnog i graničnog poremećaja ličnosti teško je procijeniti, no za narcistični poremećaj ličnosti najčešće se spominje raspon 1-17 % u kliničkoj populaciji, te 0-5,3 % (0-6,2 % prema DSM-5) u općoj populaciji (2-4). Medijan prevalencije graničnog poremećaja ličnosti u općoj populaciji iznosi 1,6 – 5,9 % (4).

Cilj ovoga rada je prikazati suvremeno stajalište o navedenim društvenim fenomenima iz perspektive odnosa narcisa i *borderline-a*. U društvu koje podržava narcizam i želju za moći zasigurno ima pojedinaca koji čim ne uspiju ostvariti svoje narcističke grandiozne planove i fantazije skloni su drugoj krajnosti - jadu i viktimizaciji što se najčešće karakterizira kao *borderline*, odnosno granični poremećaj ličnosti. U suvremenoj kulturi svakako se prepoznaju obrasci funkcioniranja prisutni upravo u psihopatologiji narcisa i *borderline-a*.

SOCIJALNI ASPEKTI NARCIZMA

Narcizam je pojam koji vežemo uz manjak empatije, grandioznost, potrebu za divljenjem, traženjem pažnje, kao i pretjerani osjećaj vlastite važnosti. Kada takve karakteristike postanu trajne, potpuno nefleksibilne govorimo o narcističnom poremećaju ličnosti (4-6).

Improvement of living standards, development of technology, and the wide availability of resources and luxuries that were once lacking have caused the focus of society and modern individuals to shift to the individual, becoming dedicated to new goals aimed at consumerism and personal hedonism. Furthermore, however much wealth and luxury one may have, it is never enough. Christopher Lasch broached this topic as early as 1979 in his book “Narcissistic Culture” and asked whether the culture was changing and whether modern people were becoming increasingly shallow and empty (1).

Precise data on the epidemiology of narcissistic and borderline personality disorder are hard to assess, but a range of 1-17% in the clinical population is most commonly mentioned regarding narcissistic personality disorder, as well as 0.0-5.3% (0.0-6.2% according to DSM-5) in the general population (2-4). The median prevalence of borderline personality disorder in the general population is 1.6-5.9% (4).

The goal of this article is to describe the modern scientific position on these social phenomena from the perspective of the relationship between persons with narcissistic and those with borderline personality disorder. In a society that encourages narcissism and a desire for power, some individuals are certainly persons who, as soon as they are unable to achieve their grandiose narcissistic plans and fantasies, tend towards the opposite extreme – self-pity and victimization that is usually classified as borderline personality disorder. In modern culture, behavior patterns present in the psychopathology of narcissistic and borderline disorder can certainly be observed.

SOCIAL ASPECTS OF NARCISSISTIC PERSONALITY DISORDER

Narcissism is a concept associated with a lack of empathy, grandiosity, need for validation, attention-seeking, and an exaggerated feeling of

Neuroznanstvena istraživanja u oboljelih od narcističnog poremećaja ličnosti uočavaju deficit sive tvari u desnom prefrontalnom i bilateralno u medijalnom prefrontalnom / prednjem cingularnom korteksu (engl. *right prefrontal and bilateral medial prefrontal/anterior cingulate cortices*). Također, otkrivaju smanjenu frakcijsku anizotropiju u bijeloj tvari desnog frontalnog režnja. Spominje se i povezanost narcističkih osobina s desnom prednjom inzulom (engl. *right anterior insula*) (7,8).

Narcizam je često praćen osjećajem nadmenosti (engl. *entitlement*) - osjećaja da im sve pripada te da su zadužili svijet svojim postojanjem. Nadalje, opčinjeni su perfekcionizmom koji proizlazi iz vrlo strogog, kažnjavajućeg superega. Ovisni su o potvrdi drugih i neumorno dokazuju svoju posebnost. Kada su povrijeđeni postoje samo dva moguća obrasca ponašanja - povlačenje i narcistični bijes (Lachkar opisuje V-točku narcisa). Grandiozni self nastaje kao obrana od ovisnosti o bilo kome, poglavito iz konkretnosti koja izjednačuje zdravu ovisnost o značajnim drugima s parazitskom ovisnošću (9-13).

Lasch je 1979. god. u djelu „Narcistička kultura“ otvorio temu kako današnje društvo potiče paranoju i mentalitet preživljavanja te naglasio kako se stvara okolina koja tjera modernog čovjeka da ne mašta o tome kako riješiti problem, već da bude sretan što je preživio usprkos problemu (1). U istom je djelu Lasch opisao promjenu zapadne kulture, koja postaje obilježena prazninom i nemoći. Svaka aktivnost mora biti hedonistička i u svakom odnosu se mora uživati (1,14). Novac i konsumerizam su sve, bitna je jedino usporedba i zavist uz stalno prateći osjećaj neadekvatnosti i manje vrijednosti (15). Lasch smatra kako uvjeti života u suvremenom svijetu zahtijevaju površnost koja nas štiti od strahova koji robuju nama. Suvremeni pojedinac smatra da je slobodan, otvoren, da ne ovisi ni o kome, no opet je toliko slab, paranoičan, potpuno

self-importance. When these become completely inflexible and lasting characteristics, they are identified as narcissistic personality disorder (4-6).

Neuroscientific research in persons suffering from narcissistic personality disorder has found a deficit in gray matter in the right prefrontal and bilateral medial prefrontal/anterior cingulate cortices, as well as reduced fractional anisotropy in the white matter of the right frontal lobe. There have also been reports of an association between narcissistic traits and the right anterior insula (7,8)

Narcissism is often accompanied by a feeling of entitlement – a feeling that the person is entitled to anything and that the world is in their debt due to the mere fact of their existence. Furthermore, such persons are obsessed with perfectionism that stems from a very strict, punishing superego. They are dependent on validation from others and tirelessly strive to prove their uniqueness. When they are hurt, they are able to react with only two patterns of behavior – withdrawal and narcissistic rage (Lachkar described the V-spot for persons with narcissistic personality disorder). The grandiose self develops as a defense from dependency on anyone, primarily from a concreteness that equivocates a healthy dependency on significant others with parasitic dependency (9-13).

In his 1979 work “Narcissistic Culture”, Lasch broached the subject of how modern society encourages paranoia and a survival mentality, emphasizing the creation of an environment that forces the modern individual not to imagine ways to solve problems, but rather to be happy for merely surviving despite the problems (1).

In the same work, Lasch described a change in Western culture which has become marked with emptiness and powerlessness. Every activity must be hedonistic, and every relationship must be enjoyable (1,14). Money and consumerism are everything, and all that matters is comparing oneself with and envying others accompanied by a constant feeling of inadequacy and inferiority (15). Lasch believes that living conditions in the modern world require a shallowness that pro-

nesposoban nekome vjerovati ili biti zahvalan (16).

Kao ključan aspekt narcizma u suvremenoj kulturi sve se češće ističe individualizam. Čovječanstvo je tijekom povijesti uvijek težilo neovisnosti/autonomiji individuuma, slobodi. Međutim, do današnjeg dana to je doseglo razinu u kojoj kolektivne vrijednosti i vanjska očekivanja postaju manje važni, a ljudi se više fokusiraju na sebe same, odnosno zadovoljenje osobnih potreba i tom cilju usmjereno je njihovo ponašanje i akcije koje poduzimaju što vodi u narcizam (17,18).

Kernberg pak tvrdi kako postoje tri razine težine narcističnog poremećaja ličnosti (sl. 1). Prva, visokofunkcionalna, neurotska; druga razina pokazuje tipične simptome narcizma, a treća razina težine narcističnog poremećaja ličnosti može funkcionirati po dva modela. Prva mogućnost je da funkcionira i prezentira se kao *borderline* - manjak tolerancije anksioznosti, kontrole impulsa, ali i redukcija sublimatornih funkcija. Drugi model je onaj koji pokazuje pretežito antisocijalne karakteristike (19-21).

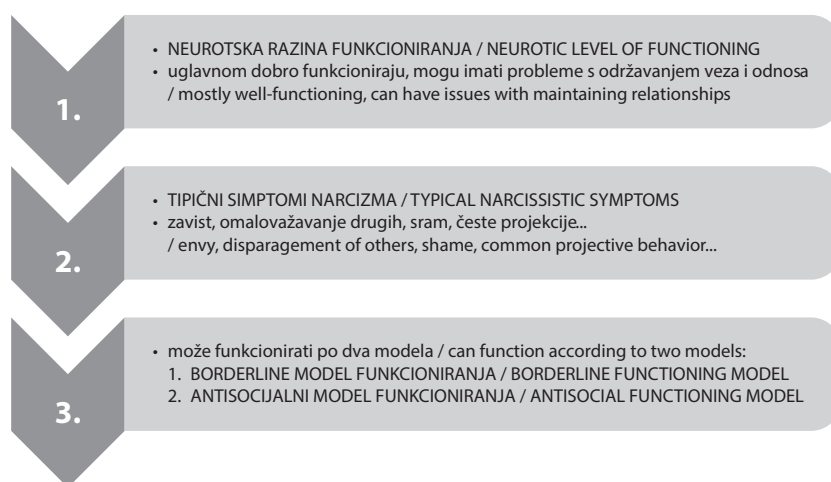
Ekstrem će biti označen kao sindrom malignog narcizma, koji uz osnovne karakteristike narcističnog poremećaja ličnosti (NPL) pokazuje antisocijalno ponašanje, paranoidne ideje te agresiju usmjerenu prema sebi i/ili okolini (20,22).

protects us from the fears that enslave us. The modern individual believes they are free, open, and independent, but they are simultaneously weak, paranoid, and completely incapable of trusting or feeling gratitude towards others (16).

Individualism has been increasingly emphasized as a key aspect of narcissism in modern culture. Humankind has historically always strived for independence/autonomy of the individual, i.e. freedom. However, today this has reached a point where collective values and external expectations become less important and individuals increasingly focus on themselves, i.e. on fulfilling their personal needs, resulting in actions and behavior aimed at that goal, which leads to narcissism (17,18).

On the other hand, Kernberg claimed there were three levels of severity in narcissistic personality disorder (Figure 1). The first level is the high-functioning neurotic type; the second level of severity presents with typical narcissistic symptoms, and the third level of severity can function according to two models. The first possibility is functioning that presents as borderline personality disorder – lack of tolerance for anxiety, lack of impulse control, and reduced sublimation functions. The second model primarily presents with antisocial characteristics (19-21).

The extreme is classified as malignant narcissist syndrome, where the basic characteristics of nar-



SLIKA 1. Tri razine težine narcističnog poremećaja ličnosti [prema Kernbergu (21)]

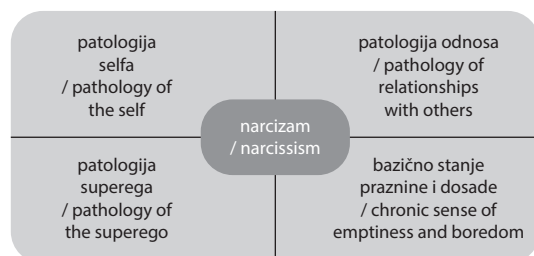
FIGURE 1. Three levels of severity in narcissistic personality disorder [according to Kernberg (21)]

Stone opisuje narcise s vrlo izraženim antisocijalnim karakteristikama. Također, postoje i maligni narcisi kojima vlada prezir, obično su skloni alkoholu te posljedično tome i nasilnom ponašanju. S druge strane postoje i narcistični kriminalci koji nisu nasilni. Oni su u kriminalu jer izvlače novac raznim manipulacijama i od toga dobro žive (23).

NPL je Kernberg definirao u četiri dimenzije (sl. 2): patologija selfa, patologija odnosa s drugima, patologija superega te *bazično stanje praznine i dosade*. *Bazično stanje praznine i dosade* očituje se potrebom za učestalom stimulacijom, koja može biti i umjetna. Često se očituje kao ovisnost o alkoholu ili drogama, promiskuitetom ili pak seksualnom inhibicijom (3,19).

Dugo se vremena grandioznost smatrala glavnom značajkom narcizma, tako da se pojavljivala u svakoj definiciji i klasifikaciji. U međuvremenu se mišljenje o tome počelo mijenjati. Opisane su tako brojne karakteristike narcizma upravo suprotne grandioznosti. Tako postoje sramežljivi, tankokožni, prikriveni, posramljeni, dakle gotovo sve suprotno od grandioznog osjećaja važnosti i veličine.

„Debelokožnog“ i „tankokožnog“ narcisa opisao je Rosenfeld 1987. , a razliku u transferu između njih opisivao je Kernberg 2014. (20,24). Tako se „debelokožnog“ narcisa opisuje kao stabilnog, na višoj razini funkcioniranja koji može izvrsno funkcionirati na poslu i u



SLIKA 2. Četiri dimenzije narcističnog poremećaja ličnosti [prema Kernbergu (21)]

FIGURE 2. Four dimension of narcissistic personality disorder [according to Kernberg (21)]

cissistic personality disorder (NPD) are accompanied by antisocial behavior, paranoid ideas, and aggression towards oneself or the surroundings (20,22). Stone described narcissists with strongly expressed antisocial characteristics. There are also malignant narcissists dominated by contempt, who are usually prone to alcohol abuse and consequently to violent behavior. On the other hand, there are also narcissistic criminals who are not violent. They engage in criminal behavior by extorting money through various manipulations, out of which they make a good living (23).

NPD was defined by Kernberg as having four dimensions (Figure 2): pathology of the self, pathology of relationships with others, pathology of the superego, and the *chronic sense of emptiness and boredom*. The *chronic sense of emptiness and boredom* manifests as a need for constant stimulation that can be artificial. It often presents as addiction to alcohol or drugs, promiscuity, or sexual inhibition (3,19).

Grandiosity was long considered the main characteristic of narcissism and appeared in every definition and classification. In time this opinion began to change. Many characteristics of narcissism have now been described that are in direct opposition to grandiosity. There are shy, thin-skinned, hidden, and ashamed narcissists, almost all of which are incompatible with a grandiose feeling of importance and greatness.

“Thick-skinned” and “thin-skinned” narcissists were described by Rosenfeld in 1987, and the difference in transfer between them was described by Kernberg in 2014 (20,24). “Thick-skinned” narcissists are described as stable, more highly functioning persons who can function very well at work and in social interactions, but who have a total lack of fantasy and imagination which leads to a truly poor inner world. In transfer, they cannot broach the question of their fears and desires and any deeper conflicts. Such narcissistic patients strive to have total control over their relationship with the therapist. They carefully premeditate on what to talk about during therapy, even going so far as to plan which associations

socijalnim kontaktima, međutim ima potpuni manjak fantazija i mašte tako da je unutarnji svijet uistinu presiromašan. U transferu ne mogu otvoriti pitanje strahova ili želja pa ni nikakvih dubljih konflikata. Takav narcis želi imati potpunu kontrolu u odnosu s terapeutom. Intenzivno promišlja o čemu će pričati tijekom terapije, pa čak i koje će asocijacije izreći kako bi terapeut otišao u određenu smjeru, a on će to shvatiti kao vlastiti trijumf jer je anticipirao situaciju i „prevario“ terapeuta čime je sebi dokazao da je bolji od profesionalaca u tom području. S druge strane, „tan-kožni“ narcis stvara regresivniji transfer i funkcionira više na *borderline*, nestabilnoj razini. Stvara prezirne osjećaje prema terapeutu i sklon je osjećaju inferiornosti, poniženja i depresiji (21,24). Preosjetljiv je na bilo kakvu kritiku, a glavni mehanizam obrane mu je projekcija (25). Tako sve negativno projicira na terapeuta, a onda očekuje i svojevrsnu zamjenu uloga. Pacijent koji je sadistički mučio terapeuta ima osjećaj da će mu terapeut to morati vratiti, osvetiti mu se nekim oblikom agresije. Ekstrem takvog odnosa može biti sadomazohistički transfer u kojemu svaki odnos koji ostvaruju pretvaraju u neprijateljsku interakciju koju žele dovesti do ruba i sloma (19,26,27).

Danas se tako preferira podjela narcisa na grandiozni i vulnerabilni. U karakteristike grandioznog spadale bi arogancija, malignost, manipulativnost, dok je vulnerabilni narcis zatvoren, posramljen i sramežljiv (28). Vulnerabilni narcis sklon je preosjetljivosti, viktimizaciji i ne može se suočiti s problemima i drugim ljudima te je slabog samopouzdanja (29).

Vaknin je 2007. narcise podijelio na „cerebralne“, to jest one kojima se treba diviti zbog inteligencije i „somatske“ čija je ljepota izvor narcizma. Akhtar je govorio i o specifičnim obrascima ponašanja narcisa. To su nemogućnost vjerovanja drugim ljudima, odnosno oni ne žele i ne mogu se osloniti na druge, sma-

to give so as to guide the therapist in a specific direction, which the patient will see as a personal triumph because they succeeded in anticipating the situation and “tricking” the therapist, proving to themselves that they are better than a professional in the field. On the other hand, a “thin-skinned” narcissist creates a regressive transfer and generally functions at an unstable level similar to borderline personality disorder. Such patients create feelings of contempt towards the therapist and are prone to feelings of inferiority, humiliation, and depression (21,24). They are overly sensitive to any criticism, and projection is their main defensive mechanism (25). They therefore project all negative elements on the therapist and expect a consequent role reversal. The patient who sadistically tortures the therapist has the feeling that the therapist will have to return the favor and take revenge through some form of aggression. The extreme version of such a relationship can manifest as sadomasochistic transfer in which every relationship that is achieved turns into a hostile interaction that the patient attempts to drive to a breakdown (19,26,27).

Due to the above, the division of narcissistic personality disorder into grandiose and vulnerable is currently preferred. Characteristics of grandiose NPD would include arrogance, malignancy, and manipulateness, whereas vulnerable narcissists are withdrawn, ashamed, and shy (28). Vulnerable narcissists are prone to oversensitivity and victimization and cannot face problems and other people, with an accompanying lack of self-confidence (29).

In 2007, Vaknin divided narcissists into “cerebral”, i.e. those that want to be admired for their intelligence, and “somatic”, whose physical beauty is the source of their narcissism. Akhtar also discussed specific behavior patterns in narcissists. These include the inability to trust other people, i.e. a refusal and inability to rely on others, a reduction in morality if there is something to be gained, a feeling of inferiority, and reduced capacity for love and affection. The difference between overt and covert narcissists has also been described (15,29-31).

njena im je moralnost ako postoji neka dobit, osjećaj inferiornosti te oslabljeni kapacitet za ljubav i povezanost. Opisana je i razlika između otvorenog (*overt*) i prikrivenog (*covert*) narcisa. (15,29-31).

OD PRAZNINE *BORDERLINE-A* DO SOCIJALNE HISTERIJE

Emocionalno nestabilna ličnost pojavljuje se u dvama oblicima - impulzivni i granični poremećaj ličnosti. Impulzivni tip pun je naglih i hirovitih reakcija, a granični je još teži stupanj obilježen osjećajem praznine, suicidalnim pokušajima i narušenim emocionalnim vezama (5).

Postoji i određena zbunjenost oko pojma *borderline*. Nameće se pitanje je li *borderline* samo stanje između neuroze i psihoze još otkako je Stern 1938. to prvi puta i spomenuo (32,33) ili poseban poremećaj ličnosti. Za razliku od shizofrenije kod *borderline-a* rijetke su halucinacije i prividenja (34). Češća je distorzija realiteta i pomaknuta percepcija objektnih odnosa. Dominira sram, rjeđe krivnja, imaju patološki strah od potencijalnog ili stvarnog napuštanja kao i od nestajanja, te su izrešeta-ni paranoidnim idejama koje često projiciraju na okolinu. Od svega toga brane se rascjepom, poricanjem i magičnim razmišljanjem. Ono što se često događa je i viktimizacija (10,35,36). Stavljanjem u poziciju žrtve okreće se krug projekcije, paranoje, ali i zadržavanja drugih oko sebe. To se često očituje osjetom boli. Ta bol može biti simbol, odnosno ima dvojako značenje. S jedne strane ona je tu kao znak života – „kad me boli znači da sam živ/a i time je moje nestajanje opovrgnuto“, a strah od nestajanja privremeno umanjen (10,35). S druge strane, može se očitovati kao somatizacija, konverzivnim simptomima pomoću kojih komuniciraju s okolinom, dobivaju mogućnost manipulacije svojom bolesti te tako mogu postići katarzu, ali i sekundarnu

FROM THE EMPTINESS OF BORDERLINE PERSONALITY DISORDER TO SOCIAL HYSTERIA

Emotionally unstable personality disorder manifests in two forms – impulsive and borderline personality disorder. The impulsive type is full of sudden and capricious reactions, whereas borderline disorder is a more severe level presenting with feelings of emptiness, suicide attempts, and damaged social relationships (5).

There is also a certain confusion about the concept of borderline personality disorder. The question whether borderline is just a state between neurosis and psychosis or if it is a discrete personality disorder has been discussed since it was first mentioned by Stern in 1938 (32,33). As opposed to schizophrenia, borderline personality disorder rarely presents with hallucinations (34). It is more common to experience reality distortion and distorted perception of object relations. Shame, and more rarely guilt, are dominant, and patients have a pathological fear of potential or realistic abandonment as well as of disappearance, and are fraught with paranoid ideas that they often project to their surroundings. They defend themselves from all this through dichotomization, denial, and magical thinking. Victimization is common as well (10,35,36). Placing themselves into the role of the victim creates a circle of projection and paranoia, but also forces others into codependent relationships. This often manifests through the sense of pain. The pain can be a symbol, i.e. it can have a double meaning. On the one hand it is present as a sign of life – “when I am in pain, I know I’m alive and thus my disappearance is refuted”, and the fear of disappearance is temporarily reduced (10,35). On the other hand, pain can manifest as somatization, as conversion symptoms used to communicate with their surroundings provide a way to manipulate their disease and thus achieve catharsis as well as secondary benefits from the disease. Pain enables relationships with other people.

In their desire to feel alive and to defeat the empty deadness inside themselves, narcissistic patients are capable of doing anything. They are

dobit od bolesti. Bol im omogućuje odnose s drugim ljudima.

U želji da se osjećaju živo, to jest da pobijede prazno mrtvilo u njima skloni su napraviti bilo što. Tako su skloni rizičnim ponašanjima – nezaštićenim seksualnim odnosima, ovisnostima, samoozlijeđivanju i raznim drugim. Vođeni su sramom i nemaju nikakav kapacitet za žalovanje. Iz srama i osjećaja da ne vrijede nastaje i golemi strah od separacije (napuštanja bliskih osoba). To je nešto što ih stalno tišti i ako se u bilo kojem trenutku tako osjećaju rezultat će ili bijesom ili osvetom zbog slabe kontrole impulsa. U želji da zadrže objekt povode se konstantnim zavodenjem objekta kako bi ih primijetio i doživio (10,37,38).

Kernberg je opisao organizaciju ličnosti *borderline* (33) s namjerom da pomakne fokus s *borderline-a* kao isključivo poremećaja ličnosti. BPO (engl. *borderline personality organization*) nastaje u djece koja ne mogu integrirati pozitivna i negativna iskustva, bilo zbog velike količine prirodne agresije, pretjerane anksioznosti ili štetnih ranih iskustava (39). Ona imaju velike varijacije u simptomima od aksioznosti, preko fobija do konverzivnih simptoma te paranoidnih ideja (39,40). Ključne karakteristike BPO-a su: nespecifične manifestacije slabosti ega, pomak prema primarnom procesu mišljenja, korištenje specifičnih mehanizama obrane (rascjep – od savršenstva do bespomoćnosti), patološki internalizirani objektni odnosi (33,40). Grinker i sur. su 1968. opisali četiri podtipa *borderline-a*: granica s psihozom, *borderline* u sužiti (do srži), „kao da“, neurotski *borderline* (41). Zanarini i sur. iznijeli su 1990. karakteristike koje čine razliku. Po njima su to kvazipsihotične misli, samounakaženje, manipulativni pokušaji suicida, pretjerana zabrinutost oko napuštanja ili nestajanja, zahtjevnost, regresija u terapiji te teškoće kontratransfera (42).

