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Atribucije i kapital za oporavak liječenih ovisnika o kockanju – pilot studija

/ Attributions and Recovery Capital of Recovering Gambling Addicts - a Pilot Study

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Atribucijske teorije objašnjavaju načine na koji osoba interpretira pojave i događaje vezane uz sebe i oko sebe, a u tretmanu ovisnosti nužno je razumijevanje vlastite bolesti kao i etioloških čimbenika koji su doprinijeli njezinom razvoju. Kapital za oporavak, kao relativno novi konstrukt u istraživanju ovisnosti o kockanju, obuhvaća dvije ključne domene - pozitivan i negativan kapital. Unutar svake od njih prisutan je niz individualnih, obiteljskih, financijskih i društvenih resursa za apstinenciju odnosno rizika za relaps. Ovo istraživanje motivirano je potrebom za razumijevanjem specifičnih čimbenika oporavka u hrvatskom okruženju visoke dostupnosti igara na sreću i liberalne regulative. Postavljena su dva specifična istraživačka cilja: (1) Kako liječeni ovisnici o kockanju atribuiraju razvoj svoje ovisnosti? te (2) Koja individualna i okolinska obilježja im trenutno pomažu (pozitivan kapital za oporavak), a koja otežavaju (negativan kapital za oporavak) održavanje apstinencije? Istraživanje se temelji na kvalitativnom pristupu, a podatci su prikupljeni u tri fokusne grupe sa 16 sudionika koji su završili liječenje i aktivno sudjeluju u grupama podrške. Svi sudionici su muškog spola, a raspon dobi kreće se od 19 do 49 godina (M_{dob}=31,2 godina). Rezultati su kao ključne individualne atribucije razvoja ovisnosti identificirali emocionalnu nezrelost, nisko samopouzdanje i financijsku nepismenost, dok su okolinske atribucije vezane uz obiteljsku dinamiku, materijalistički društveni stil i široku dostupnost kockanja. Pozitivan kapital za oporavak očituje se strukturiranošću vremena, obiteljskom podrškom, sigurnim radnim okruženjem i programima liječenja, dok negativni kapital uključuje nestrukturirano vrijeme, dugove, rizične socijalne kontakte i društvenu normalizaciju kockanja. Kao zanimljiv i specifičan negativan kapital za oporavak moguće je istaknuti zainteresiranost za sport. Dobiveni rezultati potvrđuju važnost ekosistemskog pristupa u tretmanu, ali i potrebu za osnaživanjem odgovornog priređivanja igara na sreću na nacionalnoj razini. Rezultati su stavljeni u kontekst koristi za programe prevencije relapsa, kao i osnaživanju post-tretmanske podrške u procesu liječenja.

/ *Attribution theories explain the ways in which an individual interprets the occurrences and events in relation to themselves and their surroundings, while addiction treatment requires understanding one's own illness and the etiological factors that contributed to its development. Recovery capital, as a relatively new construct in gambling disorder research, encompasses two key domains - positive and negative capital. Each of these includes a series of individual, family, financial and social resources for abstinence, i.e. risks of relapse. This study was motivated by the need for understanding the specific recovery factors in the Croatian context, where gambling is highly available and regulations are liberal. Two specific research objectives were defined: (1) How do recovering gambling addicts attribute the development of their addiction?, and (2) which individual and environmental factors directly help (positive recovery capital) and which hinder (negative recovery capital) abstinence maintenance? The study was based on a qualitative approach, while the data were collected*

from three focus groups that included 16 participants who had completed their treatment and actively participated in their support groups. All of the participants were male, and the age range was from 19 to 49 years (Mage = 31.2 years). The results identified emotional immaturity, low self-esteem and financial illiteracy as the key individual attributions to addiction development, while the environmental attributions involved family dynamics, materialistic social style and widespread availability of gambling. Positive recovery capital was characterized by structured time, family support, safe working environment and treatment programs, while negative capital included unstructured time, debts, risky social contacts and a society that normalizes gambling. As an interesting and specific example of negative recovery capital we could highlight an interest in sports. The obtained results confirmed the importance of an ecosystemic approach to treatment, in addition to a need for encouraging responsible gambling at the national level. The results were used in the control of benefits for relapse prevention programs, as well as strengthening post-treatment support in the recovery process.

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UVOD

Ovisnost je kronična i recidivirajuća bolest (1,2), a psihosocijalna šteta povezana s ovom bolesti, sukladno ekosistemskoj perspektivi (3,4), pogađa i pojedinca i osobe u užoj i široj socijalnoj sredini (5,6). Budući da su uzroci ovisnosti složeni i slojeviti, isto vrijedi i za tretmanske postupke koji su višedimenzionalni, složeni, dugotrajni (7–9) te nerijetko zahtijevaju i post-tretmanske intervencije, odnosno pružanje kontinuirane podrške osobama koje su formalno završile terapijski proces (10,11).

Ovisnost o kockanju je klasificirana u bolesti ovisnosti prvi puta u DSM-5 klasifikaciji duševnih poremećaja (12–14) nakon čega je istu konceptualizaciju ponovilo i 11. izdanje Međunarodne klasifikacije bolesti (15), iako ne bez kritika pojedinih skupina znanstvenika

INTRODUCTION

Addiction is a chronic and recurrent disease (1, 2), and the psychosocial damage associated with this disease, in line with the ecosystemic perspective (3, 4), affects both the individual and those in their narrow and wider social environment (5, 6). Since the causes of addiction are complex and layered, the same applies to the treatment procedures as well, which are multidimensional, complex and long-term (7–9), and often require post-treatment interventions, i.e. provision of continuous support to the individuals who have formally completed the treatment process (10, 11).

Gambling disorder was classified as an addictive disorder for the first time in the DSM-5 classification of mental disorders (12–14), after which the same concept was repeated in the 11th revision of the International Classification of

(16,17). Neovisno o klasifikacijskom pristupu, ovu ovisnost u kognitivnom aspektu opisuje intenzivna i perzistentna zaokupljenost kockarskim aktivnostima, a često uključuje gubitak kontrole nad ponašanjem, unatoč brojnim negativnim psihosocijalnim posljedicama (16,18). U kontekstu razvoja tolerancije ovisnici ili problematični kockari tipično manifestiraju kompulzivnu potrebu za kockanjem s progresivno većim količinama novca ili s rizičnijim obrascima igranja kako bi postigli istu razinu željenog emocionalnog uzbuđenja (19,20). Nadalje, ova ovisnost često dovodi do značajnog stresa kao neposredne posljedice kockanja, što negativno i štetno utječe na različite aspekte života pojedinca (21–23).

U Hrvatskoj su dostupni različiti pristupi tretmanu ovisnosti o kockanju. Postoje opcije u okviru psihijatrijskih bolnica/klinika, od kojih neke znanstveno prate učinke svojeg terapijskog protokola (24), do klubova liječenih ovisnika o kockanju – KLOK klubova (25–27) koji su slični GA grupama (engl. *gambling anonymous groups*) u svijetu (28), te izvanbolničkih oblika tretmana u zdravstvenim ustanovama i savjetovalištima, pa sve do terapijskih zajednica za ovisnike (29). Psihijatrijske klinike, kao i KLOK klubovi, u pravilu osiguravaju i grupe podrške za svoje korisnike te članove njihovih obitelji kako bi osnažili održavanje remisije/apstinencije odnosno prevenirali relapse, što su uobičajeni ciljevi ovakvih post-tretmanskih intervencija (30,31).

Što se tiče tretmanskih ciljeva, apstinencija od kockanja se najčešće stavlja u prvi plan (32,33), iako su neka novija istraživanja pokazala kapacitete za umjereno i neproblematično kockanje nakon tretmanskih intervencija (34–36). U ovom području rezultati studija trenutno nisu jednoznačni te je potrebno detaljnije istražiti mogućnosti i kapacitete za umjerenim kockanjem. No, neovisno o različitim tretmanskim pristupima /ciljevima, kao i modelima koji naglašavaju važnost uključivanja 'značajnih dru-

Diseases (ICD) (15), although not without criticism from some groups of scientists (16, 17). Regardless of the classification approach, in its cognitive aspect this addiction is characterized by intense and persistent preoccupation with gambling activities, and often involves the loss of control over one's behavior, despite numerous negative psychosocial consequences (16, 18). Within the context of tolerance development, addicts or problem gamblers typically present a compulsive need for gambling which involves progressively increasing amounts of money or riskier gaming patterns in order to achieve the same level of desired emotional excitement (19, 20). Furthermore, this addiction often leads to significant stress as an immediate consequence of gambling, which has a negative and adverse impact on the various aspects of the individual's life (21–23).