Novija istraživanja dokazuju uz magnetnu rezonanciju kako kod graničnog poremećaja lič-

consequently more prone to risky behavior – unprotected sexual relations, addiction, self-harm, and many others. They are guided by shame and have no capacity for mourning. The shame and inferiority they feel leads to an enormous fear of separation (abandonment by people close to them). This is a constant source of oppression for such patients, and any feelings of abandonment result in either rage or revenge due to poor impulse control. In their desire to retain the object, they constantly employ seduction of the object in order to be noticed and appreciated (10,37,38).

Kernberg described how a personality with borderline disorder is organized (33), with the goal of moving the focus away from borderline disorder as a disorder of personality alone. Borderline personality organization (BPO) forms in children who cannot integrate positive and negative experiences due to a large amount of innate aggression, anxiety, or harmful early experiences (39). Their symptoms vary widely from anxiety and phobias to conversion symptoms and paranoid ideas (39,40). The key characteristics of BPO are as follows: unspecific manifestations of a weak ego, propensity for primary process thinking, application of specific defensive mechanisms (dichotomization – from perfection to helplessness), and pathologically internalized object relations (33,40). In 1968, Grinker et al. described four subtypes of borderline personality disorder: Psychotic Border: bordering with psychosis; Core Borderline Syndrome (to the core); “As-If” Borderline; and the Border with the Neuroses (41). In 1990, Zanarini et al. presented differentiating characteristics. According to them, these are quasi-psychotic thoughts, self-mutilation, manipulative suicide attempts, overanxiety about abandonment or disappearance, demandingness, regression in therapy, and countertransference difficulties (42).

Newer research using MR imaging has shown that patients with borderline personality disorder have evident changes in those regions of the brain that regulate emotions, such as the amygdala, hippocampus, orbitofrontal cortex, and anterior cingulate cortex, which lead to emotional dysregulation and affective instability (43-45).

nosti postoje evidentne promjene upravo onih regija mozga koje su zadužene za regulaciju emocija poput amigdale, hipokampusa, orbitofrontalnog korteksa i prednje cingularne kore te da to dovodi do emocionalne disregulacije i afektivne nestabilnosti (43-45).

U literaturi se sve češće vodi rasprava o razlici između bipolarnog poremećaja (pogotovo tipa 2) i graničnog poremećaja ličnosti. Kao jedna od ključnih značajki ističe se afektivna nestabilnost. Kod graničnog poremećaja ličnosti ona je obično jaka, varira od eutimije do aksioznosti i ljutnje te je vrlo često potaknuta interpersonalnim konfliktom. U bipolarnom poremećaju afektivna nestabilnost može biti prisutna, no najčešće nije jaka, varira od eutimije do depresije ili ushićenja i pretežno je autonomna i manje ovisna o vanjskim, okolišnim čimbenicima (46-48). Također, navode se i razlike u odgovoru na farmakoterapiju (49,50).

U sekciji III DSM-5 htjelo se izbjeći glavne probleme koji su nastali kao posljedica preklapanja kriterija između poremećaja ličnosti. Tako su narcistični i granični poremećaj ličnosti dijelili osjetljivost prema kritici, sklonosti izljevima bijesa i *entitlement* (3,4). Dijelom se u tome i uspjelo. Zaključeno je da su grandioznost (maka skrivena/vulnerabilna) i traženje pažnje nužni za dijagnozu narcističnog poremećaja ličnosti, dok granični poremećaj ličnosti mora sadržavati barem jedan od sljedećeg - impulzivnost, rizično ponašanje i/ili hostilnost. Tako se trenutno najpreciznije očituje razlika između narcisa i *borderline-a* u formalnim dijagnostičkim kriterijima (51-53).

Danas se vrlo često vode rasprave u literaturi je li *borderline* transformirana histerija s obzirom na vrijeme u kojemu živimo. Ono što je prije bio sukob, krivnja koja izjeda i radi simptome, danas je praznina *borderline-a*. Prije su postojala jasna pravila te je osoba bila u sukobu sa strogim socijalnim normama izvana, a danas je socijalno gledano skoro sve dopušte-

There is a growing discussion in the literature on the difference between bipolar disorder (especially type 2) and borderline personality disorder. Affective instability is considered one of the key characteristics. It is usually strong in borderline personality disorder and varies from euthymia to anxiety and anger, while often being exacerbated by interpersonal conflict. In bipolar disorder, affective instability can be present but is usually not strong, varying from euthymia to depression or elation and is generally autonomous and less dependent on external environmental factors (46-48). Additionally, differences in response to pharmacotherapy have also been reported (49,50).

Section III of DSM-5 tries to avoid the main issues that have arisen as a consequence of criteria overlap between personality disorders. Narcissistic and borderline personality thus share sensitivity to criticism, propensity for outbursts of rage, and entitlement (3,4). This has been partially successful. It has been concluded that grandiosity (even hidden/vulnerable types) and attention-seeking are necessary for the diagnosis of narcissistic personality disorder, whereas borderline personality disorder much include at least one of the following – impulsivity, risky behavior, and/or hostility. This is currently the most precise way to describe the difference between narcissistic and borderline personality disorder in formal diagnostic criteria (51-53).

There are many ongoing debates in the literature on whether borderline personality disorder is transformed hysteria due to the times we live in. What used to be conflict and guilt that ate people up from inside and caused symptoms has today been replaced by the emptiness of borderline disorder. In earlier times, clear rules existed and a person could be in conflict with strict external social norms, whereas today almost everything is permitted, socially speaking, and individuals wrestle only with their own inner emptiness that has to manifest in some way. Since these are overly concrete personalities with low resilience, they cannot describe and conceptualize their own problems but instead must attempt to ground and objectivize the problem through concrete physical

no te se osoba sukobljava jedino s unutarnjom prazninom, bezdanom, ali i slikom „moranja biti sretan i savršen“ što stvara visoku anksioznost koja se mora nekako ispoljiti. Budući da se radi o pretjerano konkretnim osobama slabe rezilijencije oni ne mogu opisati i sagledati vlastite probleme već moraju taj problem konkretizirati, objektivizirati tjelesnim simptomom. Imajući tjelesnu manifestaciju oni su manje prazni, trebaju druge da vide njihov „objektivni“ problem, a odlazak doktoru koji će ih razumjeti i umanjiti njihovu zabrinutost je svojevrsan pokušaj korektivnog emocionalnog iskustva zbog nedostatka „majke“ koja će ih smiriti. S te strane gledano, ali i po općim kriterijima i definicijama zasigurno postoji određeno preklapanje između histerije i *borderline-a* (54-56).

SOCIJALNA DIMENZIJA ODNOSA *BORDERLINE-A* I NARCISA

Društveni teret odnosa *borderline-a* i narcisa može se prikazati kao vanjsko opterećenje – socijalni parazitizam i sklonost kriminalu te unutarnja – suicid. Prije svega, objasniti ćemo interakciju *borderline-a* i narcisa fenomenom harmonike i plesom pogotovo kada su perpetuirani traumom, zatim ćemo raspraviti gore navedeno te konačno objasniti suvremene probleme ovog odnosa na socijalnoj razini te ponuditi rješenje i put k zrelijem ponašanju.

Narcis i *borderline* koriste primitivne obrasce ponašanja, kao i primitivne mehanizme obrane. Rascjep koji karakterizira odnos prati i ambivalencija – od bliskosti do destrukcije. Narcis se boji da neće biti dovoljno savršen, a *borderline* da će se otkriti koliko je loš, prazan i bezvrijedan (10).

Kada se dogodi nešto loše određenoj skupini ljudi, na primjer narodu ili državi, teško se nositi s tim nerješivim problemom koji je taj sukob donio. Tako se ta trauma prenosi na potomke,

symptoms. When experiencing a physical manifestation, they feel less empty and need others to perceive their “objective” problem, with a visit to a physician who will understand them and alleviate their anxiety representing an attempt to achieve a corrective emotional experience due to the lack of a “mother” to comfort them. Viewed from that perspective, but also from the perspective of general criteria and definitions, there is certainly some overlap between hysteria and borderline personality disorder (54-56).

THE SOCIAL DIMENSION OF THE RELATIONSHIP BETWEEN BORDERLINE AND NARCISSISTIC PERSONALITY DISORDER

The social burden of the relationship between borderline and narcissistic personality disorder can be described as an external burden – social parasitism and propensity towards criminal behavior – as well as an inner burden – manifesting as suicide. We will first explain the interaction between persons with borderline and narcissistic personality disorder using the phenomenon of the accordion and dance, which is especially emphasized when they are perpetuated by trauma, after which we will discuss the above, concluding with an explanation of modern issues arising in this relationship at the social level and offer a solution and path to more mature behavior.

Persons with narcissism and borderline disorders employ primitive behavior patterns as well as primitive defense mechanisms. The dichotomy that characterizes the relationship is accompanied by ambivalence – from intimacy to destruction. Narcissists fear that they will not be perfect enough, whereas persons with borderline disorder fear the discover of how bad, empty, and worthless they are (10).

When something negative happens to a certain group of people, for instance a people or a nation, it is hard to deal with this unsolved problem created by the conflict. This is how trauma is transferred descendants, i.e. to subsequent generations. Volkan (1991) called this chosen trauma (57,58). Cho-

to jest sljedeće generacije. Volkan (1991.) je to nazvao izabranom traumom (57,58). Izabrana trauma tako postaje stvarna, vječna, a ne nešto što pripada prošlosti i sjećanju (58). Oni se osjećaju kao vječne žrtve u bilo kojemu odnosu (15,29). Projekcije prema neprijatelju iz traume su svježije, emocije vezano za to su snažne, kao da su bile jučer, a izvor anksioznosti je nepresušna. To je Volkan nazvao kolapsom vremena. Ljudi mogu kognitivno, racionalno živjeti s tom traumom, no u emotivnom smislu to nije razriješeno (57). Kernberg je slično traumatske, bolne situacije objasnio destrukcijom vremena. Smatra da na putu emotivnog prolaska vremena stoji rascjep te neposredna okolina koja ne dozvoljava nova pozitivna iskustva koja donose zadovoljstvo. Osoba ili cijela obitelj ostaju u vremenu traume. „Ništa se nije promijenilo“ (59).

Volkan opisuje fenomen harmonike. Kada se susretne dva naroda koja imaju neriješenu izabranu traumu na prvi su pogled svi uglašeni i distancirani. To u vrlo kratkom vremenu i na najmanji poticaj/provokaciju može eskalirati i pobuditi vrlo snažne emocije, koje se onda opet nakon određenog vremena (više objektivnog nego subjektivnog) smire (57,58). Tako se stalno, poput harmonike, neprestano udaljavaju i skupljaju stvarajući glazbu za taj specifičan narcis/*borderline-ski* ples naroda.

Taj ples toplo je hladan odnos u kojemu se pokušavaju razumjeti na svjesnoj razini, no nesvjesni obrasci robuju odnosom (sl. 3) (10). Tako narcis pleše idealizacijom, perfekcionizmom i svim drugim savršenostima koje se lako mogu ugroziti, a u plesu ih *borderline* dovodi u pitanje. Koreografija *borderline-a* prožeta je osvetom, viktimizacijom i ostalim oblicima manipulacije koji provociraju narcisa budeći u njemu osjećaj nesavršenosti. Ples se tako sastoji od izazova *borderline-a* napadom, negodovanjem ili izazivanjem konflikta što budi nelagodu narcisa koji se onda povlači. Sav bijes

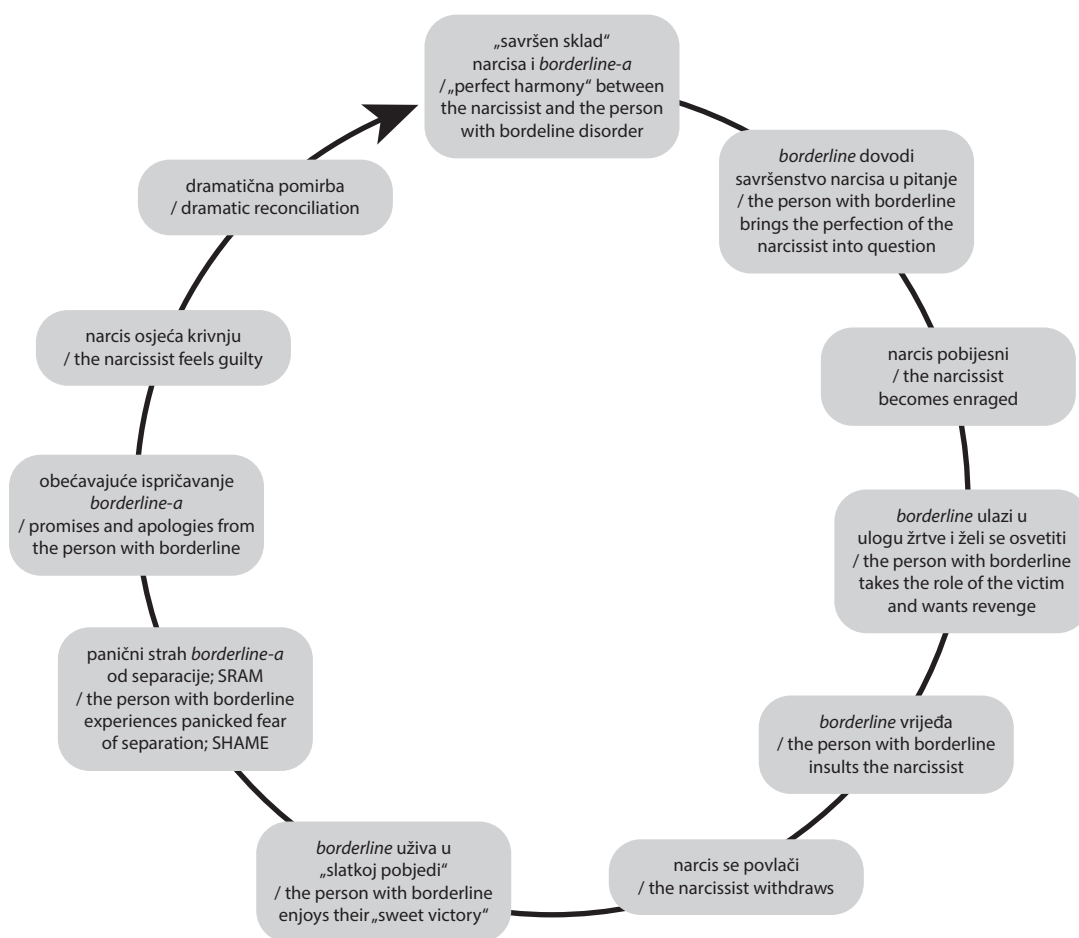
sen trauma thus becomes real and eternal instead of something consigned to history and memory (58). People feel like eternal victims in any relationship (15,29). Projections towards the enemy from that trauma remain fresh and emotions related to it are strong, as if the trauma happened just yesterday and representing an inexhaustible source of anxiety. Volkan this called a time collapse. People can cognitively and rationally live with the trauma, but it remains unresolved in the emotional sense (57). Kernberg explained similar traumatic and painful situations as time destruction. He believed that there is a gulf in the path of the emotional passage of time and that the immediate environment does not allow new positive experiences that bring contentment. The person or the whole family remain at the point in time when the trauma took place. “Nothing has changed” (59).

Volkan described the accordion phenomenon. When two nations that have an unresolved chosen trauma meet, initially everyone remains polite and distanced. But even the smallest incitement/provocation can cause very rapid escalation and awaken very strong emotions, which then calm down after a certain (more objective than subjective) time (57,58). In this way, like an accordion, they constantly move away and come together, creating the music of that specific narcissistic/*borderline* dance of nations.

This dance is a hot-and-cold relationship in which people try to understand each other at the conscious level, but unconscious patterns enslave the relationship (Figure 3) (10). The narcissist's dance is one of idealization, perfectionism, and all other forms of perfection that can be easily threatened, and the person with *borderline* brings them into question. The choreography of *borderline* disorder is permeated by revenge, victimization, and other forms of manipulation that provoke the narcissist by awakening a feeling of imperfection in them. The dance therefore consists of a challenge issued by the person with *borderline* disorder in the form of an attack, complaints, or creation of conflict, which causes discomfort to the narcissist who then withdraws. The person with *borderline* disorder perceives the rage of the narcissist as the leadership of someone who they admire, but who

narcisa *borderline* doživljava kao vodstvo nad nekim kojem se dive, a sad pokazuje svoju slabu točku. Kratko uživaju u toj „slatkoj pobjedi“ koja ih uzdiže iz uobičajenog mrtvila. Ubrzo se budi panični strah od separacije, osjećaju navalu negativnih emocija i žele učiniti bilo što kako bi izbjegli prijetu napuštanje narcisa. Počinju se ispričavati i obećavati raznolike načine iskupljenja govoreći kako se ništa slično neće i ne može ponoviti. Na kraju, narcisu treba netko tko će ga uzdizati i diviti mu se, osjeća više krivnje nego srama u usporedbi s *borderline-om* te se odluči vratiti *borderline-u*. Tako se koreografija tog plesa neprestano ponavlja. To je vječan ples između krivnje i srama. Oni teže harmoniji, ali ih konflikti, na nesvjesnoj razini čine povezanim i dobivaju privid konstantnosti (10,60,61)

is now showing their weakness. They briefly enjoy this “sweet victory” that brings them out of their usual feeling of deadness. However, the panicked fear of separation arises soon after; the person with borderline disorder feels a rush of negative emotions and is ready to do anything to avoid the impending abandonment by the narcissist. They start to apologize and promise various forms of atonement, saying that nothing like this will ever happen again. The narcissist ultimately needs someone who will elevate and admire them and feels more guilt than shame in comparison with the person with borderline disorder, so they decide to go back to the person with borderline disorder. Thus, the choreography of this dance constantly repeats. It is an eternal dance between guilt and shame. The dancers strive for harmony, but the conflicts bring them closer at an unconscious level and create an appearance of constancy (10,60,61).



SLIKA 3. Ples/drama narcisa i *borderline*-a (prema Lachkar 1984., 1985., 1992., 1997., 1998., 2004.)

FIGURE 3. Dance/drama of a person with borderline disorder and the narcissist (according to Lachkar 1984, 1985, 1992, 1997, 1998, 2004)

Drama označava nemogućnost *borderline-a* i narcisa da išta promijene, već se uvijek isti scenarij stalno odigrava (10).

Socijalni parazitizam kao sekundarna dobit od bolesti pojam je koji vežemo uz „nemoguće, teške“ pacijente. Takvi pacijenti vrlo često imaju izražene slike graničnog ili narcističnog poremećaja ličnosti. Radi se o nemogućnosti zadržavanja posla tako da čak i neki vrlo obrazovani radije ne rade, već ovisе o financijskoj pomoći svoje obitelji ako je ona dobrostojeća ili o socijalnoj pomoći, ako su siromašniji. Čak i kada se bolje osjećaju ili izliječe od primarnog uzroka zbog kojega nisu radili određeno vrijeme, njihova motivacija za povratak na posao uopće nije primjetljiva. Smatra se da je to zbog fantazija uspjeha i slave te da oni sebe doživljavaju kao neshvaćene presposobne talente koje nitko nije prepoznao. Odbijaju psihoterapijsko liječenje onda kada im ono više ne donosi financijske povlastice (plaćeno bolovanje, mirovina, socijalna pomoć), kao i onda kada bi morali sami plaćati terapiju bez obzira misle li je li im potrebna. Nadalje, smatra se kako im treba „zaprijetiti“ da moraju naći posao ili će se terapija prekinuti, jer jedino ih se tako može potaknuti na kreativnost i izlazak iz začaranog kruga nerad-dobit (19,62).

Koekkoek i sur. opisivali su ponašanje „teških“ pacijenata. „Teško“ ponašanje podijelili su u četiri dimenzije: povlačenje i nedostupnost, zahtjevnost i potraživanje, privlačenje pozornosti i manipuliranje te agresivno ponašanje (63,64). Također, tvrde kako se „teške“ pacijente često povezuje s profesionalnim pesimizmom, pasivnim liječenjem, kao i mogućim otpustom iz zdravstvene ustanove (65). Bos i sur. dolaze do zaključka kako visoko strukturirano okruženje za liječenje usmjereno na stabilizaciju pacijenta značajno pomaže „teškim“ pacijentima (66).

U Hrvatskoj, Klinika za psihijatriju i psihološku medicinu KBC-a Zagreb bavila se problemom

This drama signifies the inability of the person with *borderline* and the narcissist to change anything, instead repeating the same scenario over and over again (10).

Social parasitism as a secondary benefit from disease is a concept we associate with “impossible, difficult” patients. Such patients very often have strongly expressed clinical pictures indicating *borderline* or narcissistic personality disorder. They are unable to keep their jobs, leading to even the highly educated among them to be out of work and dependent on financial assistance from their family if it is well-off or welfare if it is poorer. Even when they feel better or successfully resolve the primary cause that led them to be unemployed, they show no motivation to return to work. It is believed that this is due to fantasies of success and fame, and that they see themselves as misunderstood and overly capable, and filled with unrecognized talent. Such patients refuse psychotherapy when it no longer brings them financial advantages (paid leave, retirement, social welfare) and when they are required to pay for the therapy themselves regardless of whether they think it is necessary. Furthermore, it is believed that they much be “threatened” that they must find employment or the therapy will be terminated, as this is the only way to incite them to be creative and break the endless circle of sloth and profit (19,62).

Koekkoek et al. described the behavior of “difficult” patients. They divided “difficult behavior” into four dimensions: withdrawal and unavailability, demanding and claims, attention-seeking and manipulation, and aggressive behavior (63,64). They also stated that “difficult” patients are often associated with professional pessimism, passive treatment, and potential discharge from the healthcare institution (65). Bos et al. concluded that a highly structured environment for treatment focused on patient stabilization significantly helps “difficult” patients (66).

In Croatia, the Zagreb Clinical Hospital Center Clinic for Psychiatry and Psychological Medicine examined the issue of “difficult” patients. Marčinko et al. concluded that patients with personality

„teških“ pacijenata. Tako Marčinko i sur. zaključuju kako pacijenti s poremećajem ličnosti pate od konstitucijske vulnerabilnosti (67,68). Marčinko i Bilić 2010 pokazuju kako obiteljska terapija u ženskih osoba oboljelih od graničnog poremećaja ličnosti pokazuje značajna poboljšanja u obliku veće samostalnosti te manjoj sklonosti depresiji i suicidu u odnosu na skupinu koja nije bila liječena obiteljskom terapijom (69).

Budući da se često radi o visokointelektualnim osobama stupanj emocionalne regresije određivat će sklonost kriminalnom ponašanju. Tako će oni koji imaju samo određene crte poremećaja ličnosti vrlo rijetko učestvovati u kriminalu, oni s malignim narcizmom češće, dok će oni s jakim antisocijalnim karakteristikama biti izuzetno skloni takvom ponašanju (23,70). Nadalje, komorbiditet poput bipolarnog afektivnog poremećaja katalizirat će ulazak u kriminalne aktivnosti. Izražen osjećaj grandioznosti i manjak empatije također čine čimbenike rizika za kriminal (23). Uzrok je još uvijek nepoznat, no smatra se da se radi o utjecaju okolišnih faktora na određenu genetsku predispoziciju. Jako loša okolina potiče na kriminal bez obzira na gensku podlogu, ali kada postoji umjereno loša okolina smatra se da mora postojati određena genska predispozicija da bi se razvilo antisocijalno ponašanje te kriminal (23,71). Opisane su neuroanatomske promjene u cingularnoj regiji i orbitomedijalnom dijelu frontalnog korteksa čija je uloga inhibicija socijalno neprihvatljivog ponašanja tako da pri njihovom oštećenju dolazi do izostanka inhibicije (72,73). Linnoila i Virkkunen su 1992. proučavali povezanost agresije, suicidalnosti i niskog serotonina. Došli su do zaključka da je nizak serotonin povezan s impulzivnim kriminalnim ponašanjem kao i sklonosti alkoholu. Sve su zajedno nazvali „sindromom niskog serotonina“ (74).