Various approaches to the treatment of gambling disorder are available in Croatia. They include treatments within psychiatric hospitals/clinics, some of which employ a scientific approach to measure the effects of their treatment protocols (24), as well as recovering gamblers' peer clubs – *KLOK* clubs (25–27) which resemble gambling anonymous (GA) groups in other countries (28), or outpatient treatments in health institutions and counseling centers, and therapeutic communities for addicts (29). Psychiatric clinics, as well as *KLOK* clubs, typically also provide support groups for their clients and family members in order to strengthen the maintenance of remission/abstinence, i.e. to prevent relapses, which are the usual goals of such post-treatment interventions (30, 31).

In terms of treatment goals, abstinence from gambling is most commonly at the forefront (32, 33), although some more recent studies have shown capacities for moderate and unproblematic gambling after treatment interventions (34–36). The study results in this field are currently inconclusive, and further research is required in order to examine the possibilities of and capacities for moderate gambling. Nevertheless, regardless of the different treatment approaches/

gih' (engl. *significant others*), u tretman (37), jedan od bitnih zadataka svih tretmanskih protokola vezan je uz razumijevanje sebe, kao i osobne etiologije ovisnosti te mehanizama koji su doveli do potrebe za liječenjem (38,39). To nas dovodi do konstrukta uzročnih atribucija odnosno atribucijskih teorija koje objašnjavaju načine na koji osoba interpretira pojave i događaje vezane uz sebe i oko sebe (40,41).

U svijetu ne postoji mnogo dostupnih studija u području atribucija i ovisnosti, a prve su uglavnom bile usmjerene prema pušenju i konzumiranju psihoaktivnih tvari (42–45), s naglaskom na preuzimanje odgovornosti (46). U trodimenzionalnom modelu atribucija, ključno je pozicionirati svaku atribuciju na dimenzijama temporalne stabilnosti (stabilno – nestabilno tijekom vremena), kontrolabilnosti (podložno – nije podložno kontroli) te lokusa uzročnosti (internalno – eksternalno) (47,48). Istraživanja ukazuju da bi atribucije mogle imati značajan utjecaj i na same ishode tretmana (49). U općoj populaciji, relativno su konzistentni nalazi da ljudi imaju tendenciju uspjehe i pozitivne rezultate atribuirati internalno (sebi), a neuspjehe eksternalno (vanjskim čimbenicima) (50–52). U odnosu na konzumaciju opijata, istraživanje Bradleya i sur. (53) je pokazalo da ovisnici koji su prilikom prijema sebi (internalno) pripisivali veću odgovornost za negativne ishode, te koji su epizode relapsa pripisivali čimbenicima koji se mogu kontrolirati, naknadno su (nakon 6 mjeseci praćenja) imali veću vjerojatnost potpune apstinencije ili kontrole nad povremenim lapsevima.

Atribucije su u istraživanjima kockanja (kao ponašanja), a marginalno vezano i uz problematično kockanje/ovisnost, uglavnom povezana sz kognitivnim procesima koji se vežu uz procese tijekom kockanja. Primjerice, mjerenje internalnih i eksternalnih atribucija uspjeha i neuspjeha pri igranju (54), atribucijske pogreške i mjerenje iracionalnih uvjerenja vezanih uz kockanje (55). Dostupno je i nešto istraživanja

goals, as well as the models emphasizing the importance of including the significant others into the treatment (37), one of the important tasks of all treatment protocols involves the understanding of oneself, of the personal etiology of addiction, and of the mechanisms which led to the need for treatment (38, 39). This leads us to the construct of causal attributions, i.e. attribution theories that explain the manners in which the individual interprets the occurrences and events in relation to themselves and their surroundings (40, 41).

There are few globally available studies addressing the field of attributions and addiction, and the first ones mainly focused on smoking and psychoactive substance use (42–45), with an emphasis on asking personal accountability for addiction (46). The three-dimensional model of attribution places emphasis on positioning each attribution on dimensions of temporal stability (stable and unstable over time), controllability (controllable or uncontrollable) and locus of causality (internal and external) (47, 48). Studies indicate that attributions could also have a significant effect on the treatment outcomes (49). In the general population, the findings relatively consistently show that people have a tendency to attribute success and positive outcomes internally (to themselves), while they attribute failures externally (to outside factors) (50–52). In terms of opioids consumption, the study conducted by Bradley et al. (53) showed that addicts who attributed larger responsibility for negative outcomes to themselves (internally), as well as those who attributed relapse episodes to controllable factors, were subsequently (after 6 months of follow-up) more likely to achieve full abstinence or control over occasional relapses.

In studies on gambling (as a behavior), and marginally related to problem gambling/addiction, attributions were mainly associated with cognitive processes relating to the processes that occur during gambling. For example, these include examining the internal and external attributions of success or failure in gambling (54), attribution

vezanih uz štetne posljedice kockanja, odnosno objašnjavanje društvene stigmatizacije kockara (56). Međutim, pretraživanjem znanstvene literature autori ovog rada nisu naišli na radove koji su istraživali uzročne atribucije razvoja ovisnosti o kockanju. S druge pak strane, neosporno je važno razumjeti specifične kognitivne distorzije problematičnih kockanja koje je u svom radu fokusiranom na kognitivnu psihopatologiju problematičnog kockanja, precizno opisao Toneatto (57), budući da je kognitivna perspektiva razumijevanja sebe i etiologije osobnog problema nužan preduvjet trajnog oporavka.

U kontekstu ovisnosti o kockanju, u međunarodnoj znanstvenoj literaturi također ne postoji potpuni konsenzus o tome što je oporavak i kako ga točno definirati (58,59). S druge pak strane, kapital za oporavak, kao konstrukt, nije značajno istraživan u hrvatskoj znanstvenoj literaturi. Već dugo vremena, oporavak u području zdravlja (što uključuje i mentalno zdravlje) ne podrazumijeva samo izostanak bolesti, već se smatra puno širim spektrom ostvarene dobrobiti (60). Jedan od značajnijih konceptualnih modela oporavka u području mentalnog zdravlja je tzv. CHIME okvir (61,62) koji se sastoji od sljedećih pet komponenti: (1) povezanost, (2) nada i optimizam za budućnost, (3) identitet, (4) smisao života, (5) osnaživanje (engl. *Connectedness, Hope and optimism about the future, Identity, Meaning in life, and Empowerment* - CHIME) čime je neosporno pokazana važnost ekosistemskog pristupa u proučavanju oporavka.

Polazeći od podrijetla ovog konstrukta, a usmjeravajući se na oporavak u kontekstu ovisnosti, Kelly i Hoeppner (63), analiziraju niz njegovih definicija i operacionalizacija. Sukladno dvodimenzionalnom modelu ovisnosti, u kojem je intenzitet ovisnosti u visokoj korelaciji s (psihosocijalnim) problemima povezanim s ovisnosti, navedeni autori nude i dvodimenzionalni model konstrukta oporavka. Na 'x-os' postavljaju kapital za oporavak, a na 'y-os' re-

errors and examining the irrational beliefs relating to gambling (55). There are some available studies addressing the harmful consequences of gambling, i.e. explaining the social stigmatization of gamblers (56). However, while reviewing the scientific literature, the authors of this paper did not find any papers examining the causal attributions to the development of gambling disorder. On the other hand, it is unquestionably important to understand the specific cognitive distortions of problem gambling, which were described in detail by Toneatto in his paper addressing the cognitive psychopathology of problem gambling (57), since the cognitive perspective of understanding oneself and the etiology of the personal issue represent an essential precondition for permanent recovery.

In the context of gambling disorder, there is also no complete consensus in the international scientific literature with regard to the description of recovery and its precise definition (58, 59). On the other hand, recovery capital as a construct has not been significantly studied in Croatian scientific literature. For a long time already, recovery in terms of health (including mental health as well) has not involved only the absence of disease, but includes a much wider spectrum of achieved well-being (60). One of the more significant conceptual models of recovery in the field of mental health is the so-called CHIME framework (61, 62), which consists of the following five components: (1) connectedness, (2) hope and optimism about the future, (3) identity, (4) meaning in life and (5) empowerment (CHIME), and which unquestionably demonstrates the importance of an ecosystemic approach to the study of recovery.

Starting from the origins of this construct and focusing on recovery in the context of addiction, Kelly and Hoeppner (63) analyzed a series of its definitions and operationalizations. In line with the two-dimensional model of addiction, where addiction intensity has a high correlation to the (psychosocial) issues relating to addiction, the abovementioned authors offered a two-dimen-

misiju ovisnosti. Navedene osi su u međusobnoj korelaciji. Slijedom navedenog, što je duža remisija od ovisnosti, trebao bi se povećavati i kapital za oporavak, kao i obratno. Njihov model kontekstualizira oporavak unutar teorije stresa i mehanizama nošenja (engl. *coping*) s izazovnim životnim situacijama.

Začetke definiranja kapitala za oporavak kao konstrukta u području problema ovisnosti o psihoaktivnim tvarima možemo datirati od radova Clouda i Granfielda (64,65) koji su pozitivan kapital za oporavak proširili i onim negativnim zahvaćajući četiri temeljne komponente/dimenzije: (1) društveni kapital, (2) fizički kapital, (3) ljudski kapital i (4) kulturalni kapital. Radi se o kumulativnim unutarnjim i vanjskim resursima, odnosno obilježjima, koja pomažu ljudima da nadiđu svoju ovisnost (pozitivni kapital) ili onima koji su rizik za relaps (negativni kapital). U narednom razdoblju kapital za oporavak postao je istraživačkim fokusom drugih znanstvenika u području ovisnosti o psihoaktivnim tvarima te je Hennessy (66), proveo sistematičan pregled 35 studija koje su se empirijski bavile ovim konstruktom od 1999. do 2016. godine. Autor predlaže promatranje kapitala za oporavak na tri ekološke razine (individualna, mikro- i meso- razina) te identificira devet njegovih domena. Međutim, mnoge od njih zapravo predstavljaju slične aspekte, samo ih se različito naziva. Tako primjerice neki autori fizički kapital za oporavak nazivaju i financijski, budući da se odnosi na materijalna sredstva (novac), nekretnine, pokretnine i pristup resursima u zajednici. Takav izričaj je zapravo i precizniji. Ljudski kapital je također vrlo sličan zdravlju i osobnom rastu, koji navode neki drugi autori. Slijedom navedenog, a sažimajući pristupe različitih autora, Gavriel-Fried i Lev-el (67) predlažu sljedećih pet domena kapitala za oporavak. To su:

1. Ljudski kapital – znanja i vještine, te druga osobna svojstva koja mogu biti naslijeđena ili naučena, a koja pomažu osobama u

sional model of the construct of recovery as well. They placed recovery capital on the "x-axis", with addiction remission on the "y-axis". These axes are correlated. Consequently, the longer the addiction remission, the greater should be the recovery capital, and vice-versa. Their model contextualizes recovery within the theory of stress and mechanisms of coping with challenging life situations.

The beginnings of defining recovery capital as a construct in the field of psychoactive substance addiction can be traced back to the works of Cloud and Granfield (64, 65), who expanded positive recovery capital with the negative one, encompassing four fundamental components/dimensions: (1) social capital, (2) physical capital, (3) human capital and (4) cultural capital. These are cumulative internal and external resources, i.e. attributes, that help people overcome their addiction (positive capital) or represent a risk of relapse (negative capital). In the subsequent period, recovery capital became the focus of research for other scientists in the field of psychoactive substance addiction as well, and Hennessy (66) conducted a systematic review of 35 studies that empirically addressed this construct in the period from 1999 to 2016. The author suggested examining recovery capital on three ecological levels (individual, micro- and meso- levels) and identified its nine domains. However, many of these essentially represent similar aspects with a different name. For example, some authors refer to physical recovery capital as financial, since it relates to material means (money), immovable and movable property, and access to community resources. This wording is, in fact, more precise. Human capital is also very similar to health and personal growth, as stated by some other authors. In this respect, and summarizing the approaches taken by various authors, Gavriel-Fried and Lev-el (67) proposed the following five domains of recovery capital. They include:

1. Human capital – knowledge and skills, and other personal traits that can be inherited or taught, and which assist the individuals in

njihovom psihosocijalnom funkcioniranju i ostvarivanju ciljeva.

2. Društveni kapital – definiran kao zbroj osobnih opipljivih ili virtualnih resursa kao što su obiteljski odnosi i druga društvena mreža.
3. Financijski kapital – odnosi se na opipljive aspekte koji se prije svega odnose na prihode, vlasništvo, bogatstvo i stanovanje. Ranije su autori ovo nazivali fizičkim kapitalom.
4. Kulturalni kapital –veže se na kulturalne vrijednosti i stavove, te sposobnost ljudi da se ponašaju unutar njih.
5. Kapital zajednice – pokriva tretmanske resurse kao što su formalne organizacije (institucije) ili neformalne grupe unutar zajednice. Uključuje i politike te stavove koji podržavaju dostupnost tih resursa te promoviraju društvene norme i oporavak.

U svojoj suštini, pozitivan i negativan kapital za oporavak u području ovisnosti vrlo su slični konceptu rizičnih i zaštitnih čimbenika koji iz ekosistemske perspektive definiraju obilježja pojedinca te obilježja i okolnosti u okolini koja povećavaju ili smanjuju vjerojatnost pojave bilo kojeg problema mentalnog zdravlja i/ili rizičnog ponašanja (68–71).

Najznačajniji doprinos u translaciji koncepta 'kapital za oporavak' u područje kockanja napravila je Gavriel-Fried sa suradnicima (67,72–78). Osim što njezine studije pokazuju značenje za razumijevanje cjelovitog kapitala za oporavak, istraživanje Gavriel-Fried, Lev-el & Krausa (74) je pilot primjenom Indeksa holističkog kapitala za oporavak kod ovisnosti o kockanju pokazalo da su viši rezultati na ovoj mjeri negativno povezani s različitim emocionalnim teškoćama, kao što su anksioznost i depresivnost, ali i s ozbiljnosti simptoma ovisnosti. Istovremeno, pozitivna korelacija je utvrđena sa subjektivnom srećom. Nadalje, Gavriel-Fried i Lev-el (67,78) su u svojoj studiji, temeljem fokusnih grupa provedenih s 91 izliječenih ovisnika o kockanju, istražile specifične

their psychosocial functioning and achievement of goals.

2. Social capital – defined as the sum of personal tangible or virtual resources such as family relations and other social networks.
3. Financial capital – refers to the tangible aspects that primarily relate to income, ownership, wealth and residence. Earlier authors referred to this as physical capital.
4. Cultural capital – relates to cultural values and attitudes, and the people's ability to behave within them.
5. Community capital – encompasses treatment resources such as formal organizations (institutions) or informal groups within the community. It also includes the policies and attitudes that support the availability of these resources, and promote the social norms and recovery.

In their essence, addiction-related positive and negative recovery capital are very similar to the concept of risk and protective factors which define the traits of an individual from the ecosystemic perspective, as well as the traits and circumstances in the environment which increase or reduce the likelihood of occurrence for any mental health problem and/or risky behavior (68–71).

Gavriel-Fried et al. made the most significant contribution to the translation of the concept of "recovery capital" into the field of gambling (67, 72–78). Her studies demonstrated the meaning of understanding the entirety of recovery capital, while the study conducted by Gavriel-Fried, Lev-el & Kraus (74) also used a trial application of the Holistic Recovery Capital in Gambling Disorder Index to demonstrate that higher scores in this measure have a negative correlation with different emotional difficulties, such as anxiety and depression, but also with the severity of addiction symptoms. At the same time, a positive correlation with the subjective feeling of happiness was observed. Furthermore, based on their observation of focus groups encompassing a total of 91 recovered gamblers, in their study Gavri-

domene, kategorije i podkategorije pozitivnog i negativnog kapital za oporavak specifično u ovom području. Njihovi rezultati skraćeno su prikazani u tablici 1.

Iz ovakve konceptualizacije razvidno je kako ni snage, ali ni rizici za relaps, ne leže samo u pojedincu, već je važno uzeti u obzir uži i širi društveni kontekst. U odnosu na Hrvatsku ovakva su istraživanja posebno značajna s obzirom na izuzetnu dostupnost i pristupačnost igara na sreću, te vrlo liberalnu regulativu industrije (79,80) koja potencijalno može otežavati ove procese.

el-Fried and Lev-el (67, 78) examined the specific domains, categories and subcategories of positive and negative recovery capital specifically in this field. Their results are summarized in Table 1.

It is evident from this conceptualization that neither the strengths nor the risks of relapse depend solely on the individual, but it is important to take the wider social context into consideration. In terms of Croatia, such studies are of special importance considering the extreme availability and accessibility of gambling, as well as the very liberal regulations pertaining to the industry (79, 80), which can potentially hinder these processes.