Sklonost suicidu kod narcisa i *borderline-a* treba razgraničiti od parasuicidalnog ponašanja kao ekstremnog oblika privlačenja pažnje i ekspre-

disorder suffer from constitutional vulnerability (67,68). In 2010, Marčinko and Bilić showed that family therapy in female persons suffering from borderline personality disorder showed significant improvements presenting as greater independence and lower susceptibility to depression and suicide in comparison with the group that was not treated with family therapy (69).

Because these patients are often highly intellectual persons, the level of emotional regression will determine the propensity for criminal behavior. Therefore, those that have only some of the characteristics of personality disorder will very rarely participate in crime, those with malignant narcissism will do so more often, whereas those with strong antisocial characteristics will be extremely prone to such behavior (23,70). Furthermore, comorbidities such as bipolar affective disorder can catalyze initiation of criminal activities. A pronounced feeling of grandiosity and lack of empathy also represent risk factors for criminal behavior (23). The cause is still unknown, but it is believed that this stems from the influence of environmental factors on certain genetic predispositions. A very bad environment encourages criminal behavior regardless of the genetic basis, but when the environment is only moderately poor it is believed that a certain genetic predisposition is needed to develop antisocial and criminal behavior (23,71). Neuroanatomical changes have been described in the cingulate cortex and the orbito-medial part of the frontal cortex, which inhibit socially unacceptable behavior leading to a consequent lack of inhibition resulting from damage to these areas (72,73). In 1992, Linnoila and Virkkunen studied the associations between aggression, suicidal tendencies, and low serotonin. They concluded that low serotonin is associated with impulsive criminal behavior as well as tendency towards alcohol abuse. Taken together, they called this phenomenon “low serotonin syndrome” (74).

Tendency towards suicide in persons with narcissist and borderline disorders should be differentiated from parasuicidal behavior as an extreme form of attention-seeking and expression of inner emptiness and self-destruction. The concept

sije vlastite praznine i destrukcije. Koncept parasuicidalnog ponašanja uveo je Ringel 1953. godine. To su različiti obrasci ponašanja ili djelovanja povezani sa samodestrukcijom. Nadalje, to je i težnja ideji samouništenja, bolestan *thanatos*, koji na nesvjesnoj razini, uz predisponirajuću patološku podlogu ličnosti ima za cilj ugroziti, ozlijediti sebe, bez same namjere oduzimanja života. Kako prepoznati osobu koja se parasuicidalno ponaša teško je tvrditi dok neka osoba nema puno takvih obrazaca – prebrza vožnja, konzumacija alkohola, zlouporaba droga, samoozlijeđivanje ... Apel-fenomen naglašava kako je tolika količina agresije prema sebi i drugima definitivno najekstremniji oblik privlačenja pažnje bliskih/važnih osoba. Žele da im se okolina posveti i angažira oko njihovih problema (75-78).

Mentalizacijske teorije smatraju kako postoji povezanost između odrastanja u nesigurnim okolnostima ili nestabilnim obiteljima s kasnijim razvojem suicidalnih misli, pa i ponašanja. Danas se ističu tri važna elementa koja predisponiraju pojedinca k suicidalnosti – perfekcionizam, impulzivnost i beznade (77,79). To su vrlo česta, da ne kažemo gotovo obavezna obilježja poremećaja ličnosti, pa nas opasnost od suicida kod *borderline-a* i narcisa ne smije iznenaditi.

Kernberg (2014.) opisuje različite razloge suicidalnosti kod *borderline-a* i narcisa. *Borderline* (kao i težak narcis koji funkcionira na *borderline* razini) sklon je nepromišljenom suicidu u oluji osjećaja nakon frustrirajućeg događaja ili situacije koja ga je pogodila. Takva situacija potpuno je neplanirana, a jasno možemo uočiti element impulzivnosti. S druge strane, narcis ima svoju parolu („bolje smrt nego posramljenje“) pa je njegovo parasuicidalno i suicidalno ponašanje u skladu s tim uvjerenjem. Ne želi pokazati sram, već zadržava čvrstu vanjštinu, doima se smireno i opuštено, dok u isto vrijeme pažljivo planira vlastiti suicid kako bi ono bilo atraktivno i oslobađajuće. Također, na suicid može gledati

of parasuicidal behavior was introduced by Ringel in 1953. It includes different forms of behavior and action associated with self-destruction. It also includes a drive towards the idea of self-destruction, a sick *thanatos* at an unconscious level supported by a predisposing pathological basis in the personality that has self-endangerment and self-harm as a goal without the drive to actually take one's own life. It is hard to recognize a person exhibiting parasuicidal behavior until they present with multiple behavior patterns – speeding, alcohol consumption, drug abuse, self-harm... The appeal phenomenon emphasizes that this amount of aggression towards oneself and others is definitely the most extreme form of attention-seeking directed at close/important persons. Such people want their environment to be dedicated to them and for it to engage with their problems (75-78).

Mentalization theories claim that there is an association between growing up in uncertain environments or in unstable families and later suicidal thoughts and behavior. Currently, three important elements have been emphasized that predispose an individual to suicidal behavior – perfectionism, impulsivity, and hopelessness (77,79). These are very common and almost necessary characteristics of personality disorder, so the danger of suicide in persons with narcissistic and borderline personality disorder comes as no surprise.

Kernberg (2014) postulated different reasons for suicidality in borderline and in narcissistic personality disorder. Persons with borderline disorder (and severe narcissists who function at the level of borderline disorder) are prone to rash suicide in the emotional unrest caused by a frustrating event or situation. The situation is completely unplanned, and the element of impulsivity is clear. On the other hand, narcissists act according to their principles (“better death than shame”) and their parasuicidal and suicidal behavior result from such a principle. They do not want to exhibit shame, and they maintain an outward appearance of strength and calm while simultaneously carefully planning their own suicide in a

kao na „oslobađajuću smrt“ od svijeta koji ne može kontrolirati. Kod narcisa je tako izražen perfekcionizam kao rizičan čimbenik suicidalnosti (21,70).

Ekspresija dominantne, nesvjesne samodestruktivnosti očituje se ponavljanim pokušajima samoubojstva. Također, smatra da je važno napraviti distinkciju između stanja kada je suicidalno ponašanje posljedica teške depresije od istog ponašanja koje je „način života“. Znaju i provocirati terepeuta, ponovno nadmećući se s njim, govoreći o pokušaju suicida već pri prvom susretu izazivajući da terapeut „prihvati izazov“ i odgovori ih od tog nauma. Smatra da su to pacijenti s opterećenom obiteljskom situacijom, koji su proživjeli određene traume ili zlostavljanje, bili dio obiteljskog kaosa ili pak imali agresivne roditelje. Neki samodestrukciju pokazuju samosakaćenjem/samomutilacijom pa tako mogu izazivati frakture udova i slično, no neće sebe nikada dovesti u stanje životne opasnosti. Takvi pacijenti mogu to doživljavati i kao osobni trijumf nad svima onima koji se boje boli, ozljeda i bilo kakvog drugog tjelesnog oštećenja (19). Također, Kernberg navodi veliku važnost razlikovanja suicidalnosti koja se javlja uz veliki depresivni poremećaj (terapija je pretežno farmakološka) te kroničnog suicidalnog ponašanja, koje se često spominje i kao parasuicidalno i suicidalno ponašanje kao stil života te bolje reagira na psihoterapiju (20). Kernberg spominje i Greenov „sindrom mrtve majke“ u kojemu osoba uništava sve odnose s ljudima oko sebe. U podlozi toga je internalizirana slika mrtvog objekta, to jest majke koja je najčešće bila odsutna i depresivna. Parasuicidalnim i suicidalnim ponašanjem osoba ima osjećaj da se može opet približiti, pa možda i ujediniti s takvim objektom te tako biti u savršenom skladu i simbiozi bez ikakve daljnje patnje (21).

Twenge, Miller i Campbell su 2009. skovali termin epidemija narcizma, čime su upozorili na rastući broj narcisa u društvu, kao i u kliničkim dijagnozama (80). U današnjem društvu teh-

way that is attractive and liberating to them. Such persons can view suicide as a “liberating death” that frees them from a world they cannot control. Perfectionism is thus an important risk factor for suicidality in narcissists (21,70).

Expression of dominant, unconscious self-destructiveness manifests in repeated suicide attempts. Additionally, Kernberg believed that an important distinction should be made between states in which suicidal behavior is the result of severe depression and states in which such behavior becomes a “way of life”. Such patients can also attempt to provoke and challenge the therapist by talking about suicide attempts already at the first meeting, trying to force the therapist to “accept the challenge” of talking them out of it. It is believed that such patients come from difficult family situations, have experienced trauma or abuse, were involved in family chaos, or had aggressive parents. Some manifest self-destructive tendencies through self-mutilation and can cause limb fractures and similar harm, but will never endanger their own lives. Such patients may view this act as a personal triumph over all those who fear pain, injury, or any other bodily harm (19). Kernberg also emphasized the importance of differentiating between suicidality that presents as a severe depressive disorder (with treatment being predominantly pharmacological) and chronic suicidal behavior, which is often described as parasuicidal behavior and suicidal behavior as a lifestyle and which reacts better to psychotherapy (20).

Kernberg also mentioned Green’s “dead mother complex” in which the person destroys all relationships with people around them. The basis for this is an internalized image of a dead object, i.e. the mother who was usually absent and depressive. Parasuicidal and suicidal behavior enables the person to feel closer and even unite with such an object, achieving perfect harmony and symbiosis without any further suffering (21).

In 2009, Twenge, Miller, and Campbell coined the term narcissism epidemic as an attempt to warn of the growing number of narcissists both in society as a whole and in clinical settings (80). Tech-

nologija se rapidno brzo razvija, a čovjek se sve slabije tome prilagođuje. Internet pomaže, ali u emocionalnom zasigurno i odmaže (14). Prisutnost na društvenim mrežama gotovo je obavezna za društveni život današnjice, no odnosi koji se tamo ostvaruju vrlo su plitki i ugrožavaju osnovne prednosti međuljudskih odnosa poput empatije i topline (80). To je svakako i bijeg od realiteta, predstavljanje u idealnom izdanju na društvenim mrežama, čak i nadilazi najbolje izdanje ako se koriste nove tehnološke mogućnosti obrade fotografija. Pojedinač koristi sve mogućnosti kako bi ispao *cool* i uspješan te kako bi prikrio vlastitu slabost, fragilnost i sram (14,81).

Andreassen i sur. proučavali su sklonost ekscesivnom ili kompulzivnom korištenju društvenih mreža u povezanosti s narcizmom i samopoštovanjem. Njihovi rezultati pokazali su kako mlađa dob, ženski spol, samci (nebivanje u romantičnoj/ljubavnoj vezi), lošija edukacija, manja primanja, studenti, niže samopoštovanje i narcistične karakteristike pokazuju povezanost sa sklonošću ekscesivnom/kompulzivnom angažmanu na društvenim mrežama. To pokušavaju objasniti potrebom za hranjenjem ega (povezanost s narcističnim osobinama) te pokušajem suzbijanja negativnog samovrednovanja (dimenzija samopoštovanja) (82).

Postoje i radovi koji tvrde kako narcistični ljudi više i češće koriste mrežne stranice, pogotovo u svrhu samopromocije u odnosu na manje narcistične ljude (83,84). Zanimljivo je i istraživanje koje nalazi kako među mladim odraslima u Americi od kasnih 70-ih postoji porast narcizma, a smanjenje empatije (84,85).

Suvremeni *reality show*-ovi pravi su primjer praznine današnjeg čovjeka (14). Ne cijeni se rad i odricanje za postizanje uspjeha. Fokus se stavlja na zabavu, hedonizam, a pobjednik će u dokolici pokazati svoju divnu ličnost koju će „vanjski svijet“ napokon prepoznati. Tako su to obični ljudi čija će se veličina napokon spoznati. U dubini se nadaju kako više neće mo-

nology is developing rapidly in modern society, but people are having more and more difficulty adapting to the developments. The existence of the internet is beneficial, but also surely makes life more difficult at an emotional level (14). Being present on social networks is almost mandatory for social life today, but relationships formed on social networks are very shallow and endanger the fundamental advantages of interpersonal relationships such as empathy and warmth (80). This certainly also constitutes an escape from reality by representing oneself in the best light on social networks, and even improving on the true best version of oneself with the use of new technological developments in photograph processing. The individual uses all available tools to seem *cool* and successful and to hide any weakness, fragility, and shame (14,81).

Andreassen et al. studied the tendency towards excessive or compulsive use of social networks in association with narcissism and self-esteem. Their results showed that young age, female sex, being single (not being in a romantic relationship), poorer education, lower income, being a student, lower self-esteem, and narcissistic characteristics showed an association with tendency for excessive/compulsive engagement on social networks. They attempted to explain this as a need for feeding the ego (associated with narcissistic characteristics) and an attempt to suppress negative self-worth (the self-esteem dimension) (82).

Some articles also claim that narcissistic persons use the internet for longer periods of time and more frequently, especially with the goal of self-promotion, in comparison with less narcissistic persons (83,84). There was also an interesting study that found an increase in narcissism in young adults in the USA since the late 70s, with a concurrent decrease in empathy (84,85).

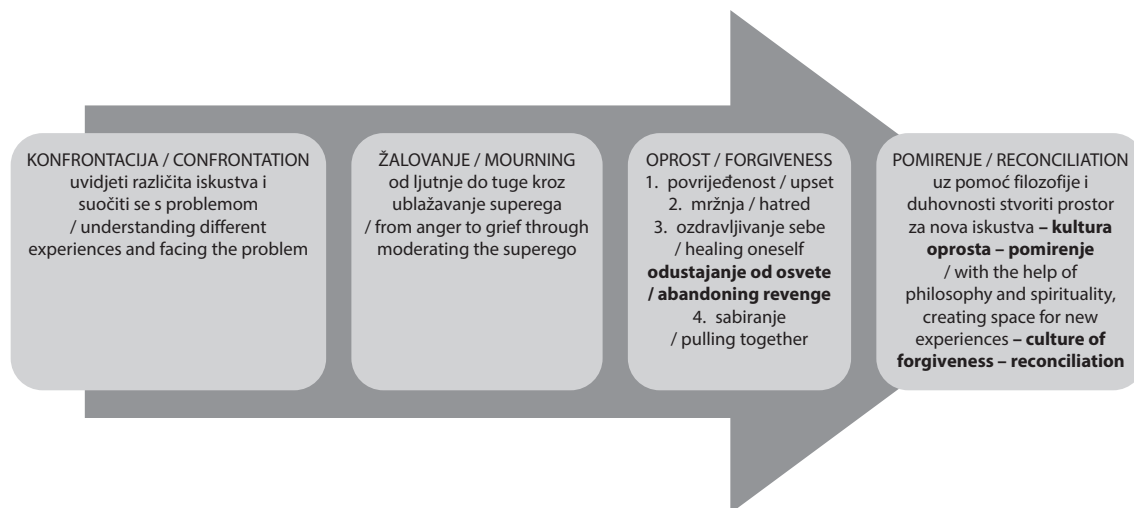
Modern reality shows are a true example of the emptiness in modern humans (14). Work and sacrifice to achieve a goal is no longer valued. The focus is on having fun and hedonism, with the victor being the one who presents their wonderful personality in a context of leisure time and is finally recognized as wonderful by the “outside

rati raditi neke „obične“ poslove, već će ih se lansirati u glamurozni svijet bogatih i slavni. Isto tako činjenica je i da takvi sadržaji postoje jer su gledani. Što to onda govori o gledatelji-ma? Oni uživaju biti opsjednuti onima koji su opsjednuti samima sobom (80). Gledajući kako se drugi muče suočeni s vlastitom prazninom, gledatelj nešto radi, osjeća se superiornije nad sudionikom takvog *show-a* koji se ulaskom u *show* odrekao intime, dotadašnjeg posla te obitelji i prijatelja na neko vrijeme, dakle svega što ga veže za realitet. Noviji koncepti emisija još su regresivniji, poigravaju se s temeljnom ljudskom potrebom, potrebom za drugim objektom te željom za ljubavi i pažnjom. Tako producenti izabiru podosta regresivne, često i osobe snižene inteligencije ili pak socijalno neprilagođene, ismijavajući njihovu komunikaciju i ophođenje tijekom zavođenja i druženja. Navedeno nikako nije jedini primjer dvoličnosti u suvremenom društvu. Freeman i Fox 2013. spominju dvoličnost medija, jer ismijavaju poznate osobe koje imaju neprirodno zategnuto lice za svoje godine jednako kao i one koje imaju bore i primjetne znakove starenja (14, 86).

Rješenje u obliku zrelijeg ponašanja i veće rezilijencije treba biti praćeno optimističnim ponašanjem, sposobnošću procjene rizika i posljedica te mogućnošću kontrole emocija (87-90). Tek integrirani cjeloviti objekti mogu dopustiti nova, dobra iskustva koja omogućuju sadašnjost i budućnost te otpućuju loše vrijeme, odnosno ostavljaju ga prošlosti. Krivnjom, reparacijom i ispravnim žalovanjem mogu se graditi novi odnosi koji onda imaju potencijal za optimizam i želju za novim iskustvima u životu (59). Prošlost treba ostaviti prošlosti, agresiju sublimirati u nešto novo i tomu se posvetiti. To je moguće radom tuge čime se dolazi do izgubljenog libida, te radom mržnje kojim se, uz ulaganje energije, možemo riješiti agresije. Uvidom i procesom žalovanja treba odustati od osvete te stvoriti kulturu oprosta i pomirenja (sl. 4) (91).

world”. These are ordinary people whose greatness will finally be recognized. At heart they hope that they will no longer have to work at any “ordinary” jobs but will instead be launched into the glamorous world of the rich and famous. It is also a fact that such media content exists because it has a high viewership. What does this say about the viewers? They enjoy being obsessed with those who are obsessed with themselves (80). Watching others struggle with their own emptiness, the viewer is doing something and feels superiority over the participant of such a show, who relinquished their privacy, their job, and family and friends for a time, i.e. everything tying them to reality. Newer concepts of the show are even more regressive and toy with the basic human need for objects and for love and affection. Producers thus choose quite regressive persons, sometimes even with lower intelligence or poorly socially adjusted, ridiculing their communications and behavior during seduction and socialization. The above is by no means the only example of hypocrisy in modern society. In 2013, Freeman and Fox mentioned the hypocrisy of the media because they ridicule celebrities both for having unnaturally tight facial skin for their age and for having wrinkles and other noticeable signs of aging (14,86).

A solution in the form of more mature behavior and greater resilience should be accompanied by optimistic behavior, the ability to assess risks and consequences, and the ability to control emotions (87-90). Only integrated, wholesome objects can allow new, good experiences that accept the present and the future while relegating bad times to the past. Guilt, reparations, and proper mourning can build new relationships that have a potential for optimism and a desire for new experiences in life (59). The past should be left to the past, while aggression should be sublimated into something new that oneself can dedicate to. This is possible through grief work that restores the lost libido, as well as working on hate which can, with an investment of energy, allow us to get rid of aggression. Insight and the mourning process should lead to abandoning the desire for revenge and creating a culture of forgiveness and reconciliation (Figure 4) (91).



SLIKA 4. Put pomirenja (prema Urlič, 2004., 2014., Siassi, 2007., Smedes, 1996., Alerdice, 2004.)

FIGURE 4. The path of reconciliation (according to Urlič, 2004, 2014, Siassi, 2007, Smedes, 1996, Alerdice, 2004)

ZAKLJUČAK

Narcizam je opterećenje suvremenog doba, kako u individualnim slučajevima, tako i na široj, socijalnoj razini. *Borderline*, kao negativ narcisu ili preciznije samo neuspješan narcis, svojim problemima i mehanizmima obrane također otežava funkcioniranje društva u cjelini. Odnos narcisa i *borderline-a* na socijalnoj razini obilježen je traumom, sramom, međusobnim okrivljavanjem s provokacijama, agresijom te drugim umarajućim konfliktima koji beskrajno iscrpljuju obje strane i koče društvo, koje za napredak treba drugačije uloženu energiju.

Mnoge statistike ukazuju na sve veći broj narcističnog i graničnog poremećaja ličnosti tako da će biti potrebno dalje se posvetiti toj temi i upitati se kako olakšati breme narcizma.

U terapiji je potrebno raditi na sublimaciji agresije u novi interes, dopuštanju novih, dobrih iskustava kojima je cilj doći do oprosta i stvaranja kuture pomirenja. Važno je poticati apstrakciju, empatiju te altruizam, kao i druge zdrave mehanizme obrane.

CONCLUSION

Narcissism is one of the burdens of modern times, both at the level of individual cases and at the wider social level. Borderline personality disorder, as the negative of narcissism or more precisely as an unsuccessful narcissist, also hampers the functioning of society as a whole through associated problems and defensive mechanisms. The relationship between narcissism and borderline personality disorder at the social level is marked by trauma, shame, mutual blame and provocations, aggression, and other taxing conflict that infinitely fatigue both sides and encumber society, which requires a different investment of energy in order to achieve progress.

Many statistics indicate the growing number of narcissistic and borderline personality disorders, which means that this topic will require further investments and evaluation of ways to alleviate the burden of narcissism.

Therapy must work on the sublimation of aggression into new interests and openness to new, positive experiences with the goal of achieving forgiveness and creating a culture of reconciliation. It is important to encourage abstraction, empathy, and altruism as well as other healthy defense mechanisms.

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Važnost interneta u informiranju o zdravlju kod trudnica

/The Importance of the Internet in Obtaining Health-related Information in Pregnant Women

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Internet je u današnje vrijeme učestao medij putem kojeg osobe prikupljaju informacije o zdravlju. Žene češće koriste internet kako bi došle do zdravstvenih informacija, a njihova sklonost pretraživanju intenzivira se tijekom trudnoće koja je za njih vrlo važno životno razdoblje. U ovom preglednom radu sažeti su nalazi o fenomenu pretraživanja zdravstvenih informacija na internetu kod trudnica. Detaljno su opisani facilitirajući i inhibirajući faktori zbog kojih se trudnice upuštaju u pretraživanje informacija o zdravlju, kao i procesi u zdravstvenom sustavu koji ih navode na pretraživanje. Prikazani su najčešće korišteni internetski izvori zdravstvenih informacija i teme o kojima trudnice najviše pretražuju. Objasnjeni su aspekti pouzdanosti informacija namijenjenih trudnicama na internetu, kao i faktori koje one uzimaju u obzir prigodom procjene točnosti i relevantnosti informacija. Dan je sažet pregled demografskih, opstetričkih i psiholoških karakteristika trudnica zbog kojih su one sklonije pretraživanju informacija o zdravlju. Psihološke karakteristike koje su opisane su zdravstvena pismenost, samoeфикаsnost, zdravstveni lokus kontrole, zdravstvena anksioznost i anksioznost specifična za trudnoću. Objasnjeni su efekti i posljedice koje internetsko pretraživanje ima na funkcioniranje i dobrobit trudnica s naglaskom na kompulzivno pretraživanje i intenziviranje anksioznosti nakon pretraživanja. Na kraju rada je opisana važnost daljnjih istraživanja u tom području s obzirom na brojne praktične implikacije.