TABLICA 1. Pozitivan i negativan kapital za oporavak ovisnika o kockanju (prema Gavirel-Fried i Lev-el, 2020, 2022)
TABLE 1. Positive and negative recovery capital of recovering gambling addicts (according to Gavirel-Fried and Lev-el, 2020, 2022)

POZITIVNI KAPITAL / POSITIVE CAPITAL	NEGATIVNI KAPITAL / NEGATIVE CAPITAL
DOMENE / kategorije / DOMAINS / categories	**DOMENE / kategorije / DOMAINS / categories**
LJUDSKI KAPITAL / HUMAN CAPITAL	**LJUDSKI KAPITAL / HUMAN CAPITAL**
• Subjektivna dobrobit / Subjective well-being	• Nagoni i nekontrolirani nagoni / Urges and uncontrolled urges
• Samoefikasnost / Self-efficacy	• Kognitivne distorzije / Cognitive distortions
• Samokontrola / Self-control	• Nedjelovanje / Inaction
• Proaktivne vještine 'copinga' / Proactive coping skills	• Potreba za traženjem uzbuđenja / Sensation seeking
• Socioemocionalne vještine / Socioemotional skills	• Stresni životni događaji / Stressful life events
• Rekonstrukcijske vještine / Reconstruction skills	• Negativne emocije / Negative emotions
	• Sposobnost skrivanja i nemogućnost dijeljenja informacija / traženja pomoći / Ability to conceal and inability to share information/seek help
	• Nedostatak motivacije za oporavak / Lack of motivation to recover
KAPITAL ZAJEDNICE / COMMUNITY CAPITAL	**KAPITAL ZAJEDNICE / COMMUNITY CAPITAL**
• Okruženje usmjereno na oporavak / Prorecovery environment	• Nedostatak društvenih i obiteljskih veza / Lack of social and familial networks
• Profesionalni terapijski milje / Professional therapeutic milieu	• Konfliktne ili opasne društvene veze / Conflictual or dangerous social networks
• Grupe podrške za liječene ovisnike / Recovering gamblers' peer support groups	
DRUŠTVENI KAPITAL / SOCIAL CAPITAL	**DRUŠTVENI KAPITAL / SOCIAL CAPITAL**
• Veze s izliječenim kockarima / Social relationships with recovering gamblers	• Okruženje koje potiče kockanje / An Environment that encourages gambling
• Prijatelji bez problema ovisnosti o kockanju / Friends without a gambling disorder	• Zajmodavci novca / Money lenders
• Obitelj / Family	
FINANCIJSKI KAPITAL / FINANCIAL CAPITAL	**FINANCIJSKI KAPITAL / FINANCIAL CAPITAL**
• Financijski status usmjeren na oporavak / Prorecovery financial state	• Financijski stres i dugovi / Financial distress and debts
	• Novac (posjedovanje) kao rizičan čimbenik / (Having) money as a risk factor

CILJEVI ISTRAŽIVANJA

Svrha ove pilot studije nastavlja se na prethodno opisan nedostatak istraživanja (engl. *research gap*) u ovom području, odnosno nepostojanje znanstveno-utemeljenih spoznaja u hrvatskom kontekstu vezano uz kapital za oporavak kod ovisnika o kockanju, kao i nedostatak istraživanja koja su etiološki ispitivala uzročne atribucije ovisnosti iz pozicije samih ovisnika.

Slijedom navedenog postavljena su dva specifična istraživačka cilja: (1) Kako liječeni ovisnici o kockanju atribuiraju razvoj svoje ovisnosti? te (2) Koja individualna i okolinska obilježja im trenutno pomažu (pozitivan kapital za oporavak), a koja otežavaju (negativan kapital za oporavak) održavanje apstinencije?

METODOLOGIJA

Uzorak

Istraživanje je provedeno sa 16 sudionika koji su uspješno završili liječenje u Klinici za psihijatriju Sv. Ivan u Zagrebu te koji aktivno pohađaju grupu podrške kao oblik post-tretmanske pomoći u održavanju apstinencije. Svi sudionici su muškog spola, a raspon dobi se kreće od 19 do 49 godina (Mdob=31,2 godina). Četiri sudionika je pohađalo grupu podrške pri Odjelu za mentalno zdravlje, prevenciju i izvanbolničko liječenje Zavoda za javno zdravstvo Varaždinske županije, dok je 12 pohađalo grupu u Klinici za psihijatriju Sv. Ivan u Zagrebu.

U odnosu na partnerski status, najviše sudionika je u vezi, no ne žive s partnericom (n=6), samaca je bilo pet, oženjenih troje, jedan sudionik je razveden, a jedan živi u izvanbračnoj zajednici. Pet sudionika ima djecu. Što se tiče najviše ostvarenog obrazovnog statusa, 11 sudionika završilo je srednju školu, četvero fakultet, a jedan sudionik ima samo završenu osnovnu školu. Ukupno je 12 sudionika stalno zaposleno, a dvoje povremeno (ili na pola radnog vremena), dok su dvojica nezaposleni.

AIMS

The purpose of this pilot study further builds on the previously described research gap in this field, that is, the absence of scientifically based knowledge in the Croatian context in terms of recovery capital in gambling addicts, as well as a research gap pertaining to studies that would etiologically examine the causal attributions of addiction from the viewpoint of the addicts themselves.

In view of the above, two specific research objectives were defined: (1) How do recovered gambling addicts attribute the development of their addiction?, and (2) Which individual and environmental factors directly (positive recovery capital) and which hinder (negative recovery capital) abstinence maintenance?

METHOD

Sample

The study involved 16 participants who had successfully completed their treatment at the University Psychiatric Hospital Sveti Ivan in Zagreb, and were actively attending their support group meetings as a form of post-treatment assistance for abstinence maintenance. All of the participants were male, ranging from 19 to 49 years of age (Mage=31.2 years). Four of the participants attended the support group at the Department of Mental Health, Prevention and Outpatient Treatment of the Institute of Public Health of the Varaždin County, while 12 attended the support group meetings at the University Psychiatric Hospital Sveti Ivan in Zagreb.

With regard to their relationship status, most of the participants were involved in a relationship, but did not live with their partners (n=6), five were single, three were married, one participant was divorced, and one was living in a consensual union. Five of the participants had children. In terms of the highest attained educational level, 11 participants had completed high school, four had a university degree, while one had completed only elementary school education. A total of 12 participants were permanently employed, two were occasionally (or part-time) employed, and two were unemployed.

Metode prikupljanja podataka

Istraživanje je provedeno metodom fokusne grupe s unaprijed pripremljenim protokolom koji je uključivao uvodna, središnja i završna pitanja. Uvodna pitanja bila su usmjerena prema istraživanju uzročnih atribucija u razvoju ovisnosti o kockanju, dok su središnja bila vezana uz pozitivni i negativni kapital za oporavak. Na kraju se sudionike pitalo žele li dodati nešto što smatraju važnim, a nije ih se pitalo u okviru unaprijed postavljenih pitanja.

Postupak provedbe istraživanja

Istraživanje je provedeno u tri fokusne grupe u razdoblju od prosinca 2023. do travnja 2024. godine. Prije početka dogovaranja fokusne grupe, stručno osoblje grupa podrške informiralo je korisnike o osnovnom cilju i planiranom načinu njihove provedbe. Pozvani su bili svi korisnici grupa podrške, bez posebnih ograničenja ili isključujućih kriterija. Nakon što su svi dali načelni pristanak, dogovoreno je mjesto i vrijeme provedbe fokusnih grupa, a prije početka samog razgovora, sudionici su od istraživača bili preciznije informirani o cilju, svrsi i postupku istraživanja. Na taj način se poštivalo etičko načelo informiranog pristanka, kao i načelo dobrovoljnosti, anonimnosti, povjerljivosti i mogućnosti da se odustane u bilo kojem trenutku. Svaka fokusna grupa trajala je 90 minuta, a provela ih je autorica ovog rada. Osigurano je bilo snimanje audio uređajem.

Cjelokupni postupak istraživanja dobio je suglasnost Etičkog povjerenstva Sveučilišta u Zagrebu Edukacijsko-rehabilitacijskog fakulteta (Klasa: 602-25/24-01/4; Urbroj: 251-74/24-16/2).

Metode analize podataka

Podatci su analizirani metodom refleksivne tematske analize (81–83) koja je uključivala sljedećih 6 faza: (1) upoznavanje s podatcima,

Data collection methods

The study was conducted using the focus group method with a previously prepared protocol which included introductory, central and final questions. The introductory questions were aimed at exploring the causal attributions in the development of gambling disorder, while the central questions related to the positive and negative recovery capital. In the end, the participants were asked whether they wanted to add something that they considered important, but were not asked about while being previously questioned.

Study procedure

The study was conducted in three focus groups in the period from December 2023 to April 2024. Prior to the start of focus group arrangements, the professional staff involved in the support groups informed the participants about the main objective and the planned method of their implementation. All of the support group participants were invited, without specific limitations or exclusion criteria. The place and time for the focus groups meetings were determined after everyone had given their agreement in principle, and the researchers provided more detailed information to the participants with regard to the objective, purpose and method of the research before the interviews began. In this way, the ethical principle of informed consent was respected, as well as the principles of voluntariness, anonymity, confidentiality and possibility to withdraw at any time. Each focus group meeting lasted for a period of 90 minutes, and was conducted by the author of this paper. Audio recording was organized as well.

The entire research procedure was approved by the Ethics Committee of the University of Zagreb, Faculty of Education and Rehabilitation Sciences (Class: 602-25/24-01/4; Reg.No: 251-74/24-16/2).

Data analysis methods

The data were analyzed using the reflexive thematic analysis method (81–83) which included the following 6 phases: (1) familiarization with

odnosno pažljivo čitanje prijepisa fokus grupa uz zapisivanje inicijalnih zapažanja o podatcima u odnosu na pojedinu fokus grupu i na cijeli set podataka (sve fokus grupe); (2) kodiranje, odnosno pripisivanje kodova podatcima (originalnim izjavama sudionika); (3) definiranje inicijalnih tema grupiranjem kodova kako bi se prikazali uočeni obrasci u podatcima; (4) revizija, odnosno provjera inicijalnih tema u odnosu na kodove te redefiniranje tema kako bi bolje odgovarale podatcima; (5) definiranje finalnih tema i (6) pisanje analitičkog narativa (deskripcije).

REZULTATI

Temeljem refleksivne tematske analize definirano je 5 tema: (1) Individualni čimbenici koji su doprinijeli razvoju ovisnosti o kockanju, (2) Okolinski čimbenici koji su doprinijeli razvoju ovisnosti o kockanju, (3) Motivacija za liječenje, (4) Čimbenici koji podržavaju apstinenciju, (5) Čimbenici koji ugrožavaju apstinenciju. U okviru svake od glavnih tema definirane su i podteme (tablica 2). Rezultati će biti predstavljeni prema glavnim temama i njima pripadajućim podtemama, uz prikaz izravnih citata[1] sudionika istraživanja.

Individualni čimbenici koji su doprinijeli razvoju ovisnosti o kockanju

Kada govore o individualnim čimbenicima koji su doprinijeli razvoju ovisnosti o kockanju sudionici navode **emocionalnu nezrelost** koju i često opisuju upravo ovim izrazom („*Ja bi rekel da emocionalna nezrelost, ovoga…mislim normalno to je isto počelo ko, ono, fora, srednja škola, klasika, de je bilo zabavno i to. Tak da velim, tu*

[1] Citati sudionika su šifrirani te će biti prikazani u odnosu na fokus grupu (FG1,FG2,FG3) i na kodni broj pojedinog sudionika u fokus grupi (npr. FG11- označava sudionika s kodnim brojem 1 u fokus grupi koja je označena brojem 1).

the data, i.e. careful reading of the focus group transcripts and taking notes on the initial observations concerning the data referring to a specific focus group and the entire data set (all focus groups); (2) coding, i.e. assigning codes to the data (original statements made by the participants); (3) defining the initial themes by grouping codes in order to present patterns observed in the data; (4) reviewing, i.e. verifying the initial themes in relation to the codes and redefining the themes in order to better match the data; (5) defining the final themes, and (6) writing the analytical narrative (description).

RESULTS

A total of 5 themes were defined based on the reflexive thematic analysis: (1) individual factors that contributed to the development of gambling disorder, (2) environmental factors that contributed to the development of gambling disorder, (3) motivation for treatment, (4) factors supporting abstinence, (5) factors threatening abstinence. Subthemes were also defined within each of the main themes (Table 2.). The results will be presented in accordance with the main themes and their corresponding subthemes, with a presentation of the direct quotes[1] by the study participants.

Individual factors that contributed to the development of gambling disorder

When referring to the individual factors that contributed to the development of gambling disorder, the participants cited **emotional immaturity**, which they often described using precisely that term (*"I would say that emotional immaturity, you know… I mean of course it also started with being*

[1] Participants' quotes are coded and will be presented in reference to the focus group (FG1, FG2, FG3) and the code number of the particular focus group participant (eg. FG11 - stands for the participant with the code number 1 in the focus group marked as 1).

TABLICA 2. Definirane teme i podteme temeljem fokusnih grupa (N=16)
TABLE 2. Defined themes and subthemes based on the focus groups (N=16)

Tema / Theme	Podtema / Subtheme
Individualni čimbenici koji su doprinijeli razvoju ovisnosti o kockanju / Individual factors that contributed to the development of gambling disorder	Emocionalna nezrelost / Emotional immaturity
	Nisko samopouzdanje / Low self-esteem
	Ovisnički mehanizam emocija i ponašanja / Addictive mechanism of emotions and behavior
	Neadekvatan odnos prema novcu / Inadequate attitude towards money
	Interes za sport / Interest in sports
Okolinski čimbenici koji su doprinijeli razvoju ovisnosti o kockanju / Environmental factors that contributed to the development of gambling disorder	Loši odnosi s roditeljima / Poor relationships with the parents
	Rizično društvo / Risky social circles
	Rizično radno okruženje / Risky working environment
	Kockanje kao društveni ritual / Gambling as a social ritual
	Afirmiranost materijalističkog životnog stila / Affirmation of a materialistic lifestyle
Motivacija za liječenje / Motivation for treatment	Potpuna iscrpljenost svih resursa / Total exhaustion of all resources
	Važni socijalni odnosi / Important social relationships
	Svijest o kockanju kao bolesti / Awareness of gambling as a disease
	Apstinencija kao rasterećenje / Abstinence as relief
Čimbenici koji podržavaju apstinenciju – pozitivan kapital za oporavak / Factors supporting abstinence – positive recovery capital	Potpuna promjena životnog stila / Total change of lifestyle
	Pozitivni odnosi i socijalne mreže / Positive relationships and social networks
	Dugovi i financijske restrikcije / Debts and financial restrictions
	Pozitivni učinci liječenja / Positive effects of treatment
Čimbenici koji ugrožavaju apstinenciju – negativan kapital za oporavak / Factors threatening abstinence – negative recovery capital	Rizici na individualnoj razini / Risks at the individual level
	Rizici na obiteljskoj razini / Risks at the family level
	Rizično društvo i izlasci / Risky social circles and outings
	Rizici na razini društva / Risks at the societal level
	Rizici vezani uz liječenje / Treatment-related risks

sam sve emocije izražaval, nisam znal ovak općenito u životu". FG11), ali je opisuju i kao slabu kontrolu svojih impulsa, nepromišljenost i brzopletost. Neki sudionici pripisuju razvoj ovisnosti o kockanju slabom poznavanju sebe te potrebi da se dokažu sebi („*Ego, ono, neki unutarnji nešto, dokazivanje samom sebi.*" FG25). Nadalje, sudionici kao jedan od čimbenika prepoznaju i **nisko samopouzdanje** koje se manifestira željom za dokazivanjem drugima, za priznavanjem od strane drugih te usmjerenosti na ono što drugi misle o njima („*Neka želja za dokazivanjem, frajerisanjem, čašćenjem… bit, ajmo reć, u nekom centru pažnje, da si ti glavni.*" FG24; „*Imao sam osjećaj manje vrijednosti i*

cool, high school, the classic stuff, when it was fun and all. What I'm saying is that I expressed my emotions this way, I didn't know how to do it generally in life". FG11*)*, but they also described it as poor control of their own impulses, recklessness and hastiness. Some participants attributed the development of gambling disorder to poor knowledge of themselves and a need to prove their worth to themselves ("*The ego, like, an internal thing, proving worth to myself.*" FG25). Furthermore, the participants recognized **low self-esteem** as one of the factors, manifesting as a desire to prove themselves to others and be recognized by others, as well as focusing on what others think of them ("*Some kind of a desire to prove myself, be the tough guy, treat others to*