/ The Internet has become a commonly used medium through which persons obtain information on health. Women use the Internet more often to obtain health-related information, and their tendency towards searching the Internet for information increases during pregnancy, which is a very important period in their lives. This review article presents findings on the phenomenon of searching the Internet for health-related information in pregnant women. It includes a detailed description of facilitating and inhibiting factors due to which pregnant women engage in Internet searches on health, as well as processes within the healthcare system that lead to such searches. We describe the most commonly used internet sources for health-related information and the most common search topics in pregnant women. Various aspects of the reliability of the information intended for pregnant women that can be found on the Internet are described, as well as factors that they take into account when evaluating the accuracy and the relevance of the information. We also present a concise overview of the demographic, obstetric, and psychological characteristics of pregnant women due to which they are more prone to web searches on information related to health. The psychological characteristics described herein comprise health literacy, self-efficacy, health-related locus of control, health-related anxiety, and pregnancy-specific anxiety. We explain the effects and consequences of Internet searches on the functioning and wellbeing of pregnant women, with an emphasis on compulsive web searches and intensification of anxiety after searching. Finally, we describe the importance of research in this area given the numerous practical applications.

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UVOD

Internet je u današnje doba globalno raširen i postaje sve učestaliji medij putem kojeg osobe vrlo jednostavno, brzo i anonimno mogu doći do informacija o svom zdravlju (1). Žene su sklonije pretraživanju zdravstvenih informacija na internetu (2) i to je posebno učestalo tijekom trudnoće, koja je vrlo važno, složeno i osjetljivo razvojno razdoblje u njihovom životu (1). Trudnoća ulazi u pet najtraženijih zdravstvenih pojmova koje ljudi pretražuju na internetu (3), a majke su jedna od skupina koje najviše koriste internet kako bi pronašle zdravstvene informacije i donijele odluke o zdravlju (4). Od trudnica se danas očekuje visoka razina aktivnosti i uključenosti u trudnoću i brigu za dijete te samostalno donošenje odluka o zdravlju (5). Također, smatra se da je moderno viđenje trudnoće takvo da se trudnice intenzivno medicinski nadgledaju zbog čega se trudnoću može doživjeti kao „bolest“, a ne kao prirodno stanje (5). Stoga nije čudno da žene imaju potrebu biti informirane i koristiti sve izvore koji su im dostupni, poput interneta.

Dosadašnja istraživanja pružaju raznolike podatke o broju žena koje koriste internet kako bi našle informacije o zdravlju. Američka i azijska istraživanja navode da je taj broj viši od 75 % (6), dok neka europska izvještavaju o podaci-

INTRODUCTION

Today, the Internet is globally available and has become an increasingly used medium that people can employ to simply, quickly, and anonymously obtain information on their health (1). Women are more prone to searching for health-related information on the Internet (2), and this is especially pronounced during pregnancy, which represents a very important, complex, and sensitive developmental period in their lives (1). Pregnancy is one of the five most searched health-related terms that people research on the Internet (3), and mothers are one of the groups that uses the Internet the most to find health-related information and make decisions on health (4). Today, pregnant women are expected to show a high level of activity and involvement in pregnancy and child care and to independently reach decisions on health (5). It is also believed that the modern perception of pregnancy results in pregnant women receiving intense medical monitoring, which can lead to pregnancy being viewed as an “illness” rather than a natural state (5). It is therefore not surprising that women feel a need to be informed and use every available source of information, such as the Internet.

Current research presents varied data on the number of women that use the Internet to find health-related information. American and Asian studies report that this number is above 75% (6),

ma od čak 98 % (2) što pokazuje da trudnice u visokom postotku aktivno koriste internet zbog zdravstvenih pretraživanja. Larsson (7) nalazi da je učestalost korištenja interneta za nalaženje informacija o trudnoći od jednom do čak 62 puta mjesečno, a Declercq, Sakala, Corry i Applebaum (8) izvještavaju o medijanu od šest sati na mjesec. U jednom istraživanju (9) najveći broj trudnica je tražilo informacije na internetu svaki tjedan, a nešto manji broj svakodnevno. Većina trudnica internet koristi za pretraživanje informacija o zdravlju manje od jednog sata u danu, a čak oko 40 % više od jednog sata na dan (10).

Zabrinjavajući je podatak da se većina trudnica ne osjeća spremnima za porod. Moguće je da tome pridonosi i korištenje interneta jer su trudnice u virtualnom svijetu izložene velikoj količini informacija i mogu imati dojam da je jednostavno saznati apsolutno sve o trudnoći i porodu. Postoji mogućnost da se one danas više ne boje nepoznanica vezanih uz porod, nego upravo suprotno, toga da znaju više nego što bi željele (11). Ipak, treba imati na umu da adekvatna količina kvalitetnih informacija može smanjiti strah od nepoznatog i pripremiti trudnice na porod (12).

S obzirom na to da je korištenje interneta u trudnoći tema koja sve više okupira stručnjake u tom području, a neistražena je u kontekstu hrvatskog zdravstvenog sustava, cilj ovog rada je dati pregled relevantnih istraživanja u tom području, kao i smjernice za buduća istraživanja.

RAZLOZI KORIŠTENJA INTERNETA U TRUDNOĆI

Razlozi zbog kojih se trudnice upuštaju u pretraživanje zdravstvenih tema na internetu su mnogobrojni. Kao vrlo česti razlozi koje trudnice navode su brzina i jednostavnost dolaženja do informacija, fleksibilnost pristupa interne-

whereas some European studies report a rate of as high as 98% (2), which indicates that a large percentage of pregnant women actively use the Internet for health-related searches. Larsson (7) found that the prevalence of Internet use for pregnancy-related information ranged from once to as many as 62 times per month, while Declercq, Sakala, Corry, and Applebaum (8) reported a median rate of six hours per month. In one study (9), the majority of pregnant women searched the Internet for information every week, and a somewhat smaller number searched every day. The majority of pregnant women use the Internet to search for health-related information less than one hour per day, but as many as approximately 40% use it more than one hour per day (10).

One concerning fact is that the majority of pregnant women do not feel ready to give birth. It is possible that internet use contributes to this, because the virtual world exposes pregnant women to a large amount of information that can create the impression that it is simple to find out absolutely everything on pregnancy and delivery. It is therefore possible that pregnant women today no longer fear the unknown factors related to delivery but rather the opposite: that they know more than they might want (11). However, we must bear in mind that having an adequate amount of high-quality information available can reduce fear of the unknown and prepare women for the process of giving birth (12).

Since the use of the Internet in pregnancy is a topic of increasing interest to experts in the field, while remaining unexplored in the context of the Croatian healthcare system, the goal of this article was to provide a review of the relevant studies in this field as well as guidelines for future research.

REASONS FOR USING THE INTERNET IN PREGNANCY

Pregnant women engage in Internet searches on health-related topics for numerous reasons. Very common reasons reported by pregnant women include the speed and simplicity of acquiring information, the flexibility of Internet access, privacy, curiosity, the large amount of information

tu, privatnost, znatiželja, velika količina informacija na internetu, jednostavna terminologija i informacije do kojih se može doći besplatno i potreba da se trudnice uvjere da je sve u redu s trudnoćom (1,13-15). Kao prednost informiranja putem interneta trudnice navode i rjeđe negativno procjenjivanje od strane drugih korisnika, u odnosu na komunikaciju uživo s liječnikom ili bliskom osobom (16).

Osim korištenja interneta u svrhu proširivanja znanja, trudnice na internetu drugim korisnicima opisuju svoja iskustva, misli i osjećaje kako bi dobile podršku, ali i kako bi možda pomogle drugim trudnicama koje su u istoj situaciji (17). Podrška drugih osoba na internetu je pojedincima posebno važna kad su tjeskobni ili doživljavaju stres (18), tako da je moguće da isto vrijedi i za trudnice.

Faktori koji su povezani s traženjem zdravstvenih informacija tijekom trudnoće dijele se na facilitirajuće, odnosno one koji potiču pretraživanje, i inhibirajuće, koji smanjuju učestalost pretraživanja (14). Trudnice će se vjerojatnije upuštati u traženje informacija ako ih u tome podržavaju i ohrabruju bliske osobe, ako su znatiželjne i žele saznati što više informacija, ako su nekad osjećale da nisu dovoljno informirane o svom zdravstvenom stanju i to žele promijeniti te ako imaju potrebna znanja kako adekvatno pretraživati resurse. Ženama pretraživanje olakšava i potpora zdravstvenog sustava, dobar odnos s liječnikom i dobivanje kvalitetnih informacija (14). Inhibirajući faktori su oni zbog kojih je manje vjerojatno da će trudnice tražiti informacije. Jedan od tih faktora je sustav u kojem trudnice ne dobivaju dovoljno informacija od zdravstvenog osoblja, što ih dodatno obeshrabruje u pretraživanju. Ako trudnice općenito imaju teškoće u nalaženju informacija zbog manjka izvora, neiskustva u pretraživanju ili osjećaja da im je pretraživanje stresno, također su manje sklone tražiti informacije o zdravlju. Zanimljivo je da za dio trudnica okolina isto može biti inhibitor,

on the Internet, simple terminology and information that can be accessed free of charge, and the need to confirm that everything is alright with their pregnancy (1,13-15). An advantage reported by pregnant women regarding Internet use is also the less common negative assessments on part of other users in comparison with in-person communication with physicians or loved ones (16).

In addition to using the Internet to expand their knowledge, pregnant women also share their experiences, thoughts, and feelings with other online users in order to get support but also to perhaps help other women who find themselves in the same situations (17). Receiving support from others on the Internet is especially important to users in times of anxiety and stress (18), and the same is likely to hold for pregnant women.

Factors associated with searching for health-related information during pregnancy can be divided into facilitating factors, i.e. those that encourage searching, and inhibiting factors, i.e. those that reduce the incidence of searching (14). Pregnant women will be more likely to engage in searching for information if they are encouraged in this by persons close to them, if they are curious and want to find out more information, if they sometimes felt insufficiently informed on the state of their health and want to change that, and if they have the requisite knowledge to adequately search through the available resources. Searching is also facilitated by support from the healthcare system, a good relationship with the physician, and receiving high-quality information (14). Inhibiting factors are those that make it less likely that pregnant women will engage in pregnancy-related internet searches. One of these factors is a system in which pregnant women do not receive sufficient information from healthcare staff, which further discourages them in searching for the information themselves. If pregnant women have difficulties in finding information in general due to a lack of sources, being inexperienced in searching, or due to experiencing searching as stressful, they will also be less likely to search for health-related information. It is interesting to note that the environment can also be an inhibiting factor for some pregnant women, partially due to persons in their environment not being experienced in searching,

djelomično jer osobe iz okoline nisuiskusne u pretraživanju, ali i ako su te osobe prisutne na pregledima i preuzimaju u potpunosti na sebe informiranje i donošenje odluka u trudnoći (14).

Dio trudnica je nezadovoljan pregledima tijekom trudnoće jer ne zadovoljavaju u potpunosti njihove potrebe. Žene smatraju da se prvi pregled u trudnoći zakazuje prekasno i da su na početku trudnoće kontrole rjeđe nego bi one željele jer imaju puno pitanja za liječnike (19). Glavne kritike vezane uz preglede su dugo razdoblje između dva pregleda i kratko trajanje pregleda tijekom kojeg trudnice ne saznaju sve informacije koje ih zanimaju i ne osjećaju se dovoljno ugodno kako bi postavile sva pitanja koja imaju (20). Trudnice navode da puno češće koriste internet kao „prvu pomoć“ u razdoblju između pregleda kad su zabrinute i anksiozne zbog simptoma koje osjećaju, a neugodno im je učestalo kontaktirati liječnika kako bi saznale je li sve u redu (5). Također, trudnice nastoje biti što bolje pripremljene za pregled tako da traže informacije na internetu prije nove kontrole kod liječnika (1,21). Nakon pregleda traže informacije na internetu kako bi provjerile neke informacije koje su čule od liječnika, bolje shvatile te informacije, saznale više o temi o kojoj su razgovarale na pregledu i kako bi se uvjerile je li nužno da traže drugo mišljenje, osim onog koje im je dao liječnik (2,13,22). Neke trudnice češće koriste internet za informiranje kad se na neke njihove probleme ne reagira jer nisu opasni za dijete, ali narušavaju njihovu kvalitetu života (5). Sve navedeno neki su od razloga zbog kojih trudnice koriste internet za dobivanje zdravstvenih informacija, a ukazuju na problematiku vezanu uz preglede u trudnoći i manjak pažnje i podrške od dijela zdravstvenog sustava za neke trudnice. Međutim, zanimljivo je istraživanje Lagan i sur. (21) u kojem je visok postotak trudnica pretraživao internet prije i nakon pregleda, ali ih se 80 % izjasnilo da to nije povezano s pregledom. Po-

but also if these persons are present at medical examinations and completely take upon themselves the role of finding information and making decision regarding the pregnancy (14).

Some pregnant women are unhappy with medical examinations during pregnancy because they do not fully satisfy their needs. Women believe that the initial examination in pregnancy is arranged too late and that checkups at the start of the pregnancy are more sporadic than they would prefer, since they have many questions for physicians (19). The main criticisms associated with the examinations are the long periods of time between two examination and the short duration of the examination, during which pregnant women do not have the time to find out all the information that interests them and do not feel comfortable enough to ask all the questions that they have (20). Pregnant women report often using the Internet as a “first-aid” solution in the period between examinations when they are worried or anxious because of the symptoms they are experiencing but too embarrassed to repeatedly contact the physician to ask if everything is alright (5). Additionally, pregnant women try to be as well-prepared for an examination as possible, so they search for information online before a new medical checkup (1,21). After an examination, they search for information on the Internet to double-check what the physician has told them, understand it better, find out more about a topic that was broached during the examination, or to decide whether they should ask for a second option in addition to the one given to them by their physician (2,13,22). Some pregnant women use the Internet to inform themselves when some of their issues are ignored because they are not dangerous for the child, despite reducing the woman’s quality of life (5). All the above represents some of the reasons why pregnant women use the Internet to find health-related information, and indicates the issues surrounding medical examinations during pregnancy as well as a lack of attention and support on part of the healthcare system towards some pregnant women. However, in an interesting study by Lagan et al. (21), a high percentage of pregnant women reported searching the Internet before and after the

trebna su dodatna istraživanja kako bi se dobila jasnija slika o ovom području, kao i formiralo preporuke liječnicima ako postoji potreba za drugačijom strukturom pregleda i promjenama u komunikaciji s pacijenticama. Detaljniji razlozi korištenja pojedinih izvora informacija na internetu bit će opisani u nastavku teksta.

IZVORI INFORMACIJA O TRUDNOĆI I STRATEGIJE PRETRAŽIVANJA

Trudnice danas na raspolaganju imaju velik broj izvora iz kojih mogu dobiti odgovore na svoja pitanja o trudnoći, a to vrijedi i za izvore informacija koji se mogu naći na internetu. Većina žena do informacija dolazi tako da upiše pojam koji ih zanima ili neko pitanje u tražilicu na internetu (20), dok manji broj koristi specifične stranice koje su im dobro poznate i učestalo ih posjećuju (23,24). Takve stranice trudnicama je uglavnom preporučio član obitelji ili prijatelj, a manjem broju i liječnik (10) ili su za njih saznale u medijima (25). Većina trudnica informacije pretražuje kod kuće putem računala, a dio njih i putem mobitela (10).

Velik broj trudnica koristi internet stranice bolnica ili zdravstvenih institucija, kao i forume i blogove namijenjene trudnicama (2). Žene forume vide kao internet prostor u kojem mogu anonimno iznositi svoje intimne probleme ili mišljenja, tražiti direktne upute kako da postupe u nekoj situaciji i provjeriti je li sve u redu s njihovom trudnoćom s nadom da ih drugi neće kritizirati ili osuđivati kao što se često može dogoditi u komunikaciji uživo (5,26). Za dio trudnica su forumi važni i jer one tamo mogu dobiti podršku i savjete drugih žena, koje možda ne dobivaju od svoje okoline (20). Ipak, na forumima se često mogu naći uznemirujuće priče vrlo kompliciranih trudnoća ili poroda s teškim ishodima za majku ili dijete. Prescott i Mackie (1) zaključuju da trudnice koje nemaju komplikacije u trudnoći rijetko

medical examination, but with 80% of the participants reporting that the searches were not linked to the examination. Further research is needed to get a clearer picture on this topic and form recommendations for physicians if there is a need for a different checkup structure and changes in communication with patients. More detailed explanations of reasons for using specific sources of information found online will be presented below.

SOURCES OF INFORMATION ON PREGNANCY AND SEARCH STRATEGIES

Today, pregnant women have a large number of sources available that can provide answers to their questions on pregnancy, including information sources found on the Internet. Most women find such information by entering a search term or question that interests them into an internet search engine (20), while a smaller number uses specific webpages that they visit often and are familiar with (23,24). Such webpages have usually been recommended by a member of the family or a friend, and in rarer cases have been recommended by a physician (10) or the media (25). Most pregnant women conduct internet searches at home on a computer, and some also use a smartphone (10).

Many pregnant women browse the webpages of hospitals or healthcare institutions as well as forums and blogs aimed at pregnant women (2). Women view forums as internet spaces where they can anonymously express their intimate problems or opinions, ask for direct instructions on how to act in a given situation, and check if everything is alright with their pregnancy with the expectation that others will not criticize or judge them, as can often happen in face-to-face communication (5,26). For some pregnant women, forums are also important because they represent a place where they can obtain support and advice from other women, which might not be available in their environment (20). However, forums often contain upsetting stories about very complicated pregnancies or deliveries with severe outcomes for the mother or child. Prescott and Mackie (1) conclude that pregnant women without pregnancy-related

posjećuju forume jer nemaju potrebu napisati da je s njima sve u redu i na taj način možda dovesti do dodatne tuge ili zabrinutosti trudnica koje doživljavaju neke probleme. Stoga je na forumima veća zastupljenost zastrašujućih sadržaja, zbog čega su forumi stranice koje dovedu do najviše zabrinutosti kod trudnica (9). Istraživanja pokazuju da su neke trudnice koje koriste forume sklonije mijenjati svoje ponašanje i navike u trudnoći (2), a dio ih nakon korištenja foruma ima višu svijest i znanje o zdravlju (17).

Trudnice često koriste i komercijalne stranice na kojima se mogu pronaći razne trudničke teme (10), ali im je uglavnom u interesu prodaja proizvoda, a ne nužno proširivanje znanja trudnica. Zanimljivo je da trudnice preferiraju takve stranice više od onih koje vode neprofitne organizacije (25,27). Moguće objašnjenje je da proizvode na komercijalnim stranicama uglavnom reklamiraju liječnici, tako da trudnice mogu imati dojam da je taj sadržaj medicinski relevantniji.

Sve je učestalije i korištenje društvenih mreža, kao i kanala s edukativnim video sadržajima (10). Uz to što im društvene mreže omogućuju da redovito saznaju zanimljive i praktične informacije o trudnoći, također trudnicama služe kao mjesto na kojem one mogu dijeliti svoja iskustva u trudnoći i prezentirati novi dio svojeg samopoimanja, onog kao majke (28). Dio trudnica ih koristi i jer ih relaksiraju i omogućuju im da redovito komuniciraju s bliskim osobama, ali i šire socijalnu mrežu (29). Neke trudnice društvene mreže koriste i kako bi se educirale (19) što može biti problematično ako takav sadržaj nije medicinski točan i pouzdan. S druge strane, kao prednost videomaterijala na internetu trudnice spominju to da ga mogu ponovno pregledavati ako nešto ne shvate tijekom prvog pretraživanja (30). Važno je naglasiti da trudnice koje gledaju videosnimke poroda kako bi se educirale posljedično osjećaju ekstremno visoku razinu straha (11).

complications rarely visit forums because they do not feel the need to simply write that they are doing fine, thus perhaps leading to additional sorrow and anxiety in pregnant women who are experiencing pregnancy-related problems. This leads to an overrepresentation of upsetting content in forums and to forums being the type of webpage that leads to the most anxiety in pregnant women (9). Studies have shown that some pregnant women who use forums are more prone to changing their behavior and habits in pregnancy (2), and some of them show better awareness and knowledge on health after using forums (17).

Pregnant women also often use commercial webpages where various pregnancy-related topics can be found (10), but these pages are mostly focused on selling a product rather than expanding the knowledge of pregnant women. It is interesting to note that pregnant women prefer such webpages to those hosted by nonprofit organizations (25,27). A possible explanation is that products on commercial webpages are mostly advertised by physicians, which can lead to the impression that the contents are more medically relevant.

The use of social networks is also on the rise, as well as channels with educational videos (10). In addition to enabling pregnant women to regularly find out interesting and practical information about pregnancy, social networks also serve as a place where pregnant women can share their experiences in pregnancy and present the new aspect of their self-image, that of a mother (28). Some pregnant women use social networks because they also find it relaxing and because the use of social networks allows them to regularly communicate with persons close to them as well as expand their social network (29). Some pregnant women also use social networks for educational purposes (19), which can be problematic if the contents are not medically accurate and reliable. On the other hand, an advantage of video materials on the Internet reported by pregnant women is that they can view it repeatedly if they did not understand something on the first viewing (30). It is important to emphasize that pregnant women who watch videos of deliveries to educate themselves consequently experience an extremely high level of fear (11).

Trudnice učestalo koriste i mobilne aplikacije za trudnoću. Mobilne aplikacije trudnice doživljavaju korisnima jer im javljaju obavijesti vezane uz razvoj fetusa, zdravu prehranu ili teme važne za pojedini tjedan trudnoće (31). Aplikacije koje su usmjerene na informacije o razvoju mogu biti korisne jer smiruju trudnice pružanjem informacija da su njihovi simptomi uobičajeni i normalni (30). Ipak, one možda mogu dovesti i do povišenije tjeskobe ako trudnice u određenom trenutku ne doživljavaju neki osjet koji je predviđen za taj tjedan trudnoće, a to ne mora nužno značiti da postoji neki problem. Neke trudnice aplikacije koriste i kako bi jednostavnije pratile svoju tjelesnu težinu, aktivnost, raspoloženje, raspored pregleda, rezultate testiranja, itd. (30). U jednom istraživanju (32) nastojalo se otkriti više detalja o tome kakav je idealni izvor informacija za trudnice. One su se složile da je to upravo personalizirana mobilna aplikacija koja sadrži linkove na provjerene internet stranice putem kojih mogu dobiti brze i jednostavne odgovore. Htjele su da aplikacija bude usklađena s njihovom lokacijom i pruža informacije o aktualnim događanjima za trudnice u njihovoj blizini.

Vrlo važno pitanje je kako trudnice znaju da su pronašle dovoljno informacija na temu o kojoj su pretraživale internetske sadržaje. Kao najčešći odgovor žene navode nalaženje identične informacije u više izvora na internetu i kad nakon nekog vremena ne nalaze nove informacije (1,20) što može biti problematično ako je ta informacija netočna. Vrlo visok broj trudnica, oko 80 %, posjeti više od jedne internet stranice kad su u potrazi za nekom informacijom (23). Također, trudnice prestaju s pretraživanjem kad osjećaju da su zadovoljne informacijom koju su pronašle (20) ili imaju dojam da su ih informacije smirile (1). Prekidaju pretraživanje i kad im informacije više ne pomažu (1). Neke žene doživljavaju izazovnim prestati čitati internet sadržaje i zaustaviti daljnje pretraživanje. Jedna sudionica u istraživanju Prescott

Pregnant women also often use pregnancy-related smartphone applications. Smartphone applications are perceived as useful because they offer notifications associated with the development of the fetus, healthy diet, or topics of importance at certain weeks of the pregnancy (31). Applications focused on information of fetal development can have a useful calming effect by presenting information that shows that the symptoms the pregnant women are experiencing are common and normal (30). However, they might also lead to an increase in anxiety if the woman does not experience a feeling or symptom that is predicted for a given week of the pregnancy, despite that not necessarily being an indication of a problem. Some pregnant women also use the application to simplify the monitoring of their body weight, activity, moods, checkup schedule, test results, etc. (3). One study (32) attempted to find out more details on what would represent an ideal source of information for pregnant women. The participants agreed that this would be a personalized mobile application that contained links to reliable webpages that provide quick and simple answers. They also wanted the application to be synchronized with their location and provide information on relevant events for pregnant women in their area.

A very important question is how pregnant women know when they have found enough information on the topic they were searching for. The most common answer provided by women is finding identical information from several sources on the Internet and when no new information has been found for some time (1,20), which can be problematic if the information in question is incorrect. A very high ratio of pregnant women, approximately 80%, visit more than one webpage in search for a given piece of information (23). Furthermore, pregnant women stop searching when they feel they are satisfied with the information they have found (20) or when they are under the impression that the information has calmed them (1). They also discontinue the search when the information found is no longer helpful (1). Some women find it challenging to stop reading Internet content and continuing to search. One participant in the study by Prescott and Mackie

i Mackie (1) navela je da joj je teško prestati s pretraživanjem ako je jako uznemirena i anksiozna, iako je svjesna da daljnje traženje informacija možda pogoršava tjeskobu i nesigurnost koju osjeća. Situacija u kojoj trudnice nalaze različite informacije iz više izvora i nisu sigurne koja je ispravna također može dovesti do neprestanog daljnjeg pretraživanja i posljedično povišene anksioznosti kod trudnice. Također, zabrinjavajući je nalaz u istraživanju Lupton (30). Iako dostupnost interneta putem mobitela ima svojih prednosti, dio trudnica opisuje kako koristi mobitel za neprestano pretraživanje interneta, posebno tijekom noći ako postanu zabrinute oko neke trudničke teme.

TEME PRETRAŽIVANJA U TRUDNOĆI

Istraživanja izvještavaju o velikom broju tema koje su u fokusu interesa trudnica i o kojima one pretražuju internet. Većina istraživača nalazi da je tema o kojoj se najviše pretražuje razvoj fetusa (2,7,18). Važne teme su i dijagnostika i testiranja u trudnoći, komplikacije u trudnoći, fiziologija i stadiji trudnoće i poroda, promjene u trudnoći, životni stil trudnica, informacije o liječnicima, partnerski odnosi te psihološka pomoć za trudnice (2,7,10). Visok postotak trudnica pretražuje informacije i o teratogenima (22) i uzimanju lijekova u trudnoći (21). Trudnice često traže informacije i o prehrani u trudnoći (33), kao i o proizvodima za majke i djecu (7). Više znanja o procesu trudnoće, djetetu i porodu kod majke dovodi do višeg samopouzdanja, osjećaja kontrole i sigurnosti u roditeljsku kompetentnost, kao i smirenosti ako na temelju informacija trudnica spozna da su ona i dijete zdravi (1,9).

Teme o kojima trudnice pretražuju internet donekle se razlikuju ovisno o tromjesečju u kojem se nalaze. U prvom trimestru aktivno traže informacije kojima žele potvrditi da se dogodilo začeće i prate sve simptome koji ukazuju na to

(1) stated that she had a hard time stopping searching if she was very upset and anxious, although she was aware that further information searches may just increase the anxiety and insecurity she felt. Situations in which pregnant women find different information from different sources and are unsure which is correct may also lead to constant further searching and consequently to increased anxiety in pregnant women. Furthermore, the results of the Lupton study (30) are concerning. Although the availability of the Internet via smartphone has its advantages, some pregnant women described using their phone for constant online searches if they become concerned about a pregnancy-related topic, especially during the night.

SEARCH TOPICS IN PREGNANCY

Studies have reported that there is a large number of topics that interest pregnant women and for which they search the Internet. Most researchers have found that fetal development is the most-searched topic (2,7,18). Important topics also include diagnosis and testing in pregnancy, pregnancy complications, physiology and stages of pregnancy and delivery, changes in pregnancy, lifestyle of pregnant women, information on physicians, the relationship with the partner, and psychological assistance for pregnant women (2,7,10). A high percentage of pregnant women also searches for information on teratogens (22) and taking medication in pregnancy (21). Pregnant women often search for information on healthy diet during pregnancy as well as products for mothers and children (7). A higher level of knowledge on the process of pregnancy, the child, and delivery leads to higher self-confidence in the mother as well as a feeling of control, confidence in parental competence, and calmness, if the mother finds out that she and the child are healthy based on the information she finds (1,9).

Topics for which pregnant women search the Internet differ somewhat based on the trimester of the pregnancy. In the first trimester, they actively search for information that confirms whether a child has been conceived and follow all the symp-

da je sve u redu s trudnoćom. Traže i informacije o pobačaju i promjenama koje se događaju u svakodnevnom životu trudnice. U drugom trimestru su više usmjerene na dvosmislene simptome koji mogu značiti da postoje neke komplikacije, kao i na informacije o kretanju djeteta, ali i brigu o sebi i djetetu. Treći trimestar prolazi u pripremama za porod tako da su njihove potrebe za informacijama usmjerene na tu tematiku, kao i strah od poroda (5). Kako se približava termin poroda, učestalije se pretražuje o metodama manje bolnog poroda, najboljem mjestu za porod, zdravlju djeteta i dojenju (2).

Postoje i razlike u temama pretraživanja koje su u fokusu interesa trudnicama koje su trudne prvi put i onima koje imaju iskustvo prethodnih trudnoća. Prvorotkinje traže više informacija o simptomima koji ukazuju na trudnoću, razvoju fetusa, fizičkoj aktivnosti, komplikacijama u trudnoći, seksualnosti tijekom trudnoće, načinima poroda i metodama za smanjivanje boli tijekom poroda te prehrani i brizi za dijete (33).

Dio trudnica, 33 %, navodi da su tijekom trudnoće htjele dobiti više informacija o tome kako da kvalitetno brinu o sebi i djetetu. Htjele su saznati više o procesu dojenja, lakšem i bržem oporavku nakon poroda i zdravlju nakon poroda (27). Također, htjele su dobiti više informacija koje su usmjerene na jačanje njihovih kompetencija kao novih roditelja, a ne samo one usmjerene na djecu (32). Te informacije bi voljele saznati od stručnjaka koji im istovremeno pružaju podršku i propituju njihove potrebe za informacijama (34).

POUZDANOST INFORMACIJA O TRUDNOĆI NA INTERNETU

Pojedinci koji češće koriste internet kako bi pronašli zdravstvene informacije više vjeruju tim informacijama, nego onima koje im

toms that indicate whether everything is alright with the pregnancy. They also search for information on abortion and changes that happen in the everyday life of the pregnant woman. In the second trimester, they are more focused on ambiguous symptoms that can indicate the presence of some complications, on information about the child's movements, and on information about caring for themselves and the child. The third trimester is focused on preparations for delivery, so their need for information is focused on that topic as well as on fear of giving birth (5). As the term approaches, searches on methods for less painful delivery, best places for childbirth, infant health, and breastfeeding become more prevalent (2).

There are also differences in search topics between women who are pregnant for the first time and those who have previously experienced pregnancy. Primiparae search for more information on symptoms that indicate pregnancy, on fetal development, physical activity, pregnancy complications, sexuality during pregnancy, methods of childbirth and for reducing pain during childbirth, and infant feeding and care (33).

A portion of pregnant women, 33%, reported that they wanted to find out more information on how to properly care for themselves and the child during pregnancy. They wanted to find out more about the breastfeeding process, easier and faster recovery after childbirth, and health after childbirth (27). They also wanted more information aimed at strengthening their competencies as new parents and not just information focused on the child (32). They also reported that they wanted to learn this kind of information from experts, who simultaneously offer them support and question their need for information (34).

RELIABILITY OF PREGNANCY-RELATED INFORMATION ON THE INTERNET

Individuals who use the Internet more often to find health-related information trust such information more than information provided by the

pruža liječnik i internet smatraju korisnijim izvorom (35). Trudnice od okoline dobivaju brojne savjete i okružene su raznim izvorima informacija, a u internetskom prostoru je vrlo izazovno raspoznati koje informacije su točne i pouzdane i kojima se može u potpunosti vjerovati (36). Postoje milijuni internet stranica koje pokrivaju raznolike teme vezane uz trudnoću, no samo 4 % tog sadržaja su kreirali ili sponzorirali stručnjaci (37) što je vrlo problematično. Dio sadržaja na internetu koji je namijenjen trudnicama je netočan, može zbuniti žene i nije znanstveno utemeljen (38). Neke trudnice navode kako se učestalo susreću s informacijama koje nisu konzistentne, potpune ili ne postoje reference na izvor informacije (11) pa je stoga važno pitanje koliko trudnice informacije na internetu smatraju pouzdanima.

Istraživanja daju oprečne nalaze vezane uz to koliko trudnice vjeruju informacijama o zdravlju koje pronađu na internetu. Dok dio istraživanja izvještava da trudnice smatraju kako informacije na internetu nisu pouzdane (1,20), druga pak pokazuje da trudnice u poprilično visokom broju vjeruju informacijama koje nađu (7,27,39). Dio trudnica pokazuje kritičnost prema informacijama i svjesne su da informacije koje se nalaze na internetu nisu univerzalno korisne za svaku trudnicu (20).

Samo 11 % trudnica je svjesno pokazatelja prema kojima se može znati je li internet stranica kvalitetna, ali ipak ih 70 % može navesti barem jedan od indikatora. Ovaj nalaz je alarmantan jer se dio trudnica može smatrati ekspertima u pretraživanju interneta, a zapravo ne znaju prepoznati netočan sadržaj (21). Trudnice vjeruju stranicama po kojima pišu eksperti i onima koje su najpoznatije i najčešće se koriste (40). Često ne provjeravaju postoje li reference na kraju teksta (10) koje bi ukazivale na to da je sadržaj utemeljen na činjenicama (41), kao ni datum objave i koliko je informacija još relevantna (21).

physician and consider the Internet a more useful source of information (35). Pregnant women receive a large amount of advice from their environment and are surrounded by various sources of information, but it is very challenging to discern which information on the Internet is correct and reliable and can be trusted completely (36). There are millions of webpages that cover various topics related to pregnancy, but only 4% of these contents were created or sponsored by experts (37), which is very problematic. Some of the online content aimed at pregnant women is incorrect, can be confusing, or has not been scientifically established (38). Some pregnant women reported often encountering information that is inconsistent, incomplete, or lack references to sources (11), so whether pregnant women consider online information to be reliable is an important question.

Studies have provided contradictory results related to how much pregnant women trust health-related information found on the Internet. While some studies report that pregnant women do not believe online information to be reliable (1,20), others show that a fairly high ratio of pregnant women believe the information they find online (7,27,39). Some pregnant women display a critical approach to online information and are aware that information found on the Internet is not universally useful to every pregnant woman (20).

Only 11% of pregnant women are aware of the indicators that show whether an Internet page is of high quality, but 70% are still able to list at least one of the indicators. This finding is alarming because some pregnant women could consider themselves experts in searching the Internet but in fact be unable to recognize inaccurate contents (21). Pregnant women believe webpages written by experts and those webpages that are most famous and most used (40). They often do not check for references at the end of the text (10), which would indicate that the contents are based on facts (41), nor do they check the publication date and whether the information is still relevant (21).

Pregnant women are more inclined to believe webpages of hospitals or other institutions of the

Trudnice više vjeruju stranicama bolnica ili drugih institucija zdravstvenog sustava (20) jer znaju da na njima objave pišu stručnjaci i da su temeljene na činjenicama, a ne samo na mišljenjima drugih trudnica (1). Primjerice, većinu sadržaja na forumima i društvenim mrežama pisale su trudnice koje uglavnom nemaju medicinsko obrazovanje i nisu detaljno upoznate sa svim okolnostima i kliničkom slikom drugih žena. Donošenje zdravstvenih odluka na temelju isključivo informacija koji se nalaze na stranicama koje ne vode stručnjaci može biti rizično, a netočne i neprovjerene informacije trudnicama mogu dati lažan osjećaj sigurnosti u situacijama kada bi trebale potražiti stručnu pomoć (11). Ipak, neke trudnice cijene tuđa iskustva i manje im je važno jesu li informacije koje čitaju u tom kontekstu točne (17).

Žene često provjeravaju točnost informacija koje nađu s nekom osobom kojoj vjeruju ili pak s drugim izvorom koji nije internet (21). To je posebno učestalo kad nađu različite informacije na više stranica i nisu sigurne kojem izvoru vjerovati (32). Također, češće dodatno provjeravaju informacije koje su našle na internetu, nego što to rade s informacijama koje su dobile od stručnjaka ili bliskih osoba (1).

Istraživanja daju oprečne nalaze oko diskutiranja o informacijama koje trudnice pronađu na internetu sa stručnjacima koji vode brigu o njihovoj trudnoći. Lagan i sur. (20) navode da većina žena razgovara s liječnikom o tim informacijama, dok Larsson (7) opisuje suprotno i pokazuje da većina trudnica ne dijeli informacije koje pronađe na internetu sa stručnjacima. Neke trudnice su bile spremne pitati liječnika o informacijama koje su našle na internetu, ali nisu htjele otkriti liječniku izvor tih informacija (17). Ipak, u istraživanju Lagan i sur. (21) većina trudnica je navela da je diskusija o informaciji nađenoj na internetu s liječnikom dobro prošla. Pacijenti često očekuju od liječnika da će oni potaknuti razgovor o pretraživanju zdravstvenih informacija na internetu (42), a trud-

healthcare system (20) since they know that the texts on these webpages are written by experts and based on facts, not just the opinions of other pregnant women (1). For example, most content found on forums and social networks has been written by pregnant women who mostly do not have a medical education or detailed knowledge of all the circumstances and the clinical picture of other women. Making health-related decisions based exclusively on information found on webpages not written by experts can be risky, and inaccurate and unconfirmed information can give pregnant women a false sense of security in situations in which they should seek professional assistance (11). However, some pregnant women appreciate reading the experiences of others and consider it less important whether all the information in that context is fully accurate (17).

Women often check the accuracy of information they find by consulting a person they trust or using some source other than the Internet (21). This is especially common when they encounter different information on different pages and are not sure which source to trust (32). They are also more likely to check information found on the Internet than information received from experts or loved ones (1).

Studies have found contradictory results on whether pregnant women discuss information found on the Internet with experts managing their pregnancy. Lagan et al. (29) reported that most women discuss such information with their physician, whereas Larsson (7) described the opposite and showed that most pregnant women do not share information found on the Internet with experts. Some pregnant women were prepared to ask their physician about information they found on the Internet, but were not willing to reveal the source of the information to the physician (17). However, in a study by Lagan et al. (21) most pregnant women reported that discussing information found on the Internet with their physician went well. Patients often expect the physician to initiate the conversation on searching for health-related information online (42), and pregnant women reported that they would consider

nice navode da bi stranice koje im preporučile njihovi liječnici smatrale pouzdanima (32,43).

webpages recommended by their physicians to be reliable (32,43).

KARAKTERISTIKE TRUDNICA POVEZANE S PRETRAŽIVANJEM INTERNETA

Demografske i opstetričke karakteristike

Istraživanja pružaju nalaze koji ukazuju na važnost nekih demografskih i opstetričkih karakteristika trudnica za upuštanje u pretraživanje zdravstvenih informacija na internetu. Merrel (44) navodi da je za pretraživanje informacija na internetu važno da trudnice imaju istraživački stav i da su motivirane za prikupljanje kvalitetnih informacija zbog djetetove i vlastite dobrobiti.

Iako u istraživanju Grimes i sur. (27) nisu nađene dobne razlike u pretraživanju interneta kod trudnica, one mlađe od 25 i starije od 34 godine internet koriste kao najčešći izvor informacija. S druge strane, De Santis i sur. (22) nalaze da je dob trudnica povezana s korištenjem interneta i da one u dobi od 26 do 35 godina najviše pretražuju internet. Nakon njih, internet u većem broju pretražuju trudnice starije od 36 godina, dok su one mlađe od 25 godina najmanje aktivne u traženju zdravstvenih informacija. Sukladno tom istraživanju, Fredriksen i sur. (17) nalaze da 90 % žena u dobi od 25 do 34 godine koristi internet u svrhu dobivanja zdravstvenih informacija.

Trudnice koje su visoko obrazovane češće koriste internet za pretraživanje informacija o zdravlju (27), vjerojatno jer imaju više iskustva s tehnologijama i snalažljivije su u korištenju interneta za traženje zdravstvenih informacija, i posljedično, u procjeni pouzdanosti i primjeni informacija (21). Osobe koje su obrazovanije češće provjeravaju izvore i reference iz kojih dolaze informacije na internetu (10). Ipak, neka

CHARACTERISTICS ASSOCIATED WITH SEARCHING THE INTERNET IN PREGNANT WOMEN

Demographic and obstetric characteristics

Studies have provided findings that indicate the importance of some demographic and obstetric characteristics in pregnant women with regard to engagement in searching for health-related information on the Internet. Merrel (44) stated that when searching for information online it is important that pregnant women have a research-focused attitude and that they are motivated to find high-quality information for their own wellbeing and that of their child.

Although a study by Grimes et al. (27) did not find age-related differences in searching the Internet in pregnant women, those younger than 25 and older than 34 use the Internet as the most common source of information. On the other hand, De Santis et al. (22) found that age in pregnant women was associated with Internet use and that women aged 26 to 35 use online searches the most. After this group, pregnant women above 36 year of age were the next most likely to engage in online searching, whereas those younger than 25 were least active in searching for health-related information. Congruently, Fredriksen et al. (17) found that 90% of women aged 25 to 34 used the Internet to find health-related information.

Highly-educated pregnant women are more likely to use the Internet to search for health-related information (27), likely due to having more experience with technology and using the Internet to find health-related information, and thus also more experience in assessing the reliability and application of information (21). Persons with higher education are more prone to checking sources and references cited in information found on the Internet (10). However, some stud-

istraživanja (7,25) ne nalaze razlike u pretraživanju s obzirom na obrazovanje trudnica.

Paritet je također jedan od prediktora učestalijeg pretraživanja interneta, a neka istraživanja nalaze da je to i najznačajniji prediktor (45). Žene koje su trudnice prvi put sklonije su traženju informacija na internetu u odnosu na one koje već imaju iskustvo poroda (2). Logično je da prvotkinje imaju potrebu biti dobro informirane o stanju u kojem se nalaze i zato je internet jedan od kanala putem kojeg dolaze do informacija o trudnoći i zdravlju. Trudnoća je za te žene novo, nepoznato i izazovno životno razdoblje i one žele biti sigurne da je dijete zdravo i teže tome da informirano preuzmu ulogu majke (46). Ipak, zanimljivo je da neki istraživači ne nalaze razlike u pristupu informiranju trudnica na internetu ovisno o paritetu (1,22).

Tijekom tromjesečja, s približavanjem poroda, dolazi do pada u učestalosti pretraživanja informacija na internetu. Najveći broj trudnica pretražuje informacije na internetu u prvom tromjesečju, a zatim dolazi do naglog pada u pretraživanju u drugom tromjesečju (6). Larsson (7) navodi da većina trudnica traži informacije na internetu na početku trudnoće, a manji broj podjednako u svim tromjesečjima. Početak trudnoće je razdoblje prepuno pitanja i neizvjesnosti za trudnice tako da je logično da u to vrijeme najviše vremena provode u informiranju o trudnoći.

Trudnice koje imaju komplikacije u trudnoći su izrazito ranjiva skupina i one učestalo traže informacije o trudnoći (33), kao i trudnice koje se razbole tijekom trudnoće. One često pretražuju informacije na internetu u trenutku kada još nisu sigurne da imaju određenu dijagnozu jer nisu dobile potvrdu s pretraga ili imale pregled na kojem će se dijagnoza eventualno potvrditi. Nakon što dobiju potvrdu dijagnoze, na internetu mogu pronaći detaljnije informacije o specifičnom stanju u kojem se nalaze u odnosu na pisane materijale i informacije koje dobiju na

ies (7,25) found no differences in searching habits based on education in pregnant women.

Parity is also a predictor for searching the Internet more often, and some studies found it was the most significant predictor. Women who are pregnant for the first time are more prone to searching for online information compared with those who already experienced childbirth (2). It is logical that primiparae feel the need to be well-informed about the state they are in, and the Internet is one of the channels they use to find information on pregnancy and health. For these women, pregnancy is a new, unknown, and challenging phase in their lives, and they want to make sure the child is healthy and strive to be well-informed when taking up the role of a mother (46). However, it is interesting that some researchers did not find any parity-dependent difference in the approach to finding information (1,22).

There is a reduction in the frequency of online searches during the pregnancy, as the moment of delivery approaches. The number of pregnant women engaging in online searches is highest in the first trimester, and there is a sharp drop in search frequency in the second trimester (6). Larsson (7) reports that most pregnant women search for information on the Internet at the start of the pregnancy, and a smaller number searches at approximately equal rates in all trimesters. The start of a pregnancy is a period filled with questions and uncertainty for pregnant women, so it is logical that this is the period they spend the most time searching for pregnancy-related information.

Women with complications in pregnancy are an extremely vulnerable group, and they frequently search for information about pregnancy (33), as do pregnant women who become sick during pregnancy. They often search for online information at the point when they are still not sure of a given diagnosis because they are waiting for test results or an examination that will potentially confirm the diagnosis. After the diagnosis is confirmed, they can find more detailed information on the Internet on the specific state they are in

pregledu, što im je posebno važno ako imaju neku komplikaciju koja je rijetka i manje poznata (13). Mnoge trudnice žele i potvrdu da je tretman koji primaju najbolja opcija koja postoji tako da se na internetu informiraju o liječenju. Osim što koriste internet kao dodatan izvor informacija o svom zdravstvenom stanju, od drugih trudnica traže i potporu i suosjećanje. Spoznaja kako se druge osobe nose s nekom teškom situacijom u kojoj se trudnica trenutno nalazi može biti od velike pomoći te smanjiti osjećaj samoće i stresa, posebno ako razmatra opciju pobačaja ili ima manjak podrške od liječnika (13). Trudnice koje su u prethodnoj trudnoći imale neke komplikacije, u idućoj trudnoći internet doživljavaju korisnim za dobivanje podrške (47). Također, trudnice koje su u prošloj trudnoći osjećale da nisu bile informirane o zdravlju koliko su željele, u sljedećoj nastoje biti informiranije (14).

Zdravstvena pismenost

Zdravstvena pismenost odnosi se na stupanj u kojem se pojedinac upušta u potragu za zdravstvenim informacijama, koliko lako pronalazi informacije, procesuiru ih, procjenjuje, i konačno, koliko ih razumije i na temelju njih kompetentno donosi odluke o zdravlju (20,27). Uz tehnološku pismenost, zdravstvena pismenost je posebno važna u današnje doba, kad su žene okružene raznim informacijama o trudnoći i teško je procijeniti koje su točne i relevantne. To da postoji velika količina informacija koje su dostupne trudnicama ne bi se trebalo smatrati faktorom koji je dovoljan pokazatelj da su one kvalitetno informirane jer možda neke od tih informacija ne razumiju. Pacijenti uglavnom trebaju stručnu pomoć s pojašnjenjem informacija o zdravlju (48) što ukazuje na važnost uključenosti zdravstvenih djelatnika u proces informiranja pacijenata na internetu.

Značajno veći postotak žena koje imaju visoku zdravstvenu pismenost koristi internet za

compared with written materials and information they receive at the examination, which is especially important if they have a complication that is rarer and less well known (13). Many pregnant women also want confirmation that the treatment they are receiving is the best possible option, and thus use the Internet to inform themselves on the treatment. In addition to using the Internet as an additional source of information on their medical state, they also search for support and empathy from other pregnant women. The realization that other persons are also coping with the difficult situation they themselves are in can be very helpful and reduce the feeling of loneliness and stress, especially if the woman is considering abortion or lacks proper support from physicians (13). Pregnant women who experienced complications in a previous pregnancy consider the Internet useful in finding support (47). Additionally, pregnant women who felt they had not been as informed regarding health as they would have wanted during a previous pregnancy will try to be more informed in the current one (13).