zato sam išao kockat da bi dobio novce, da bi dobio potvrdu u društvu." FG21). Sudionici govore i kako im je kockanje služilo za „*hranjenje ega*" odnosno da su kockanjem htjeli „*uništiti ego*" („*Veliki ego. Znači želja za nekakvim ekstra dokazivanjem drugima. Ja sam, ono, hranio sam svoj ego. Htio sam biti neko ko, pokazat se nekom.*" *FG21*). Osjećaj manje vrijednosti nadomještali su kontinuiranim traženjem vanjske potvrde i priznanja koje je proizlazilo iz novčanih dobitaka. Dobiveni novac davao im je osjećaj vrijednosti i pripadnosti („*Samo da ja mogu doć sa punim džepovima reć da im…trenutačno imam tolko i tolko i da se svi počastimo.*" FG23; „*U principu sam visio u poslovnici odnosno u nekakvim ovoga, kasinima i tamo sam primao, ajmo reć, nekakav osjećaj pripadnosti, koji zapravo je bio opet ono, lažan. Zato što dok, dok se troši novac je, ovoga, si svima mio i drag, a kad ga više nema onda si ono.*" FG36). Iz odgovora sudionika vidljiva je i njihova podložnost utjecajima, odnosno povodljivost koju se opisuje kao "*nemanje svojeg ja*". Dio sudionika navodi i kako ih je do razvoja ovisnosti o kockanju dovelo to što nisu poznavali sebe i prihvaćali sebe te im je kockanje služilo kao bijeg, pri čemu neki svoj život opisuju kao "*život bez plana i cilja*". Daljnjem razvoju ovisnosti doprinijela je specifična kombinacija različitih čimbenika koji se može definirati kao **ovisnički mehanizam emocija i ponašanja** koji je vremenom samo produbljivao ovisnost. Prije svega, sudionici u ovom kontekstu spominju uzbuđenje, iščekivanje i uživanje u trenutcima kockanja *(„To uzbuđenje, znači ono dok dobiš letiš." FG11; „Jednostavno polažeš tolko nade u to da to postane ono, se ono, zaljubiš u to na neki način da jednostavno…iščekivanje.*" FG26) naspram čega se ostale životne aktivnosti čine dosadnima („*Znači, ubijanje dosade koja onda vodi do uzbuđenja i sve ostale stvari koje onda razvije su ubiti ovisnost.*" FG14). U tom kontekstu sudionici govore o „*žudnji*" za kockanjem. U trenutku kockanja doživljavaju se ugodne emocije i dolazi do porasta adrenalina („*Želja za adrenalinom, želja za igrom.*"

stuff… to be, let's say, at the center of attention, be the man." FG24; *"I had feelings of inferiority and that's why I gambled to get money, to be recognized in the society."* FG21). The participants also stated that gambling served as an "*ego boost*", that is, that they wanted to "*destroy the ego*" by gambling ("*Big ego. I mean, a desire to extremely prove myself to others. I was, like, boosting my own ego. I wanted to be someone, prove myself to someone."* FG21). The feeling of inferiority was replaced by a continuous search for external validation and recognition which came from monetary gains. The money they won provided them with a sense of value and belonging ("*Just so I could get there with pockets full of money and tell them… that at the moment I have this much and that much, and we can all treat ourselves."* FG23; "*I basically hung out at the betting shop, and some sort of, like, casinos, and let's say I felt like I belonged there, which was again, false. Because, while you are spending money, everyone likes you, and when it is gone, you've lost it."* FG36). It is evident from the participants' responses that they were susceptible to influence, that is, gullible, which is described as "*not having their own identity"*. Some of the participants stated that they developed a gambling disorder because they did not know themselves and did not accept themselves, and gambling served as an escape, whereby some described their lives as "*not having a plan or a goal*". Further development of addiction was supported by a specific combination of various factors, which can be defined as an **addictive mechanism of emotions and behavior**, which only deepened the addiction over time. Above all, in this context the participants mentioned excitement, anticipation and enjoyment while gambling ("*This excitement, I mean, when you win, you fly"* FG11; *"You simply hold out so much hope in that, that it sort of becomes like falling in love somehow, and it's just…anticipation*." FG26), which made all other life activities seem boring ("*I mean, filling the hours of boredom which then leads to excitement, and everything that results from that is essentially addiction"* FG14). In this context, the participants spoke of a craving to gamble. They experienced pleasant emotions while gambling, along with a surge of adrenaline ("*The desire for adrenaline, desire*

FG32; „I to je onda valjda isto adrenalin. I onda sam došo u točku gdje sam ja mislio da sam ja bog, da ja sam nedodirljiv, da ja mogu šta god hoću.“ FG25) pri čemu je jedini fokus bio na trenutnom zadovoljenju potreba (*„Meni u životu ništa nije postojalo osim kladionice. Ništa. Znači to mi je bila glavna stvar s kojom idem spavat, s kojom se budim.*“ FG24). Sam iznos dobitka nije bio presudan sam po sebi, već upravo iščekivanje i uzbuđenje (*„Više mi nije bilo bitno kolko je novaca u mašini. Bilo mi je bitno samo još jednom da osjetim taj pogodak, jel. Kad mi složi to, otvori. Da osjetim taj pogodak.“* FG23), a dobiveni novac se ponovno ulagao do situacije potpunog iscrpljivanja resursa (*„Dok neko pita kolko si zakockal. Uvijek je isto. Znači kolko si mogel.*“ FG12). Sudionici su u ovom kontekstu govorili i o nestrukturiranom vremenu, odnosno o “*višku vremena*” koje su početi trošili na kockanje, da bi se vremenom došlo do toga da svo vrijeme koje mogu troše na kockanje (*„Meni je iskreno bio najveći problem taj višak vremena. I jednostavno dok nisam počeo planirat dane i šta ću radit u danu i to, imo sam jako velikih problema. Jer je svo to slobodno vrijeme meni u glavi bilo “Idemo do kladionice. Idemo do kasina. I ubit ćemo tih 3, 4 sata.*“ FG32).

Sudionici navode i kako ih je u kockanju držala želja za dobitkom, za zaradom koja bi im omogućila lagodniji život, vraćanje dugova, ali i sredstva za daljnje kockanje. Dio sudionika navodi kako se radi o “*pohlepi za novcem*” i obijesti (*„Želja, u principu, za nekakvim dobitcima, ovoga, znači ... u tom trenutku, zapravo, kao nedefinirana osoba, kao mlada osoba...onda sam želio na neki način više. Osjećo sam se da nemam“*. FG36). No, dobiveni novac nije se trošio za bolji život ili vraćanje dugova već se ponovno ulagao u daljnje kockanje. Neki sudionici smatraju kako im je prvo iskustvo veće zarade na kockanju bio okidač za daljnje kockanje (*„To te povuče. „Vidi ovo, od tog se da. Uložio sam 100 kuna, dobio sam 1000 kuna, uložio sam 500 kuna, dobio sam 5000 kn. „Isuse, super.“, ne?*

for the game.” FG32; *“And that is also adrenaline, I guess. Then I reached a point where I thought of myself as a god, as being untouchable, capable of anything I wanted.”* FG25), at which point the only focus was on instant gratification (“*Nothing existed in my life except for the betting shop. Nothing. This was the main thing I thought about before going to sleep, and after I woke up*.” FG24). The amount of winnings in itself was not crucial, it was about the anticipation and excitement (“*I didn’t care anymore about how much money there was in the machine. I only cared about experiencing that feeling of winning again, you know. When that happens, it opens up. Having that sense of winning.”* FG23), and the money won was played with again until all the resources had been depleted (“*When someone asks how much money you gambled away. It is always the same answer. As much as you could*.” FG12). In this context, the participants also talked about unstructured time, that is, the “*excess time*” which they started spending on gambling, which over time led to spending all of the time they could spare on gambling (“*For me, sincerely, the biggest problem was this excess time. And simply, until I started planning the days and what I would be doing that day and all that, it was a big problem. Because in all of this free time, in my head I thought “Let’s go to the betting shop. Let’s go to the casino. We’ll kill those 3, 4 hours that way.*” FG32).

The participants also stated that they kept gambling because of the desire to win, to earn money that would enable them to have a more comfortable life, pay off their debts, but also provide funds for further gambling. Some of the participants stated that it was about “*a greed for money”* and wantonness (“*The desire, in principle, for some sort of winning, I mean... at that moment, actually, as an undefined person, a young person... at that time I somehow wanted more. I felt like I didn’t have it”*. FG36). However, gained money was not spent on a more comfortable life or paying off debts, but was reinvested in further gambling. Some participants believed that the first experience of a larger win when gambling served as a trigger for further gambling (“*It draws you in. Look at that, this is possible. I invested 100 kuna and got 1000 kuna, I invested 500 kuna and got 5000 kuna. Jesus,*

FG21). Kod dijela sudionika ovisnost o kockanju povezana je i s ovisnošću o alkoholu i opojnim drogama pri čemu su neki sudionici imali vrlo destruktivan, pa i delinkventan način života (npr. preprodaja droge). Razvija se ovisnički stil života u kojem se gomilaju i skrivaju dugovi, a kockanje postaje ključni sadržaj u životu („*Meni u životu ništa nije postojalo osim kladionice. Ništa. Znači to mi je bila glavna stvar s kojom idem spavat, s kojom se budim*." FG24). Ovisnost je predstavljala način bijega od problema i stvarnosti *(„I tamo sam, to je zapravo bio meni nekakav izlaz od svega, od er…loše volje, problema doma, tuge, tog osjećaja nekakvog. Sve loše sam rješavao tamo i to mi je bila nekakva mirna kuća*." FG35). Kockanje i sredstva ovisnosti su za neke sudionike bila doživljena kao nagrada (opuštanje nakon radnog dana) i bijeg *(„Ja sam bježim od toga da se suočim sam sa sobom*." FG26). Sve navedeno govori o nemogućnosti svojevoljnog prestanka kockanja i gubitka kontrole nad kockanjem, odnosno o razvoju ovisničkog mehanizma.