Health literacy

Health literacy refers to the level to which an individual engages in searching for health-related information, how easily they obtain, process, assess, and understand such information, and ultimately how competently they make decision on health based on this information (20,27). In addition to technological literacy, health literacy is especially important today, when women are surrounded by various information on pregnancy, the accuracy and relevance of which it is difficult to assess. The existence of large amounts of information available to pregnant women should not be considered a factor that is a sufficient indicator of them being well-informed, since it is possible that they do not understand some of the information. Patients generally need professional help to clarify health-related information (48), which indicates the importance of the inclusion of healthcare workers in the process on informing patients via the Internet.

A significantly higher percentage of women with a high health literacy uses the Internet to find infor-

informiranje o trudnoći, nego onih koje imaju nisku pismenost (49). Zdravstvena pismenost razvija se traženjem i razmjenjivanjem informacija (50) tako da je važno da trudnice dijele informacije koje pronalaze s osobama u okolini, posebice stručnjacima. Razina zdravstvene pismenosti kod žena ima efekt na znanje o zdravlju i na zdravstvena ponašanja (49), kao i više ugodnih interakcija s liječnicima (51). Trudnice koje se doživljavaju iskusnijima u traženju informacija na internetu i procjeni njihove točnosti, imaju jasniju sliku o pitanjima koja žele postaviti liječniku i uključeni su u donošenje odluka u trudnoći (21).

Samoeфикаsnost i zdravstveni lokus kontrole

Samoeфикаsnost se smatra temeljem ljudske motivacije za uključivanje u određena ponašanja, a odnosi se na vjerovanje pojedinca u uspješno izvršavanje akcija i dostizanje željenih ciljeva (52). Samoeфикаsnost vezana uz vlastite sposobnosti izrazito je važna tijekom trudnoće i nakon poroda. Žene koje su samoeфикаsnije uspješnije kontroliraju strah od poroda i fizički su aktivnije nakon poroda (53,54). Što se tiče samoeфикаsnosti u kontekstu sigurnosti trudnica u uspješno nalaženje i korištenje zdravstvenih informacija s interneta, one koje su samoeфикаsnije i samopouzdanije po tom pitanju, češće se uključuju u pretraživanje (46,55). Trudnice koje imaju nižu zdravstvenu pismenost također imaju i sniženu samoeфикаsnost i više barijera oko brige za sebe u trudnoći i oko korištenja interneta za informiranje (49).

Zdravstveni lokus kontrole je vjerovanje pojedinca da on sam svojim postupcima utječe na svoje zdravstveno stanje ili vjerovanje da netko drugi, poput stručnjaka, ima najveći utjecaj na osobno zdravlje. Neke osobe vjeruju i da neko božansko biće, sudbina ili viša sila dovode do poboljšanja ili pogoršanja zdravstvenog stanja. S obzirom na navedeno, osobe mogu

informaciju o trudnoći uspješnije nego one koje imaju nisku pismenost (49). Health literacy develops by searching for and exchanging information (50), so it is important that pregnant women share the information they find with people from their environment, especially experts. The level of health literacy in women has an effect on knowledge on health and health behaviors (49) and leads to an increase in pleasant interactions with physicians (51). Pregnant women who see themselves as more experienced in searching for information on the Internet and assessing their accuracy also have a clearer picture of the questions that they want to ask the physician and are more involved in making decisions on the pregnancy (21).

Self-efficacy and health-related locus of control

Self-efficacy is considered the basis for human motivations for engagement in certain behaviors, and refers to the individual's belief in their capacity to successfully execute behaviors and achieve their desired goals (52). Self-efficacy associated with a woman's own abilities is extremely important during pregnancy and after childbirth. Women with greater self-efficacy are more successful at controlling fear of delivery and are more physically active following childbirth (53,54). As for self-efficacy in the context of the confidence of women in successfully obtaining and employing health-related information from the Internet, those with greater self-efficacy and higher self-confidence in that area are consequently more likely to engage in online searches (46,55). Pregnant women with lower health literacy also have reduced self-efficacy and more barriers in caring for themselves during pregnancy and in using the Internet to obtain information (49).

The health-related locus of control is the individual's belief that they themselves influence the state of their health through their own actions or the belief that someone else, such as experts, has greater influence on their personal health. Some persons also believe that some divine being, fate, or a greater power leads to improvement or de-

vjerovati u interni lokus kontrole, u lokus kontrole od drugih ili vjerovati u lokus kontrole koji se temelji na slučajnosti. Shieh i sur. (46) nalaze da je interni lokus kontrole, odnosno vjerovanje trudnice da njezini postupci utječu na dobrobit i zdravlje djeteta, povezan s češćim uključivanjem u pretraživanje informacija o trudnoći na internetu. One su također sklonije odgovornim i zdravim zdravstvenim ponašanjima i zdravom životnom stilu (56). Žene koje imaju nižu zdravstvenu pismenost češće imaju eksterni lokus kontrole i smatraju da je stručnjak najviše odgovoran za zdravlje u trudnoći (46). Također, nađena je povezanost lokusa kontrole i samoeфикаsnosti. Trudnice koje imaju interni lokus kontrole su također samoeфикаsnije po pitanju traženja zdravstvenih informacija (46).

Anksioznost

Briga o vlastitom zdravlju i zdravlju djeteta adaptivna je jer će trudnica koja brine nastojati provjeriti je li sve u redu s trudnoćom i prakticirati će zdrav životni stil. Međutim, izrazita anksioznost u trudnoći je štetna za majku i dijete (57). Visoka anksioznost tijekom trudnoće ima brojne negativne posljedice na fizičko i psihičko zdravlje majke, preuranjen porod, dugotrajniji porod, češći carski rez, roditeljsku samoeфикаsnost, motoričko funkcioniranje i zdravstveno stanje djeteta te kognitivno i emocionalno funkcioniranje djeteta (58-63). Na hrvatskom uzorku nađeno je da je 35 % žena visoko anksiozno tijekom trudnoće, no razina anksioznosti pada nakon poroda (63). Žene koje su trudne prvi put mogu biti anksioznije od višerotkinja zbog toga što trudnoća za njih uključuje nova i nepoznata iskustva i tjelesne promjene. Važno je naglasiti da za anksioznije trudnice traženje informacija na internetu može biti način nošenja s njihovim strahovima (46).

Traženje informacija o zdravlju na internetu dovodi do povišene *zdravstvene anksioznosti*

terioration of personal health. Given the above, a person can believe in an internal locus of control, in an external locus of control in a different person, or a locus of control based on accident. Shieh et al. (46) found that an internal locus of control, i.e. the belief of the pregnant women that her actions influence the health and wellbeing of the child, is associated with more frequent engagement in searching for pregnancy-related information on the Internet. Such women are also more likely to engage in responsible and healthy behaviors and have a healthy lifestyle (56). Women with lower health literacy are more likely to have an external locus of control and believe that the expert is most responsible for their health in pregnancy (46). Furthermore, an association has been found between locus of control and self-efficacy. Pregnant women with an internal locus of control also have higher self-efficacy regarding searching for health-related information (46).

Anxiety

Caring for one's own health and the health of the child is adaptive, because a pregnant woman that cares will try to check whether everything is alright with the pregnancy and practice a healthy lifestyle. However, severe anxiety in pregnancy is unhealthy for both the mother and the child (57). High levels of anxiety during pregnancy have numerous negative consequences for the physical and psychological health of the mother as well as for preterm birth, longer labor, higher prevalence of C-sections, parental self-efficacy, motoric functioning and health of the child, and cognitive and emotional functioning in the child (58-63). A study on a Croatian sample found that 35% of pregnant women were highly anxious during pregnancy, but the level of anxiety was reduced after childbirth (63). Women who were pregnant for the first time can be anxious than multigravidae because pregnancy includes new and unknown experiences and bodily changes. It is important to emphasize that, for the more anxious pregnant women, searching for information online can be a way to cope with their fears (46).

i zabrinutosti kod dijela ljudi. Osobe koje su zdravstveno anksiozne su izrazito zabrinute oko svog zdravlja, iako ne boluju od neke bolesti. One učestalo brinu o fizičkim senzacijama koje osjećaju, a koje su sklone interpretirati kao opasne simptome (4). Zdravstveno anksiozne osobe sklonije su češće i duže tražiti informacije o zdravlju na internetu, a posebno su sklone uključivanju u rasprave na internet forumima (64). Istraživanja pokazuju da zdravstveno anksiozne osobe doživljavaju više negativnih efekata pretraživanja na internetu i češće posjećuju liječnike (65,66). Kowalyk i sur. (4) nalaze da je zdravstvena anksioznost povišena kod trudnica koje imaju neke komplikacije u trudnoći. Trudnice koje su svjesne da su pronašle dovoljno informacija o temi koja ih je zanimala, kao i one koje ne ponavljaju pretraživanje o istoj temi, imaju nižu zdravstvenu anksioznost (67).

Istraživanja anksioznosti u trudnoći pokazala su da postoji specifična anksioznost koja je karakteristična za trudnice. Radi se o *anksioznosti specifičnoj za trudnoću* (engl. *pregnancy-specific anxiety*) koja se opisuje kao neugodno emocionalno stanje koje karakterizira briga oko zdravlja djeteta, vlastitog zdravlja, poroda, briga oko financija i bliskih odnosa i zabrinutost oko izgleda (68). Anksioznosti u trudnoći sklonije su mlađe žene koje nisu udane, imaju niže obrazovanje i prihode, prvotkinje su, nisu željele trudnoću i imaju povišenu anksioznost kao crtu i kao stanje (69). Također, anksioznost u trudnoći može se javiti kod žena koje su inače anksioznije u životu, ali i kod onih koje ranije nisu imale povišenu anksioznost (57). Neke žene koje imaju povišenu anksioznost u trudnoći izbjegavaju sve situacije koje bi mogle dovesti do još izraženije anksioznosti, pa tako i traženje informacija na internetu ili nastavak traženja informacija nakon što su ih one koje su pročitale uznemirile. Druge pak neprestano traže nove informacije, često idu na testiranja i preglede i teško presta-

In some people, searching for health-related information on the Internet leads to increased health anxiety and concern. Persons with health anxiety are very concerned about their health even though they are not suffering from any disease. They frequently worry about the physical sensations in their body, which they are prone to interpreting as dangerous symptoms (4). Persons with health anxiety are prone to more frequent and longer online searches for health-related information, and they are especially likely to join in discussions on Internet forums (64). Studies have shown that persons with health anxiety experience more negative effects of online searches and visit physicians more often (65,66). Kowalyk et al. (4) found that health anxiety was elevated in pregnant woman who had complications in pregnancy. Pregnant women who are aware that they have found a sufficient amount of information on their topic of interest, as well as those who do not repeat searches on the same topic, have a lower level of health anxiety (67).

Studies on anxiety in pregnancy have shown that there is a specific type of anxiety that is characteristic for pregnant women. This is called pregnancy-specific anxiety, which is described as an uncomfortable emotional state characterized by worrying about the health of the child, one's own health, delivery, and about finances, close relationships, and one's appearance (68). Anxiety in pregnancy is more common in younger, unmarried women who have lower education and income, those who are primiparae, who did not want the pregnancy, or have increased anxiety as a personality trait and psychological state (69). Additionally, anxiety in pregnancy can manifest in women who are more anxious overall, but also in those who did not have elevated anxiety previously (57). Some women with elevated anxiety in pregnancy avoid any situations that could lead to more pronounced anxiety, which includes searching for information on the Internet or continuing to search for information after they have become upset by the information they have found. In contrast, other women constantly search for new information, attend testing and examina-

ju s traženjem informacija na internetu (67). Tim trudnicama nakon pretraživanja interneta anksioznost u trudnoći može biti još viša nego što je bila prije pretraživanja, posebno jer su osobe koje su anksiozne oko zdravstvenih stanja sklonije tražiti negativne informacije koje ih mogu dodatno uplašiti, a ne umiriti (70). Trudnice koje imaju povišeniju anksioznost specifičnu za trudnoću sklonije su rizičnim ponašanjima u trudnoći, poput konzumacije alkohola i cigareta (69,71). Također, ova anksioznost bolje predviđa negativne ishode trudnoće nego ostali konstrukti anksioznosti (68,71).

EFEKTI KORIŠTENJA INTERNETA NA TRUDNICE

Pokazuje se da informacije nađene na internetu utječu na svakodnevno funkcioniranje trudnica i njihovo donošenje odluka, primjerice oko odabira načina poroda (5,72). Na temelju informacija o zdravlju koje trudnice nalaze na internetu, one propituju dijagnozu koju im je liječnik dao, procjenjuju preporuke stručnjaka i razmatraju i evaluiraju tretman kroz koji su prošle ili će tek prolaziti. Istraživanja pokazuju da je dio trudnica nakon pretraživanja interneta skloniji modificirati svoja zdravstvena ponašanja i navike (2,73). U istraživanju Lagan i sur. (21) većina trudnica je smatrala informaciju koju su pronašle na internetu korisnom. Dobivanje točnih i pouzdanih informacija tijekom trudnoće povezano je s manje komplikacija (74), rjeđim carskim rezom (75) i manjom smrtnosti majke i djeteta (76).

Korištenje interneta u trudnoći ima brojne pozitivne efekte. Žene nakon pretraživanja mogu osjetiti osnaženost, osjećaj kontrole i sigurnost u donošenje nekih odluka (20). Mnoge se osjećaju puno informiranije, spremnije za razgovor sa stručnjakom na pregledu i aktivno uključeno u njegu koja im je pružena (20,67). Žene koje su informiranije češće se upuštaju u

tions often, and find it hard to stop searching for information on pregnancy online (67). In these pregnant women, anxiety can be higher after online searches than before them, especially since persons anxious about the state of their health are prone to looking for negative information that can scare them instead of information that can calm them down (70). Pregnant women with pregnancy-specific anxiety are more prone to risky behavior in pregnancy such as consumption of alcohol and cigarettes (69,71). Furthermore, the presence of pregnancy-specific anxiety is a better predictor of negative pregnancy outcomes than other anxiety constructs (68,71).

THE EFFECTS OF INTERNET USE ON PREGNANT WOMEN

It has been shown that information obtained on the Internet influences the everyday functioning of pregnant women and the decisions they make, for example regarding the method of delivery (5,72). Based on health-related information pregnant women find on the Internet, they examine the diagnosis established by the physician, assess expert recommendations, and evaluate the treatment they have undergone or are about to go through. Studies show that some pregnant women are more willing to change their health behaviors and habits after an internet search (2,73). In a study by Lagan et al. (21), most pregnant women considered information they found online to be useful. Obtaining accurate and reliable information during pregnancy is associated with reduced complications (74), lower incidence of C-section (75), and lower mortality in the mother and child (76).

Using the Internet in pregnancy has numerous beneficial effects. Conducting an online search can result in a feeling of empowerment, being in control, and feeling secure in making some decisions (20). Many women feel much more informed, more prepared to talk with physicians during their examinations, and more actively involved in the care they are receiving (20,67). Women who are better informed more frequently engage in activities that are beneficial to them and the child, thus promot-

aktivnosti koje su dobre za njih i dijete te tako promoviraju važnost informiranosti o zdravlju (46). Neke trudnice se nakon razgovora s drugim trudnicama na internetu osjećaju smirenije, zadovoljnije, samopouzdanije i manje usamljeno (1,9,25). Doživljavanje podrške drugih osoba koje su također trudne ili su rodile povezano je s uspješnijom prilagodbom i boljom pripremljenosti na izazove nakon poroda (77). Još jedna pozitivna strana pretraživanja informacija na internetu je međusobno dijeljenje informacija koje trudnica i njezin partner pronađu na internetu, što dovodi do njihovog zbližavanja i dodatnog povezivanja u trudnoći (19).

S druge strane, neke trudnice nemaju uvijek pozitivno iskustvo s korištenjem interneta. Lagan i sur. (20) navode kako se neke trudnice nakon pretraživanja osjećaju anksiozno i pod stresom zbog informacija koje su pronašle, a prije pretraživanja nisu nužno bile tjeskobne. U tom istraživanju žene su spomenule kako tijekom pretraživanja o komplikacijama u trudnoći često nalaze na zastrašujuće priče drugih trudnica koje ih jako uznemire. Svakako je važno uzeti u obzir da je vjerojatnost nailaženja na zastrašujuće priče drugih trudnica veća na internetu, nego od neke osobe iz okoline (1). Kad su trudnice bile preplavljene i opterećene velikim brojem informacija na internetu, a za neke su sumnjale i u njihovu pouzdanost, osjetile su anksioznost, preplašenost, a neke čak i paranoju (20). Neke trudnice su informacije koje pronađu na internetu učinile toliko uznemirenima da su posljedično potražile pomoć stručnjaka (1) ili bliske osobe (9,10). Žene koje svakodnevno čitaju informacije o zdravlju na internetu su zbog zabrinutosti uzrokovane informacijama češće kontaktirale liječnika, u odnosu na žene koje čitaju informacije jednom tjedno (9). Trudnice uglavnom izbjegavaju informacije koje ih mogu jako uznemiriti ili pojačati anksioznost, poput video snimki poroda (30). Osim uznemirenosti,

ing the importance of being informed about health (46). Some pregnant women feel calmer, more content, more self-confident, and less lonely after a conversation with other pregnant women on the Internet (1,9,25). Experiencing support from other people who are or have been pregnant is associated with more successful adjustment and better preparedness to challenges arising after childbirth (77). Another positive side of searching for information online is sharing information found on the Internet between the pregnant woman and her partner, which leads to their relationship becoming closer during the pregnancy (19).

On the other hand, some pregnant women do not always have a positive experience with Internet use. Lagan et al. (20) reported that some pregnant women feel anxious and under stress because of the information they found in an online search, whereas they were not necessarily anxious before the search. In that study, women mentioned that during online searches on complications in pregnancy they often encounter terrifying stories from other pregnant women that upset them greatly. It is certainly important to consider that the probability of encountering terrifying stories from other pregnant women is higher on the Internet compared with persons in one's environment (1). When pregnant women were overwhelmed and overburdened by a large amount of information on the Internet, the reliability of some of which was in doubt, they felt anxiety, fear, and sometimes even paranoia (20). Some pregnant women were so upset by information they found on the Internet that they consequently requested assistance from experts (1) or people close to them (9,10). Women who read health-related information on the Internet on a daily basis were more likely to contact their physician due to anxiety caused by the information in comparison with women who read information online once per week (9). Pregnant women mostly avoid information what can severely upset them or exacerbate their anxiety, such as videos of childbirth (30). In addition to being upset, some pregnant women felt confused by the information they obtained on the Internet (22), while some felt frustrated by being unable to find what they were looking for (25).

dio trudnica je osjetio zbunjenost informacijama na koje su naišle na internetu (22), a neke frustriranost jer nisu pronašle ono što su tražile (25).

Kad trudnice pronađu informacije na internetu koje ih smiruju, zanimljivo je da te informacije dovode do smanjene zabrinutosti kraćeg trajanja u odnosu na efekte informacija koje dobiju uživo. Ipak, informacije koje im na internetu pruže stručnjaci također imaju dugotrajniji efekt (1) što ukazuje na važnost izvora informacija kad su trudnice tjeskobne, a ne toliko medija kojim se informacija prenosi.

ZAKLJUČAK

Široka dostupnost interneta omogućila je trudnicama da se aktivno i učestalo informiraju o zdravlju putem interneta. Trudnice koje su motivirane za traženje informacija i imaju istraživački stav, uključeniije su u praćenje trudnoće i više sudjeluju u donošenju odluka (14). S obzirom na velik broj informacija koje se mogu pronaći na internetu za trudnice je nužno da znaju procijeniti koliko su informacije pouzdane, ali i imaju kapacitet za nošenje s velikom količinom informacija koje su dostupne. Iako internet za neke trudnice simbolizira pozitivno okruženje gdje mogu dobiti podršku i razuvjeravanje, trudnice moraju biti pažljive zbog uznemirujućih sadržaja koji se nalaze u internetskom prostoru.

U usmjeravanju ponašanja trudnica na internetu veliku ulogu imaju njihovi liječnici, za koje je poželjno da samoinicijativno pokreću raspravu o informacijama na internetu tijekom pregleda. Ginekolozi bi trebali biti upoznati s kvalitetnim internet stranicama i mobilnim aplikacijama koje bi mogli preporučiti trudnicama. Bilo bi poželjno da liječnici provjere koliko su trudnice svjesne kriterija za procjenu kvalitete i pouzdanosti informacija na internetu te im, ako nisu, obrate pozornost na najvažnije kriterije.

When pregnant women find information on the Internet that calms them down, it is interesting to note that the calming effect is shorter in comparison with the effect of information received in face-to-face conversations. However, information on the Internet provided to them by experts also has a longer effect (1), which indicates that the source of the information is more important than the medium when the pregnant women are feeling anxious.

CONCLUSION

The wide availability of the Internet has allowed pregnant women to actively and frequently obtain information via the Internet. Pregnant women who are motivated to find information and have a research-focused attitude are more involved in monitoring their pregnancy and in participating in decision-making (14). Given the large amount of information that can be found on the Internet, pregnant women have to be able to assess the reliability of the information, but must also have the capacity to cope with the large amounts of available information. Although for some pregnant women the Internet symbolizes a positive environment where they can receive support and understanding, pregnant women must be careful due to the upsetting contents that can be found in online spaces.

The behavior of pregnant women on the Internet is significantly influenced by their physicians, for whom it would be desirable to take the initiative in starting a discussion on information found on the Internet during examinations. Gynecologists should be familiar with high-quality Internet pages and smartphone applications that they can recommend to pregnant women. It would be desirable for physicians to check how aware their pregnant patients are of the criteria used to assess the quality and reliability of information on the Internet and, if they are not sufficiently aware, indicate the most important criteria. Additionally, given their expertise, it would be ideal for physicians to actively engage in creating Internet content for pregnant women. International research shows that only a small number of healthcare profes-

Također, s obzirom na njihovu ekspertizu, bilo bi idealno kad bi se liječnici aktivno angažirali oko kreiranja internet sadržaja za trudnice. Inozemna istraživanja pokazuju da malen broj zdravstvenih djelatnika u sklopu obrazovanja uči o važnosti pretraživanja interneta za pacijente, kao i da nisu upoznati s kriterijama pouzdanosti internet stranica (78), što je svakako pokazatelj da treba poraditi na poboljšanju i modernizaciji obrazovnih programa.

Traženje informacija o zdravlju na internetu nije zamjena za podršku koju trudnice dobivaju u stvarnom životu, *offline* (1). Suradnički odnos s liječnikom i puno podrške, topline i pažnje od okoline trudnici je izrazito potrebno u ovom važnom životnom razdoblju. Međutim, korištenje interneta je za većinu trudnica svakodnevnica i samim time je nužno detaljnije istraživati ponašanja trudnica na internetu i efekte koje internet ima na njihovo zdravlje i dobrobit. Iako je nađeno nekoliko psiholoških karakteristika trudnica i karakteristika izvora i sadržaja na internetu koji su povezani s učestalijim pretraživanjem interneta, jasnija slika mehanizama koji pridonose zadovoljstvu ili anksioznosti nakon pretraživanja interneta kod trudnica još je nerazjašnjena. Ovo područje zaslužuje veliku istraživačku pažnju s obzirom na brojne potencijalne praktične implikacije nalaza u okviru obrazovnog sustava i naglašavanja važnosti zdravstvene pismenosti, ali i u kontekstu zdravlja trudnice i djeteta i napretka sustava zdravstvene skrbi.

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sionals learns about the importance of internet searches for their patients during the course of their education and that they are unaware of the reliability criteria for webpages (78), which is certainly an indication that more effort is needed to improve and modernize educational programs.

Searching for health-related information on the internet is not a replacement for the support pregnant women receive in real life, offline (1). A cooperative relationship with the physicians and a large amount of support, warmth, and care directed at the pregnant women from the people around her are extremely important in this important period in life. However, using the Internet is part of everyday life for most pregnant women, and further research is therefore necessary regarding the behavior of pregnant women on the Internet and the effects that the Internet has on their health and welfare. Although some psychological characteristics in pregnant women and characteristics of sources and contents on the Internet have been found to be associated with more frequent Internet use, a clearer picture of the mechanisms that contribute to contentment or anxiety in pregnant women after online searches is yet to be elucidated. The topic deserves a large amount of attention from researchers given the numerous potential practical implications of study findings within the framework of the educational system and emphasizing the importance of health literacy, but also in the context of the health of pregnant women and their children as well as improvement of the healthcare system as a whole.

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Primjena muzikoterapije u poticanju majčinske privrženosti i samopercipiranih roditeljskih kompetencija majki u riziku

/ Application of Music Therapy in Promoting Maternal Attachment and Self-perceived Parental Competence in Mothers at Risk

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Rano iskustvo emocionalne komunikacije pridonosi privrženosti između majke i dojenčeta te ima utjecaj na neurološki, socijalni i emocionalni razvoj djeteta. Primjenom muzikoterapijskih aktivnosti koje su usmjerene na interakciju roditelj–dijete moguće je kreirati iskustva u kojem majka i dijete uzajamno dijele ritam, tempo, melodiju i visinu glasa, što su sve intrinzični elementi ranog procesa privrženosti. Cilj ovoga rada odnosi se na ispitivanje mogućnosti primjene muzikoterapije u poticanju majčinske privrženosti i jačanju doživljaja vlastitih roditeljskih kompetencija kod majki u riziku. Istraživanje je provedeno na uzorku od tri majke te njihovom dojenčadi koji su bili uključeni u program muzikoterapije jednom na tjedan tijekom 10 tjedana. Prije i poslije provođenja muzikoterapije majke su ispunile Ljestvicu majčine postnatalne privrženosti i Ljestvicu roditeljskih kompetencija. Dobiveni rezultati ukazuju na pozitivne ishode primjene muzikoterapije u poticanju majčinske privrženosti kod majki u riziku, kao i na razinu percipiranih kompetencija u vlastitoj roditeljskoj ulozi. Muzikoterapijska intervencija može se integrirati kao terapijski pristup usmjeren prema jačanju privrženosti u dijadi majka – dojenče te prema poticanju roditeljskih kompetencija kod majki u riziku.

/ Early experience of emotional communication contributes to the attachment between mother and infant and has an impact on the child's neurological, social, and emotional development. By applying music therapy activities aimed at parent-child interaction, it is possible to create experiences in which the mother and child share the rhythm, tempo, melody, and pitch of their voices, what are all intrinsic elements of the early attachment process. The aim of this paper was to explore the possibility of applying music therapy in promoting maternal attachment and self-perceived parental competence in mothers at risk. The study was conducted on a sample of three mothers and their infants who were enrolled in a music therapy program once a week for 10 weeks. Before and after conducting music therapy, the mothers completed the Maternal Postnatal Affection Scale and the Parental Sense of Competence Scale. The obtained results indicate the positive outcomes of music therapy in enhancing maternal attachment in mothers at risk as well as the level of self-perceived competence in parental role. Music therapy intervention can be integrated as a therapeutic approach aimed at enhancing attachment in the mother-infant dyad and at fostering parental competence in mothers at-risk.

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UVOD

Privrženost je trajna emocionalna veza koja je obilježena tendencijom traženja i održavanja blizine sa specifičnom osobom, osobito u vrijeme prijetnje i neugode (1). Prema teoriji privrženosti (2) dijete se osjeća sigurno u odnosu s važnom osobom u svom životu zavisno o razini postojanosti, topline i brige koju mu ta osoba pruža. Da bi izraslo u mentalno zdravog pojedinca, tijekom dojenačke dobi i djetinjstva dijete mora imati toplu i kontinuiranu vezu s majčinskom figurom u kojoj i on i majčinska figura osjećaju zadovoljstvo (3). Ta figura ne mora biti biološka majka, može biti bilo tko koji je u ulozi primarnog skrbnika. Ovaj temeljni plan nije ispunjen u izvanrednim okolnostima kada dijete doživljava premalo interakcije sa skrbnikom koja bi podržala stvaranje privrženosti.

Sigurna privrženost se odnosi na odgovorljivo usklađivanje s emocionalnim stanjem dojenčeta i na majčino dijeljenje pozitivnih emocija s dojenčetom i ublažavanje stanja stresa (4). Najjači učinak sigurne privrženosti je pozitivna interakcija roditelj - dijete. Istraživanja pokazuju kako djeca koja su u prvoj i drugoj godini života procijenjena kao sigurno privrženata tijekom interakcije s majkama imaju više pozitivnog afekta i manje frustracija te agresivnosti u odnosu na nesigurno privrženata djecu (5). Majke sigurno privrženata djece su osjetljivije

INTRODUCTION

Attachment is a lasting emotional connection characterized by a tendency to seek and maintain closeness with a specific person, especially in times of threat and discomfort (1).

According to attachment theory (2), a child feels secure in relation to an important person in his or her life, depending on the level of persistence, warmth, and care that that person provides. In order to grow into a mentally healthy individual, a child must have a warm and continuous relationship with the mother figure during infancy and childhood, in which both the child and the mother figure feel pleasure (3). This figure does not have to be the biological mother and can be anyone who holds the role of primary caregiver. This basic relationship is not fulfilled in extraordinary circumstances when the child experiences too little interaction with the caregiver to support attachment.

Secure attachment refers to the responsive adjustment to the emotional state of the infant and to the mother's sharing of positive emotions with her infant and alleviation of distress (4).

The strongest effect of secure attachment is positive parent-child interaction. Research shows that children who are rated as securely attached during the first and second years of life have more positive affect and less frustration and aggression than insecurely attached infants

i više podržavaju pozitivno ponašanje djece. Ako ovakvi usklađeni odnosi nisu prisutni, tada pozitivnog doprinosa sigurne privrženosti neće biti. Tako nesigurno privrženost djeca nemaju iskustvo konzistentne dostupnosti, a roditelj je ili neosjetljiv ili nekonzistentan na djetetovo traženje pažnje. Iako ova rana iskustva ne moraju nužno određivati kasnije odnose, postoji utjecaj na prirodu bliskih odnosa, cjeloživotni osobni razvoj i rizik za razvoj psihopatologije (6). Tako u usporedbi s anksiozno privrženom dojenčadi, djeca koji su sigurno privrženost kao jednogodišnjaci, u slobodnoj igri pokazuju duža razdoblja istraživanja. U situacijama rješavanja problema entuzijastičniji su, uporniji i sposobniji tražiti i prihvatiti majčinu pomoć. Lakše se prilagođavaju novim situacijama i obično postižu bolje rezultate na razvojnim testovima i testovima razvoja jezika i govora (7).

Terapijski postupci koji podupiru razvoj privrženosti u odnosu majka - dojenče jačaju čimbenike koji moraju biti prisutni kod majke za dostatnu emocionalnu i fizičku sigurnost djeteta, ako sigurna privrženost nije prisutna. Ti čimbenici su: dostatno snažan osjećaj *selfa* i odvojenog identiteta od djeteta, prilika i sposobnost za iniciranje, ponavljanje i zadržavanje pozitivne interakcije koja stvara privrženost, dostatna dosljednost u takvim interakcijama, sposobnost majke da regulira svoje emocije, kognitivne sposobnosti majke da stvara uspomene i priče koje će podijeliti s djetetom te sposobnost da zamisli sebe i svoje dijete u budućnosti (8). Važan element imaju i roditeljske vještine koje se razvijaju vremenom te je potrebno primijeniti one postupke koji pomažu majkama da ih lakše usvoje (8). Sve navedene čimbenike dovodi se u snažnu vezu s procesom razvoja sigurne privrženosti.

U tom procesu podržavajuću ulogu u razvoju privrženosti može imati i glazba (9). Glazba je idealan medij za olakšavanje razvijanja roditeljskih vještina jer angažira sudionike i nije

(5). Mothers of securely attached children are more sensitive and more supportive of positive child behavior. If such harmonized relationships are not present, there will be no positive contribution to secure attachment. Thus, insecurely affectionate children have no experience of consistent accessibility, and the parent is either insensitive or inconsistent with the child's attention seeking. Although these early experiences do not necessarily determine later relationships, there is an impact on the nature of close relationships, lifelong personal development, and risk for the development of psychopathology (6). Thus, when compared with anxiously attached infants, children who are safely attached as one-year-olds show longer periods of exploration in free play. They are more enthusiastic, persistent, and more able to seek and accept their mother's help in problem-solving situations. They adapt more readily to new situations and usually achieve better results on language and speech development tests (7).

Therapeutic approaches that support the development of attachment in the mother-infant relationship reinforce the factors that must be present in the mother for sufficient emotional and physical security of the child, if safe attachment is not present. These factors are: a sufficiently strong sense of self and separate identity from the child, opportunity and ability to initiate, repeat, and retain positive interaction that creates attachment, sufficient consistency in such interactions, the mother's ability to regulate her emotions, the mother's cognitive ability to create memories and stories to share with her child, and the ability to imagine herself and her child in the future (8). Parenting skills that develop over time are also an important element, and approaches that help mothers to adopt them more easily need to be applied (8). All of these factors are strongly linked to the process of developing a secure attachment.

In this process, music can also play a supporting role in developing attachment (9). Music

prijeteća, a glazbena interakcija može podržavati privrženost majke i dojenčeta te doprinosi poboljšanju socioemocionalnih, neuroloških i razvojnih rezultata kod djece (10). Nadalje, raznolikost majčine upotrebe glazbenih elemenata može biti koristan pokazatelj njenog emocionalnog stanja koje može utjecati na sposobnost majke da inicira i održi pozitivnu interakciju sa svojim dojenčecom (11).

U kontekstu terapijskog rada s dojenčecom i roditeljem, muzikoterapija se može opisati kao sustavni proces razvijanja odnosa sa skrbnikom kako bi se podržale, razvile i obogatile njegove vještine korištenja glazbenih interakcija i interakcija sličnih glazbi, uključujući vokalne improvizacije, pjevušenje, uspavanje, ritmiziranje te skladanje i izvođenje pjesama. Koristeći muzička iskustva i odnos koji se razvija među njima muzikoterapeut potiče i poboljšava senzibilnost te međusobnu koregulaciju između dojenčeta i majke kako bi se stvorili optimalni uvjeti za poticanje sigurne privrženosti (12).

Interakcija u odnosu roditelj – dojenče prepuna je glazbenih elemenata. Prema tome, muzikoterapeut ima snažnu osnovu za terapijsku intervenciju koja će pomoći sigurnom povezivanju između ranjivog dojenčeta i njegovog skrbnika (12). Kako su interakcija, komunikacija i glazba fundamentalno načinjene od istih elemenata (13), elementi komunikacije kao tempo, ritam, ton, fraza, oblik i glasnoća neophodni su dojenčetu kako bi moglo dekodirati i organizirati iskustva interakcije, a majke mogu podržati u razvijanju dosljedne odgovorljivosti.

CILJ ISTRAŽIVANJA

Jačanjem majčinske privrženosti smanjuje se mogućnost napuštanja djeteta od majke, majka razvija pozitivnije mišljenje o svojim roditeljskim kompetencijama te ona i dijete osjećaju zadovoljstvo u zajedničkom odnosu

is an ideal medium for facilitating the development of parenting skills as it engages participants and is non-threatening, and musical interaction can support mother and infant attachment and contribute to improving socio-emotional, neurological, and developmental outcomes in children (10).

Furthermore, the diversity of the mother's use of musical elements can be a useful indicator of an emotional state that may affect the mother's ability to initiate and maintain a positive interaction with her infant (11).

In the context of therapeutic work with an infant and parent, music therapy can be described as a systematic process of developing a relationship with a caregiver to support, develop, and enhance his or her skills in using musical and music-like interactions, including vocal improvisation, humming, lullabies, rhythm, and composing and performing songs. Using music experiences and the relationship that develops between them, the music therapist encourages and enhances sensibility and co-regulation between the infant and the mother to create optimal conditions for fostering secure attachment (12).

The parent-infant interaction is full of musical elements. Thus, the music therapist has a strong foundation for therapeutic intervention that will help secure the connection between the vulnerable infant and his or her caregiver (12). As interaction, communication and music are fundamentally made of the same elements (13); communication elements such as tempo, rhythm, tone, phrase, form, and volume are necessary for the infant to decode and organize the experiences of interaction and can support the mother in developing consistent responsiveness.

AIM OF THE STUDY

Strengthening the maternal attachment reduces the possibility of the mother abandoning the child, as the mother develops a more positive

koji će poticati daljnji tjelesni i psihički razvoj djeteta.

Kako se muzikoterapija može koristiti u cilju facilitacije i osnaživanja interakcije majke i dojenčeta u prvim mjesecima njegova života, glavni cilj ovog istraživanja odnosio se na ispitivanje mogućnosti primjene muzikoterapije u poticanju majčinske privrženosti i jačanju doživljaja vlastitih roditeljskih vještina majki u riziku.

METODE ISTRAŽIVANJA

Ispitanici

Muzikoterapijski program proveden je s tri majke (jedna maloljetnica) koje su u Centar za pružanje usluga u zajednici Klasje u Osijeku boravile na majčinskom odjelu neposredno nakon rođenja djeteta. Dojenčad je bila u dobi od 1. do 4. mjeseca života. Majke su imale pravo koristiti usluge Centra do navršene godine dana djeteta. Stručno osoblje Centra procijenilo je kako su sve tri majke u riziku za razvoj zdrave privrženosti prema svom djetetu i za izgradnju primjerenih roditeljskih vještina zbog sljedećih čimbenika u obiteljskoj i medicinskoj anamnezi: 1) prethodno napuštanje rođene djece; 2) nesređena obiteljska situacija; 3) blage intelektualne teškoće i 4) poremećaj u ponašanju.

Sve majke iz uzorka bile su nezaposlene. Dvije majke su završile srednjoškolsko obrazovanje, a maloljetna majka je prije rođenja djeteta pohađala srednju školu. Dojenčad nije pokazivala rizik za niti imala uočena razvojna odstupanja.

Istraživanje je odobrio etički odbor ustanove u kojem su majke bile smještene i Etički odbor Akademije za umjetnost i kulturu Sveučilišta u Osijeku. Sve su majke potpisale Informirani pristanak za ispitanika te je istraživanje provedeno u skladu s Helsinškom deklaracijom.

opinion of her parenting competences, and she and the child feel content in a shared relationship that will foster the child's further physical and psychological development.

As music therapy can be used to facilitate and empower mother-infant interaction in the first months of life, the main objective of this study was to explore the possibility of applying music therapy in promoting maternal attachment and self-perceived parental competence in mothers at-risk.

RESEARCH METHODS

Participants

The music therapy program was conducted with three mothers who were in the maternity ward at the Klasje Community Center in Osijek, shortly after the birth of the child. The infants were 1-4 months old. The mothers were entitled to use the services of the Center up to the infant's first year of life. The professional staff from the Centre estimated that all three mothers were at risk for developing a healthy attachment to their child and for developing appropriate parenting skills due to the following factors in the family and medical history: (1) previous abandonment of children; (2) unsettled family situation; (3) mild intellectual disabilities; and (4) behavioral disorders.

All mothers were unemployed. Two mothers graduated from high school, and the minor mother attended high school before the child was born. Infants did not show any risk of developmental abnormalities.

The study was approved by the Ethics Committee of the institution where the mothers were housed and the Ethics Committee of the Academy of Arts and Culture of the University of Osijek. All mothers signed Informed Consent and the study was conducted in accordance with the Declaration of Helsinki.

Rano-intervencijski program muzikoterapije

Majke su u rano-intervencijski program muzikoterapije bile uključene zajedno sa svojom djecom jednom na tjedan u trajanju od 10 tjedana. Muzikoterapijski program provodio je kvalificirani muzikoterapeut sa završenim poslijediplomskim specijalističkim studijskim programom muzikoterapije. Muzikoterapija se odvijala individualno u trajanju od 45 minuta. Istraživanje je provedeno u Centru za pružanje usluga u zajednici Klasje gdje su majke boravile na majčinskom odjelu.

U muzikoterapijskom radu implementirani su elementi kreativne (14) i Orff muzikoterapije (15). Model kreativne muzikoterapije koristio se u tehnikama zajedničkog muziciranja između muzikoterapeuta, majke i dojenčeta u cilju refleksije majčinog emotivnog stanja, osjećaja, snaga i potreba. U glazbenim aktivnostima najčešće je korišten Orffov instrumentarij zbog multisenzornog djelovanja odabranih udaraljki i melodijskih instrumenata.

Razvojni pokret [engl. *developmental movement* (16)] bio je neizostavan dio svake muzikoterapijske seanse, jer zahtijeva bliski tjelesni kontakt majke i dojenčeta (ljuljanje u majčinu kriklu, poskakivanje na majčinim koljenima, penjanje po majci i sl.) te je bio obogaćen glazbenim elementima od muzikoterapeuta. Majčin dodir i ritmizirani pokreti koji su stvarani tijekom muzičke interakcije, intrinzični su dio odnosa majke i dojenčeta (17).

Koristila se i metoda skladanja pjesme (engl. *songwriting* (18)) u kojoj je majka uz podršku muzikoterapeuta kreirala stihove buduće pjesme na temelju tema koje je donijela u terapijski prostor. Nadalje je muzikoterapeut napisao melodijsku liniju uvažavajući preferencije majke. Učinjen je i audiozapis konačne verzije pjesme.

Majka je poticana od strane muzikoterapeuta u pjevanju pjesama (npr. uspavanki, brojalice)

Early-intervention music therapy program

The mothers were included in the early-intervention music therapy program together with their children once a week for 10 weeks. The intervention was conducted by a qualified music therapist with a completed postgraduate study program in music therapy. Music therapy was performed individually for 45 minutes. The study was conducted at the Klasje Community Services Center where mothers resided in the maternity ward.

The elements of creative (14) and Orff music therapy (15) were implemented in music therapy work. The model of creative music therapy was used in techniques of joint music playing between music therapist, mother, and infant in order to reflect the mother's emotional state, feelings, strengths, and needs. In music activities, the Orff instrument was most commonly used because of the multisensory effect of selected percussion and melodic instruments.

The developmental movement (16) was an indispensable part of any music therapy session because it requires close physical contact between mother and infant (rocking in the mother's lap, bouncing on the mother's knees, climbing on the mother, etc.) and was enriched with music elements by music therapists. Maternal touch and the rhythmic movements created during musical interaction are an intrinsic part of the mother-infant relationship (17).

Songwriting was also used (18), in which the mother, with the support of music therapists, created verses of a future song based on topics she brought to the therapy space. Furthermore, the music therapist wrote a melody line respecting the mother's preferences. An audio recording of the final version of the song was also made.

The mother was encouraged by music therapists to sing songs (lullabies, rhymes) that were significant to her and her infant. Acknowledg-

koje su za nju i njezino dojenče bile značajne. Opjevavanje trenutne situacije te odnosa između majke i dojenčeta bili su važan element muzikoterapije u cilju osvještavanja uzajamne interakcije te samih roditeljskih vještine majke.

Za vrijeme odvijanja rano-intervencijskog programa muzikoterapije majke nisu bile uključene u druge oblike psihosocijalne podrške.

Metode procjene

Procjena majčinske postnatalne privrženosti i roditeljskih kompetencija učinjena je u dvije vremenske točke: neposredno prije uključanja u muzikoterapijsku intervenciju te nakon 10 tjedana, tj. odmah nakon završetka intervencijskog programa muzikoterapije.

U svrhu procjene majčinske postnatalne privrženosti korištena je Ljestvica majčine postnatalne privrženosti (engl. *Maternal Postnatal Attachment Scale - MPAS* (19) koja sadrži tri podljestvice: 1) Kvaliteta privrženosti prema dojenčetu – 9 čestica ; 2) Odsutnost neprijateljstva prema dojenčetu – 10 čestica i 3) Zadovoljstvo u interakciji s dojenčecom – 10 čestica. Zbroj svih čestica čini ukupan rezultat na ljestvici, gdje niži rezultati ukazuju na neodgovarajuću majčinsku privrženost. Minimalni i maksimalni rezultati na ljestvici MPAS i na njenim podljestvicama su, 19 i 95 bodova za sveukupni rezultat, 9 i 45 bodova za podljestvicu kvalitete privrženosti te 5 i 25 bodova za obje podljestvice odsustva neprijateljstva prema dojenčetu, kao i za zadovoljstvo u interakciji.

Razina roditeljskih kompetencija procijenjena je Ljestvicom percepcije roditeljske kompetencije (engl. *Parenting Sense of Competence* (20) koja ima dvije domene: 1) Zadovoljstvo i (2) Učinkovitost. Ljestvica se ukupno sastoji od 17 čestica koji se ocjenjuju na Likertovoj ljestvici 1 – 6 (1 = uopće se ne slažem; 6 = u potpunosti se slažem). Domena zadovoljstva mjeri anksioznost, motivaciju i frustraciju roditelja, dok domena učinkovitosti mjeri sposobnost rješavanja

ing the current situation and the relationship between mother and infant was an important element of music therapy in order to raise awareness of the interaction and mother's parenting skills.

Mothers were not included in others forms of psychosocial support for the duration of the study.

Assessment methods

The participants were asked to complete an assessment form of maternal postnatal attachment and parental competence at two time points: immediately before joining the music therapy intervention and after 10 weeks, i.e. immediately upon completion of music therapy program.

For the purpose of assessing maternal postnatal attachment, the Maternal Postnatal Attachment Scale (19) containing three subscales was used: (1) Quality of Attachment to the infant – 9 items; (2) Absence of Hostility towards the infant – 5 items; and (3) Pleasure in the Interaction with the infant – 5 infants. Each item has a two-, four-, or five-point scale response option. The sum of 19 items forms the total MPAS scale, with low scores indicating a problematic mother-to-infant bond. Thus, the theoretical minimum and maximum values for the total MPAS and its subscales are, respectively, 19 and 95 for total MPAS, 9 and 45 for the quality subscale, and 5 and 25 for both the pleasure subscale and the hostility subscale.

The level of parenting competence was assessed by the Parenting Sense of Competence Scale – PSCOC (20). The PSOC is a 17-item scale, with two subscales: (1) Satisfaction and (2) Efficiency. Each item is rated on a six-point Likert scale (1 = strongly disagree; 6 = strongly agree). The domain of Satisfaction measures the anxiety, motivation, and frustration of the parent, while the domain of Efficiency

vanja problema u ulozi roditelja. Maksimalan rezultat na domeni Zadovoljstvo je 54 boda, a na domeni Učinkovitost 48 bodova. Veći rezultat ukazuje na veću percepciju razine vlastitih roditeljskih kompetencija.

Korišteni instrumenti vrednovanja su ljestvice samoprocjene.

REZULTATI

Sve su majke s prihvaćanjem redovito polazile muzikoterapijsku intervenciju sa svojim dojenčecom unutar 10 tjedana.

Dobiveni rezultati na Ljestvici majčinske postnatalne privrženosti pokazuju kako je svaka majka nakon muzikoterapijske intervencije postigla veći ukupni rezultat, što ukazuje na veću razinu privrženosti prema vlastitom djetetu. Veći rezultat nakon muzikoterapije zabilježen je i na podljestvicama Kvaliteta privrženosti i Zadovoljstvo u interakciji s djetetom (tablica 1).

Što se tiče percepcije vlastitih roditeljskih kompetencija, postignuti rezultati poslije muzikoterapijskog programa veći su u odnosu na dobivene rezultate prije primjene intervencije. Osim ukupnog rezultata, majke su postigle veći rezultat osobito na podljestvici procjene zadovoljstva vlastitim roditeljskim kompetencijama (tablica 2).

cy measures the ability to solve problems in the role of the parent. The maximum score for the Satisfaction domain is 54 points, and 48 points for the Efficiency domain. A higher score indicates a higher parenting sense of competency.

Both assessments are self-reporting instruments.