Sudionici navode i kako razvoju ovisnosti kockanja doprinosi i **neadekvatan odnos prema novcu** koji najčešće opisuju kao financijsku nepismenost („*Mi kockari smo financijski nepismene osobe***.** *Mi ne znamo s novcima. Kad dođe taj problem, to se dogodi. Znači kad dođe taj problem, mi ne znamo kaj je jedan euro, što je deset tisuća eura ili petsto tisuća eura." FG13*), a koja se manifestira kao neadekvatno raspolaganje novcem te kod nekih sudionika manjak (ili izostanak) doprinosa u kućanskim troškovima („*Reko bi isto, jako, jako bitna nekakva, kak da sad to nazovem, financijska pismenost uopće. Tu sam završio s 28 godina. Ja nisam znao platit račune, otić u dućan, kupit špeceraj. Sve mi, sve mi je to bilo, jednostavno nikad to nisam radio.*" FG33). Dio sudionika problematizira i činjenicu da su imali velika mjesečna primanja (dobre plaće, novac od obiteljskog nasljedstva) koji su trošili na kockanje, što nisu doživljavali kao problematično jer nisu imali dugove *(„Znači, moji su*

that's great, right?" FG21). In some participants, the gambling disorder was associated with alcohol dependence and substance abuse, whereby some of the participants led a very destructive, even delinquent lifestyle (e.g. drug dealing). An addictive lifestyle developed, in which debts piled up and were hidden, and gambling became a key part of life ("*Nothing existed in my life except for the betting shop. Nothing. This was the main thing I thought about before going to sleep, and after I woke up."* FG24). Addiction represented a way to escape the problems and the reality ("*And there, for me it was kind of an escape from everything, err… the bad mood, problems at home, sadness, this kind of feeling. All of the bad things were resolved there and it was a safehouse of a sort."* FG35). Some participants perceived gambling and addictive substances as a reward (relaxing after a work day) and escape ("*I just escape facing myself."* FG26). All of the above represents an inability to willingly stop gambling and a loss of control over gambling, that is, the development of an addictive mechanism.

The participants also stated that an **inadequate attitude towards money** contributed to the development of gambling disorder, most commonly describing it as financial illiteracy ("*We gamblers are financially illiterate. We don't know how to handle money. When that problem arises, this is what happens. So, when this problem arises, we don't know the difference between one euro, ten thousand euro or five hundred thousand euro."* FG13), which manifests as inadequate handling of money, and in some participants, a lack (absence) of contributing to the household expenses ("*I would also say, a very, very important sort of, how should I say it, general financial literacy. I ended up there at the age of 28. I didn't know how to pay the bills, go to the store, buy groceries. All of that, that was all something I had never done."* FG33). Some participants also argued that the problem was in the fact that they had large monthly incomes (good salaries, family inheritance) which they spent on gambling, and did not view this as problematic because they had no debts ("*I mean, my family is wealthy, I had some money from before as well, but yes, then I gained this by gambling, and then this amount was halved, and*

imućni, nekaj je bilo da sam imal otprije, ali da, s kockanjem sam stekel onda to, ali se i taj iznos znači prepolovil, on je bil, točno znam, bil je prošle godine v jedanaestom mjesecu 330.000 eura i pal sam ispod 200.000, ali…kolko god bilo, niko nije niti znal da novci postoje. Znači, nisi mogel kupovat stvari, jednostavno samo, samo su bili za kocku predviđeni novci." FG14).

Specifičan čimbenik koji je doprinio razvoju ovisnosti o kockanju, koji spominju neki sudionici je i **interes za sport**, naročito nogomet, i to od rane dobi („*I meni je to bilo, od malena je bilo samo sport, sport, sport i ništa drugo. To je bilo na televiziji. To je bila igra. Niš drugo nije postojalo osim lopte doslovno. I onda je to nekako pratiš od…pete godine života, pratiš nogomet pa sve ostalo*." FG24).

Okolinski čimbenici koji su doprinijeli razvoju ovisnosti o kockanju

U odnosu na okolinske čimbenike koji doprinose razvoju ovisnosti o kockanju dio sudionika spominje **loše odnose s roditeljima** koji su se manifestirali u nezainteresiranosti roditelja te u osuđivanju i odbacivanju od roditelja. Neki sudionici napominju kako je upuštanje u kockanje i ovisnosti o drogama na neki način bilo kažnjavanje roditelja („*To mi je bilo, ono, samo idem se uništit, da ne znam, ono, kaznim roditelje i da to, ono, samoispunjavajuće proročanstvo što smo tu učili. Kao oni misle da ja ću završit tak i tak pa onda idem im pokazat da ću tak i tak završit.*" FG26). Jedan sudionik navodi i da ga je na kockanje navelo to što je njegov otac alkoholičar pri čemu ga ova dinamika odnosa s ocem i danas određuje u procesu liječenja *(„Recimo moj otac je alkoholičar dan danas. I ja sam živio s njim znači i jednostavno taj način života me tolko grizo da sam možda ja otišo u tu ovisnost o kockanju. Ali sad dok vidim da sam ja jači i od njega. Da sam si prizno to i da sam se uzdigo ko čovjek i da idem tim nekim boljim ži-*

it was, I know exactly, last year in November it was 330,000 euro, and then it went under 200,000 euro, but… as much as it was, nobody knew that this money existed. So, you couldn't buy things, it was simply just money intended for gambling." FG14).

A specific factor mentioned by some of participants and which contributed to the development of gambling disorder was **interest in sports**, especially football, from an early age (*"For me, since I was little, it was all about sports, sports, sports and nothing else. It was on television. It was the game. Nothing else existed, except for the ball, literally. And somehow you watch it… since you were five, you watch football and then everything else."* FG24).

Environmental factors that contributed to the development of gambling disorder

With regard to the environmental factors contributing to the development of gambling disorder, some of the participants mentioned **poor relationships with their parents**, which manifested as parental indifference, condemnation and rejection. Some participants noted that by indulging in gambling and drug addiction they were somehow punishing their parents (*"For me it was like, I'll get wasted to, I don't know, punish my parents and, it will be a self-fulfilling prophecy which we learned about here. Like, they think I will end up like this anyway, then I'll show them that I will end up like this."* FG26). One participant stated that he was led to gambling by the fact that his father was an alcoholic, and this dynamic with his father continued to be a determining factor in his healing process to the date (*"For example, my father is an alcoholic even today. And I lived with him, so maybe this way of life simply bothered me so much that I developed this addiction to gambling. But now I see that I am stronger than him as well. I admitted it to myself and I lifted myself up as a man, and I am pursuing this other better life."* FG23). Another factor considered important for gambling disorder development is **risky social circles**, that is, negative influence of social networks associated with gambling. It should also be noted that some of the participants listed

votom." FG23). Sljedeći čimbenik važan za razvoj ovisnosti o kockanju je **rizično društvo**, odnosno negativni utjecaj društva povezanog s kockanjem. Važno je primijetiti i kako dio sudionika navodi negativni utjecaj pričanja o kockanju i ovisnosti koji ih u sadašnje vrijeme navodi da izbjegavanju „*staro društvo*", ali i poznanike koji razgovaraju o klađenju. Jedan sudionik navodi kako ga je na kockanje navodio i životni stil društva u kojem se kretao, a čiji je imovinski status bio visok *(„Kad mogu okrenut rundu, kak su rekli dečki. Kad mogu zavrtit janjca, kad mogu pratiti nečiji tuđi tempo. Ja sam se družio s tim nekim poslovnim ljudima koji su imali novaca i to puno novaca, koji su… Ne znam ja sam u jednom dobu…svaki dan sam igrao tenis. Znači, to treba financijski, kak se veli. Svaki dan smo bili na nekakvim ručkovima.*" FG21). Kod ovog sudionika želja za pripadanjem tom društvu bila je povezana sa željom za velikim dobicima kako bi se osigurao željeni životni stil i priznanje (status). Povezano s time jedan od čimbenika kod razvoja ovisnosti o kockanju, iz perspektive sudionika ovog istraživanja, je i **afirmiranje materijalističkog životnog stila u društvu**. U društvu se promovira i afirmira način života koji promiče trošenje i u kojem je financijski uspjeh najvažnije postignuće (*„Svi gledamo našu okolinu di drugi voze BMW-e, Audije, grade kuće, kupuju stanove, brodove, a…ti neki puta imaš osjećaj da si sposobniji, pametniji, a nemaš to.*" FG21). Jedan od sudionika ovakav stil života naziva i „balkanskim" pri čemu je dominantna želja za statusom u društvu koja se temelji samo na materijalnom aspektu *(„Samo taj nakaradni život Balkana, Hrvatske. To šta je reko R., taj… Svi pokazuju nešto, zapravo niko ništa nema. Svi su… milijarde minusa u Hrvata, al mi imamo BMW i tako.*" FG34). Sudionici navode i kako je ovakav način života lažan.