RESULTS

All mothers regularly underwent music therapy intervention with their infant during the 10 weeks of the early-intervention program.

The results obtained on the Maternal Postnatal Attachment Scale show that each mother achieved a higher overall score after the music therapy intervention, indicating a greater level of attachment to her own child. A higher score after music therapy was also observed on the Quality of Attachment and on Satisfaction in Interaction with a Child subscales (Table 1).

In terms of perceptions of own parenting competencies, the results obtained after the music therapy program were higher than those obtained before the intervention. In addition to the overall score, mothers scored higher especially on the Satisfaction Assessment subscale of their own parenting competencies (Table 2).

TABLICA 1. Postignuti rezultati prije i poslije muzikoterapijske intervencije na Ljestvici majčinske postnatalne privrženosti
TABLE 1. Results before and after music therapy intervention on the Maternal Postnatal Attachment Scale

	Kvaliteta privrženosti / Quality of Attachment		Odsustvo neprijateljstva / Absence of Hostile Feelings		Zadovoljstvo u interakciji / Pleasure in Interaction		Ukupan rezultat / Total score	
	Inicijalno / Initial	Finalno / Final	Inicijalno / Initial	Finalno / Final	Inicijalno / Initial	Finalno / Final	Inicijalno / Initial	Finalno / Final
Majka 1 / Mother 1	41	44	24	25	24	25	89	94
Majka 2 / Mother 2	41	44	25	25	19	24	85	93
Majka 3 / Mother 3	42	45	18	19	23	25	83	89
Medijan / Median	41 (41 - 42)	44 (44 - 45)	24 (18 - 25)	25 (19 - 25)	23 (19 - 24)	25 (24 - 25)	85 (83 - 89)	93 (89 - 94)

TABLICA 2. Postignuti rezultati prije i poslije muzikoterapijske intervencije na Ljestvici percepcije roditeljskih kompetencija
TABLE 2. Results before and after music therapy intervention on the Parental Sense of Competence Scale

	Zadovoljstvo kompetencijama / Satisfaction with Competences		Učinkovitost kompetencija / Efficiency of Competences		Ukupan rezultat / Total score	
	Inicijalno / Initial	Finalno / Final	Inicijalno / Initial	Finalno / Final	Inicijalno / Initial	Finalno / Final
Majka 1 / Mother 1	41	53	40	46	81	99
Majka 2 / Mother 2	34	54	46	46	80	100
Majka 3 / Mother 3	39	44	48	48	87	92
Medijan / Median	39 (34 - 41)	53 (44 - 54)	46 (40 - 48)	46 (46 - 48)	81 (80 - 87)	99 (92 - 100)

RASPRAVA

Odnosi između dojenčeta i roditelja imaju snažan utjecaj na tjelesni, psihološki i socijalni razvoj djeteta. Poremećaji u tim odnosima, koji između ostalih čimbenika mogu biti uzrokovani i nesigurnom majčinskom privrženosti, mogu poremetiti razvoj djeteta (21). Uspostavljanje sigurne privrženosti najvažniji je razvojni zadatak najranije dobi u čemu ključnu ulogu ima majka, odnosno primarni skrbnik.

Provedeno istraživanje odnosilo se na ispitivanje mogućnosti primjene muzikoterapije u poticanju majčinske privrženosti i jačanju doživljaja vlastitih roditeljskih kompetencija majki u riziku. Dobiveni rezultati na Ljestvici majčinske privrženosti i na Ljestvici percepcije roditeljske kompetencije prije i poslije provedene intervencije ukazuju na pozitivne ishode primjene muzikoterapije kod svih ispitanica na području kvalitete privrženosti, odsustva neprijateljstva prema djetetu te u domenama zadovoljstva u interakciji s djetetom i vlastitim roditeljskim kompetencijama.

U razgovoru s muzikoterapeutom majke su izjavile kako su pjesme koje su izvođene tijekom muzikoterapije, osobito one pjesme koje su napisale za svoje dojenče, pridonijele povezivanju s djetetom u svakodnevnim aktivnostima njege i igre te im pružile osjećaj sigurnosti i većih kompetencija u roditeljskoj ulozi. Su-

DISCUSSION

The infant-parent relationship has a strong influence on the physical, psychological, and social development of the child. Disorders in this relationship, which, among other factors, may also be caused by unsafe maternal attachment, may disrupt the child's development (21). Establishing a secure attachment is the most important developmental task at an early age, in which the mother or primary caregiver plays a key role.

The present study was conducted to explore the possibility of applying music therapy in promoting maternal attachment and self-perceived parental competence in mothers at risk. The results obtained on the Maternal Attachment Scale and the Parenting Sense of Competence Scale before and after the intervention indicate the positive outcomes of music therapy in the area of maternal attachment quality, absence of hostility towards the child, and in the domains of satisfaction in interaction with the child and in parental competencies.

Talking to a music therapist, the mothers stated that songs performed during music therapy, especially those songs they wrote for their infants, contributed to connecting more easily with the child in day-to-day care and in play activities and gave them a sense of security and greater competence in the parenting role. By participating in enjoyable and rewarding music activities, moth-

djelovanjem u ugodnim i za njih nagrađujućim muzičkim aktivnostima majke su osjetile zadovoljstvo u naizmjeničnoj interakciji s vlastitim djetetom. Prepoznavanje pozitivnog afektivnog stanja kod djeteta u navedenim interakcijama omogućilo je majkama doživljaj uspješnog roditelja. Uspjeh koje su majke doživjele u ulozi roditelja u muzikoterapijskim aktivnostima posljedično je doveo do produženja razdoblja koje su željele provoditi sa svojim djetetom u Domu.

Nesigurna privrženost razvija se u situacijama kada potrebe djeteta nisu zadovoljene, najčešće na dva načina - dijete ili ne dobiva ono što mu treba, već dobiva roditelja koji je izrazito uznemiren i kaotičan u svojim nastojanjima da dijete umiri, ili pak dobiva roditelje koji ignoriraju potrebe djeteta i ne reagiraju na znakove koje dijete šalje. Ovakva djeca imaju sasvim drugačiji doživljaj svijeta. Ne osjećaju se sigurno i zaštićeno već nevažno i ostavljeno ili da je svijet opasno mjesto kada su već roditelji tako jako uznemireni. Ne razviju osjećaj sigurnosti kao ni povjerenja u ljude, što kasnije u životu može biti povezano s poteškoćama u ostvarivanju bliskih odnosa (22).

Jovančević (21) objašnjava da rođenjem djeteta tek počinje proces u kojem se postepeno razvija dugotrajna emocionalna povezanost između majke i djeteta. Kada je majka emocionalno nedostupna (depresivna, nezainteresirana, prekomjerno ustrašena, preokupirana drugim problemima i sl.) dijete ne može dobiti odgovor koji treba od nje i postaje depresivno te se kod njega rađa dubok osjećaj nemogućnosti uspostavljanja komunikacije s vanjskim svijetom. Ako se majka nalazi u okolnostima koje su joj preteške, ona može imati odbijajuće i agresivne osjećaje prema djetetu te upravo u toj situaciji majci treba razumijevanje, podrška i pomoć obitelji i stručne osobe. Prije svega osobe kojoj će moći izraziti svoje osjećaje i misli bez osude.

Uloga muzikoterapeuta je stoga podržati proces stvaranja privrženosti u odnosu majka –

ers felt pleasure in interacting with their own child. Recognizing the positive affective state of the child in these interactions enabled mothers to experience a role of successful parent. The success that mothers experienced in their role as parents in music therapy activities consequently led to a prolongation of the time they wished to spend with their child in the ward.

Insecure attachment develops in situations where the child's needs are not met, most often in two ways – the child either does not get what he or she needs but gets a parent who is extremely upset and chaotic in his or her efforts to calm the child, or gets parents who ignore the child's needs and do not respond to the signs the child sends. Such children have a completely different experience of the world. They do not feel safe and protected but unimportant and left behind, or they feel that the world is a dangerous place when parents are already so upset. They do not develop a sense of security or trust in people, which later in life may be associated with difficulties in achieving close relationships (22).

Jovančević (21) explains that the birth of a child is just the beginning of a process in which a long-lasting emotional connection between mother and child gradually develops. When a mother is emotionally unavailable (depressed, uninterested, overly frightened, preoccupied with other problems, etc.), the child cannot get the response he or she needs and becomes depressed and develops a deep sense of inability to communicate with the outside world. If the mother finds herself in circumstances that are difficult for her, she may have repulsive and aggressive feelings towards the child, and it is in this situation that the mother needs the understanding, support, and assistance of the family and the professionals. Primarily, she needs a person to whom she will be able to express her feelings and thoughts without condemnation.

The role of music therapists is therefore to support the process of creating attachment in the

dijete, tj. podržati jačanje dijade. Štoviše, prisutnost terapeuta stvara trijadnu dinamiku, ali i otvara mogućnost dvjema potencijalnim dijadama – majka i terapeut, dijete i terapeut. Izgradnja odnosa majka – terapeut je od presudne važnosti za pozitivan učinak muzikoterapijske intervencije. S druge strane, terapeut se suzdržava od interakcija koje bi osnažile dijadu terapeut – dijete (11).

Proces glazbene improvizacije u seansama muzikoterapije puno otkriva o komunikativnom odnosu između terapeuta i klijenta (23). Iako su improvizacijske tehnike muzikoterapije poput imitacije, zrcaljenja, podudaranja, vođenja, pratnje i glazbenog dijaloga često korištene u ovom istraživanju, posebno mjesto zauzimala je metoda skladanja pjesama kojom je majka imala prilike svoju trenutnu životnu situaciju te afekte prema dojenčetu pretočiti u glazbu. Glazba kreirana u seansi nije toliko važna kao kulturološki simbol, nego kao duboko afektivni emocionalni komunikacijski kanal između majke i dojenčeta (24). Istraživanja (25) ukazuju kako upravo takve uzajamno osnažujuće muzičke aktivnosti s mladim majkama i njihovom djecom pozitivno utječu na privrženost majke i djeteta. Sukladno tome, kod majki su uočene promjene u učestalijem kontaktu pogledom i iniciranju tjelesnog kontakta prema dojenčetu te općenito u kvalitetnijoj, bogatijoj interakciji s djetetom.

S obzirom da dojenčad posjeduje neurološku i auditivnu zrelost za razlikovanje visine tona te sve bolje prepoznaju emocionalnu namjeru u boji glasa (26), razumljivo je da će najbolje reagirati na zahtjev za zaigranom interakcijom kada im majka ponudi stereotipno vokaliziranje jednostavnih melodijskih obrazaca. U dobi od samo dva mjeseca dojenče može zapamtiti kratku melodiju i razlikovati je od poznate i nepoznate melodijske fraze (27). Stoga je u muzikoterapijskim intervencijama, u dijadi majka – dojenče, često podržava-

mother-child relationship, i.e. to support the strengthening of the dyad. Moreover, the presence of the therapist creates a triadic dynamic, but also opens up the possibility of two potential dyads – mother and therapist, child and therapist. Building a mother-therapist relationship is critical to the positive impact of a music therapy intervention. On the other hand, the therapist refrains from interactions that would empower the therapist-child dyad (11).

The process of music improvisation in music therapy sessions reveals a great deal about the communicative relationship between the therapist and the client (23). Although improvisational techniques of music therapy such as imitation, mirroring, matching, directing, accompaniment, and musical dialogue were often used in this study, a special place was given to the method of songwriting through in which the mother had the opportunity to translate her current life situation and affects toward her infant into music. Music created during sessions is not as important as a cultural symbol but as a deeply affective emotional communication channel between mother and infant (24). Research (25) indicates that precisely such mutually reinforcing musical activities with young mothers and their children have a positive effect on mother-child attachment. Accordingly, changes in more frequent eye contact and initiation of physical contact with their infant have been observed in mothers, and in general in more active interactions with the infant.

Given that infants have the neurological and auditory maturity to differentiate pitch, and that they are increasingly recognizing emotional intent through the color of the voice (26), it is understandable that they will best respond to a request for playful interaction when the mother offers stereotypical vocalizing of simple melodic patterns. At only two months old, an infant can memorize a short tune and distinguish it from a familiar and unfamiliar tune phrase (27). Therefore, in music therapy

na vokalizacija kratkih melodijskih obrazaca. Način na koji dojenče reagira na opisanu interakciju lako potiče osjećaje intimnosti prema majci (28,29), što se prema postignutim rezultatima pokazalo učinkovitim za jačanje privrženosti i vlastitog osjećaja roditeljske kompetentnosti. Takve pozitivne interakcije mogu biti vitalne za majke koje se bore sa svakodnevnim zahtjevima majčinstva te su stoga preventivna mjera u potencijalnoj pojavi postnatalne depresije i nesigurnih obrazaca privrženosti (30).

Nedostatci predstavljenog istraživanja su mali broj ispitanika, nepostojanje kontrolne skupine te nadziruća okolina u kojoj su majke boravile sa svojom djecom za vrijeme provođenja muzikoterapijske intervencije. Iako primijenjene ljestvice majčinske privrženosti i roditeljskih kompetencija obuhvaćaju više domena ovih entiteta, treba pri interpretaciji rezultata imati na umu kako su navedeni instrumenti vrednovanja ljestvice samoprocjene. Klasičnim prigovorima za modele samoprocjene ističe se kako osobe u nekim situacijama podešavaju svoje odgovore. Neki autori smatraju da socijalno poželjno odgovaranje, odnosno tendencija procjenitelja da daje pretjerano pozitivne opise vlastitih osobina usklađenih s društvenim normama i standardima nije nikakav problem. Tome u prilog ide i većina istraživanja na ljestvicama samoprocjene, koja izvještavaju o zadovoljavajućoj pouzdanosti svojih instrumenata (31).

Potrebna su daljnja istraživanja koja će validirati učinkovitost muzikoterapijske intervencije na razvoj majčinske privrženosti i na doživljaj vlastite roditeljske kompetencije, uspoređujući muzikoterapiju s drugim standardnim oblicima psihosocijalne podrške. Također bi bilo relevantno ispitati ishode primjene muzikoterapije u dijadi majka - dojenče na specifična obilježja mentalnog zdravlja majke, ali i na razvoj ranih komunikacijskih i socio-emocionalnih vještina dojenčeta.

interventions in the mother-infant dyad, vocalization of short melodic patterns is often supported. The way the infant responds to the described interaction easily fosters feelings of intimacy toward the mother (28; 29), which, according to the results obtained in the current study, is effective in enhancing attachment and one's own sense of parental competence. Such positive interactions can be vital in facilitating coping with the daily demands of motherhood and are therefore a preventative measure in the potential onset of postnatal depression and insecure attachment patterns (30).

The limitations of the presented research are the small number of participants, the lack of a control group, and the monitoring environment in which mothers resided with their children during the course of music therapy intervention. Although the applied scales of maternal attachment and parental competence cover multiple domains of these entities, one should be aware of the self-assessment models issues. The classic objections to self-assessment models point out that people adjust their answers in some situations. Some authors consider that the socially desirable response, that is, the tendency of the assessor to give excessively positive descriptions of his or her own characteristics in conformity with social norms and standards, does not pose a problem. This is supported by most research on self-assessment scales that report the satisfactory reliability of instruments used (31).

Further research is needed to validate the impact of music therapy intervention in promoting maternal attachment and self-perceived parental competence by comparing music therapy to other treatment protocols for mothers at risk. It would be also relevant to examine the effects of music therapy in the mother-infant dyad on the specific variables of the mother's mental health, but also on the development of the infant's early communication and socio-emotional skills.

ZAKLJUČAK

Rano iskustvo emocionalne komunikacije pridonosi privrženosti između majke i dojenčeta te ima utjecaj na neurološki, socijalni i emocionalni razvoj djeteta. Stoga je nužno majkama ukazati na važnost najranijeg razdoblja života za kasniji razvoj te na njihovu ulogu u procesu uspostavljanja privrženosti s djetetom.

Ovim istraživanjem primjenom rano-intervencijskog muzikoterapijskog programa nastojala se je potaknuti i ojačati majčinska privrženost majki u riziku te ohrabriti njihova roditeljska uloga. Dobiveni rezultati ukazuju u prilog pozitivnih ishoda primjene muzikoterapije na jačanje majčinske privrženosti i doživljaja vlastitih roditeljskih kompetencija. Muzičke aktivnosti, vođene od strane muzikoterapeuta, podržale su kvalitetniju i dosljedniju interakciju u dijadi majka – dojenče te tako stvorile okvir za uzajamno pozitivna, rana emocionalna iskustva.

Iako su potrebna daljnja istraživanja za donošenje zaključaka o pojedinim učincima muzičkih aktivnosti na domene majčinske privrženosti i roditeljske kompetentnosti, predstavljeni rezultati sugeriraju kako muzikoterapija može biti učinkovit pokretač uzajamne pozitivne i emocionalne komunikacije između majke i dojenčeta. U ovom kontekstu, zajedničko muziciranje majke i dojenčeta može imati korisnu funkciju za razvoj vještina privrženosti kroz promicanje sinkroniziranog i usklađenog međudnosa roditelja i djeteta.

CONCLUSION

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Early experience of emotional communication contributes to the attachment between mother and infant and has an impact on the child's neurological, social, and emotional development. Therefore, it is necessary to point out to mothers the importance of the earliest period in the infant's life for later development and their role in the process of establishing attachment with the child.

Through this study, an early-intervention music therapy program sought to encourage and strengthen maternal attachment in mothers at risk and to encourage their parental role. The results indicate positive outcomes of music therapy in promoting maternal attachment and self-perceived parental competence. Music activities, led by music therapists, supported enriched and consistent interaction in the mother-infant dyad, thus creating a framework for mutually positive early emotional experiences.

Although further research is needed to reach conclusions about the specific effects of musical activity on the domains of maternal attachment and parental competence, the presented findings suggest that music therapy may be an effective driver of mother-infant mutual positive and emotional communication. In this context, mother-infant joint music playing can have a useful function for developing maternal attachment skills through the promotion of a synchronized and coordinated parent-child relationship.

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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.

Uredništvo ne preuzima odgovornost za gledišta u radu - to ostaje isključivom odgovornošću autora.

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.

Tijekom cijelog redakcijskog postupka, *Socijalna psihijatrija* slijedi sve smjernice Odbora za etiku objavljivanja (*Committee of publication ethics* - COPE), detaljnije na: https://publicationethics.org/files/Code%20of%20Conduct_2.pdf, kao i preporuke ponašanja, izvještavanja, uređivanja i objavljivanja znanstvenih radova u časopisima medicinske tematike koje je objavio Međunarodni odbor urednika medicinskih časopisa (*International Committee of Medical Journal Editors* - ICMJE), detaljnije na: <http://www.icmje.org/journals-following-the-icmje-recommendations/>.

Urednici časopisa *Socijalna psihijatrija* također su obvezni osigurati integritet i promicati inovativne izvore podataka temeljenih na dokazima, kako bi održali kvalitetu i osigurali utjecaj objavljenih radova u časopisu, a sukladno načelima iznesenim u Sarajevskoj deklaraciji o integritetu i vidljivosti (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5209927/>).

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Svaki rad zaprimljen u Uredništvu časopisa *Socijalna psihijatrija* pregledava glavni urednik. Ako rad ne zadovoljava kriterije opisane u Uputama za autore, glavni urednik časopisa rad vraća autoru. Radovi koji zadovoljavaju uvjete bit će upućeni na recenziju.

Recenzija

Radovi koji su pisani prema Uputama za autore, šalju se na recenziju. Časopis *Socijalna psihijatrija* recenzentima savjetuje da se pridržavaju uputa u Uputama za recenzente koje su dostupne na mrežnim stranicama Časopisa.

Instructions to authors

Aim & Scope

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) 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/>).

Editorial board

Each received manuscript is evaluated by the Editor-in-Chief. The manuscripts that do not meet the main criteria listed in the Author guidelines are returned to the Author. Manuscripts that are qualified are processed further.

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Manuscripts that meet the scope of the Journal and are prepared according to the Author guidelines are sent to peer-review.

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Etički kodeks

Podrazumijeva se da su svi autori radova suglasni o publikaciji i da nijedan dio rada nije prije publikacije u *Socijalnoj psihijatriji* već bio objavljen u drugom časopisu te da nije u postupku objavljivanja u drugom časopisu.

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Časopis *Socijalna psihijatrija* je časopis otvorenog pristupa i njegov je sadržaj dostupan besplatno na mrežnim stranicama časopisa.

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Autor snosi dio troškova prijevoda na engleski ili hrvatski jezik, odnosno lektoriranja rada.

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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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Uvod je kratak i jasan prikaz problema; u njemu se kratko spominju radovi onih autora koji su u izravnoj vezi s istraživanjem što ga rad prikazuje.

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The manuscript published in *Socijalna psihijatrija* can be published elsewhere without the permission of the Author, Editorial board and Publisher, with the note that it has already been published in *Socijalna psihijatrija*.

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Manuscripts, figures and tables should be submitted in electronic form. Normally, manuscripts should be no longer than 20 standard pages (one standard page is 1800 keystrokes – characters with spaces). Texts should be written in Microsoft Word, in a continuous font and style: the one set under the Normal style, with no additional font effects used other than words that should be in bold or italic. Tittles should be written in the same font as the rest of the text (Normal style) in a separate row, and title hierarchy should be shown using numbers (e.g. 1., 1.1., 1.1.1., etc.).

There should be a title, name and surname, address, town, state and e-mail indicated for the corresponding author.

The title page should contain: the full and shortened title of the article, full names and full surnames of all authors of the article, and the institution they work for. All the authors should also provide an ORCID ID (please check the following website: <https://orcid.org/register>). The article should have a summary not exceeding 200 words. The summary should briefly describe the topic and aim, the methods, main results,

Cilj je kratak opis što se namjerava istraživati, tj. što je svrha istraživanja.

Metode se prikazuju tako da se čitatelju omogući ponavljanje opisanog istraživanja. Metode poznate iz literature ne opisuju se, već se navode izvorni literaturni podaci. Ako se navode lijekovi, rabe se njihova generička imena (u zagradi se može navesti njihovo tvorničko ime).

Rasprava sadrži tumačenje dobivenih rezultata i njihovu usporedbu s rezultatima drugih istraživača i postojećim spoznajama na tom području. U raspravi treba objasniti važnost dobivenih rezultata i njihova ograničenja, uključujući i implikacije vezane uz buduća istraživanja, ali uz izbjegavanje izjava i zaključaka koji nisu potpuno potvrđeni dobivenim rezultatima.

Zaključci trebaju odgovarati postavljenom cilju istraživanja i temeljiti se na vlastitim rezultatima.

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Arapskim brojkama upisuju se podatci koje se može pronaći u samom izvorniku ili u nekoj bibliografskoj bazi podataka i to sljedećim redom: godina, volumen ili svezak, sveščić ili broj (engleski *issue* ili *number* – no.), dio (engleski *part*), dodatak (engleski *supplement* ili *suppl.*),

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In case the manuscript has six or fewer Authors, all of them should be listed. Should the manuscript have more than six Authors, the first six should be listed and the rest of them marked with the abbreviation *et al.* or *i sur.* First list the surname and then the initials of the first name(s). Multiple initials for the same person should be written without spaces.

2. Title and subtitle

Titles and subtitles are copied from the original and separated by a colon. Only the first word of the title and name are written in capital letters.

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The data that can be found in the original or in any of the bibliographic database should be written in Arabic numerals, in the following order: year, volume, issue, part, supplement, pages. Issue number is entered in parentheses and it is required to enter it starting from 1. In case the issue of the Journal cannot be recognized (e.g. when the issues are bonded), that data may be omitted. The page numbers are written from first to last.

E. g.

Kingdon DG, Aschroft K, Bhandari B, Gleeson S, Warikoo N, Symons Metal. Schizophrenia and borderline personality disorder: similarities and differences in the experience of auditory hallucinations, paranoia and childhood trauma. *J Nerv Ment Dis* 2010; 10(6): 399-403.

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