Radno okruženje je također prepoznato kao čimbenik koji doprinosi razvoju ovisnosti kockanja i to specifično posao vezan uz kockanje

a negative influence of talking about gambling and addiction, which nowadays encourages them to avoid their "*old friends*" and acquaintances who talk about betting. One participant stated that he was also driven to gambling by the lifestyle of the social circles he was a part of, who were of high financial standing ("*When I can pay for the round of drinks, as the guys would say. When I can pay for a roasted lamb, when I can keep up with somebody else's pace. I hung out with these business people who had money, a lot of money, who… I don't know, at one point… I played tennis every day. So, that requires financial means, as we would say. We would go out to some sort of lunches every day.*" FG21). For this participant, the desire to belong to this type of social circles was associated with a desire for big wins, in order to ensure the desired lifestyle and recognition (status). In relation to that, one of the factors of gambling disorder development, from the perspective of the participants in this study, was also the **affirmation of a materialistic lifestyle in the society**. The society promotes and affirms a lifestyle that encourages spending, and in which financial success is the most important achievement ("*We all look at our surroundings, where everyone is driving BMWs, Audis, building houses, buying apartments, boats, and… you sometimes feel like you are more capable, smarter, but you don't have that.*" FG21). One participant called this the "Balkan" lifestyle, which is dominated by a desire for social status based only on material aspects ("*Just this ridiculous Balkan, Croatian, lifestyle. What R. said, this… Everyone is showing off, but nobody actually has anything. Everyone is… Everyone in Croatia is billions in the red, but we are driving BMWs and all that.*" FG34). The participants also stated that this kind of lifestyle was fake.

The **working environment** was also recognized as a factor that contributes to the development of gambling disorder, specifically emphasizing work relating to gambling (working at a betting shop), and IT study courses which lead to the application of an analytical approach which is later an important aspect of gambling ("*I am also in this sphere all the time, and studying and working in IT, and… there is knowledge behind this, here and there.*

(rad u kladionici) te studij informatičkih tehnologija koji dovodi do primjene analitičkog pristupa koji je kasnije važan kod kockanja („*Isto sam cijelo vrijeme u tom, u toj sferi i IT studiram i radim i.. kao neko znanje iza toga, vamo tamo. I to je solidno išlo neko vrijeme. Ja sam dvije godine za to vrijeme ful analitički na to gledao i trudio se.*“ FG34).

Značajna uloga u razvoju ovisnosti o kockanju pripisuje se i tome što je **kockanje društveni ritual**, odnosno relativno je široko prihvaćeno i normalizirano. Velika je dostupnost različitih mjesta i okruženja za kockanje (zemaljskih i *online*). Kockanje je dostupno i maloljetnicima te neki sudionici navode kako su prva iskustva kockanja (klađenja) iskusili zajedno sa svojim roditeljima („*Obiteljska neka situacija gdje je kocka bila ono, općeprihvaćena. Nisam, nisam nikad imao osjećaj da je to nešto loše uopće… Stari je isto, ovoga, isto cijeli život ide u kladionicu. Od njega sam, na kraju krajeva, i naučio kak se ispunjava listić, ono, sa 13 godina valjda*.“ FG33).

Motivacija za liječenje – *od dna do mira*

Bogati su i rječiti opisi sudionika o tome što ih je motiviralo za liječenje. Najčešće korištene metafore su „*dolazak do dna, doticanje dna, dno dna, bez izlaza, propast, zadnji krug pakla*“ koje govore o stanju **potpune iscrpljenosti svih resursa** - mentalnih, emocionalnih, fizičkih i financijskih *(„Ja sam imal prvo liječenje jer sam…aaa dotaknul, pa ne bi rekel dno, nego ono skopal sam si, ono, tri metra pod zemljom koliko je bil problem*.“ FG13; „*Mislim da ono, da ne dođeš do tog dna dok ne shvatiš da više nema ni izvora novca, ne možeš više nigdje posudit. Svi te pritišću. Dugovi pritišću*.“ FG32). Ovisnost se u tim zadnjim fazama prije dolaska na liječenje kod nekih sudionika manifestirala i kao fizički umor i bol u tijelu („*Nisam mogo spavat. Nisam funkcionirat apsolutno nikak*.“ *FG23*; „*Znači, ne samo stres u, na psihološkoj bazi, nego i na fizičkoj*

It went pretty well for a while. My view of it was fully analytical for those two years during that time, and I tried hard.” FG34).

The fact that **gambling is a social ritual**, i.e. that it is relatively widely accepted and normalized, is also considered to have a significant role in the development of gambling disorder. Various gambling locations and environments are widely available (both in the physical surroundings and online). Gambling is also available to minors, and some participants stated that their first experiences with gambling (betting) were with their parents (“*There was this family situation in which gambling was, you know, generally accepted. I never, never thought of it as something bad in any way… My old man as well, you know, has been betting his whole life. In the end, he was the one who taught me how to fill out the ticket, when I was 13 years old, I think*.” FG33).

Motivation for treatment – *from reaching the bottom to achieving peace*

The participants’ descriptions of what motivated them to seek treatment were abundant and eloquent. The most frequently used metaphors were “*reaching the bottom, touching the bottom, rock bottom, no way out, ruin, the last circle of hell*”, describing a condition of **total exhaustion of all resources** – mental, emotional, physical and financial (“*I underwent my first treatment because I… aaah reached, I wouldn’t say the bottom, but I dug myself three meters underground, you know, that was how serious the problem was*.” FG13; “*I think that, you know, you don’t reach that bottom until you realize that there is no source of money any more, you can no longer borrow money anywhere. Everyone is pressuring you. The debts are weighing on you*.” FG32). In these last phases before seeking treatment, addiction in some participants also manifested as physical fatigue and bodily pain (“*I couldn’t sleep. I couldn’t function in any way*.” FG23; “*So, the stress was not only psychological, but also physical.*” FG21). Treatment seamed as the last and only salvation. Although the participants spoke of psychological exhaustion, they most dominantly attributed the

bazi.“ FG21). Liječenje se poimalo kad zadnji i jedini spas. Iako sudionici govore o psihičkoj iscrpljenosti, dominantnije pripisuju prestanak kockanja iscrpljivanju financijskih mogućnosti - kada se više nije moglo doći do novaca, ni kockanjem, ni posuđivanjem, ni zaduživanjem, ni financijskim malverzacijama (krađama): „*Ja sam na liječenje krenul kad sam isto došel do zida di više nemrem do love, mislim svako prekida zapravo kockanje dok više nemre do love. A i bil sam već umoran jer sam isto malverzacije radil na poslu*.“ FG11; „*Znači da nisam ostao bez novaca ja bi i sad dalje posuđivo, vraćo, kocko.*“ FG21). Sudionici ekstenzivno govore o dugovima koji su nastali zbog kockanja i teretu koji su zbog njih osjećali, kao i posljedicama koje su ti dugovi imali na njihove obitelji *(„Kak vratit tih dva miliona? Pa kak vratit? Kak? Di budemo? Kam? Kud? Kaj, da prodaju starci kuću i kam bumo onda išli? Na cestu svi? kaj bumo živeli v vikendici, onoj maloj svi.*“ FG13).

Učestalo se spominje i osjećaj psihičke (emocionalne i mentalne) iscrpljenosti i velikog tereta (*„Meni osobno je najbitnije da više nema tih laži, muljanja, manipulacija.“ FG13; „Al taj mir dok ti imaš da ne skrivaš ništ…to je ono, najbitnije.*“ FG11; „*Kad se probudiš ujutro i zadovoljan i možeš pogledat normalno sve druge ljude oko sebe. Znaš da nisi nikom lago. Nisi nikog pokro. Nisi nikom dužan.*“ FG23) koji je proizlazio iz prikrivanja kockanja i dugova, laganja i manipulacije bližnjih te opravdavanja i bježanja od kamatara i ljudi od kojih su posuđivali novac (*„Ja sam tražio sam jer nisam više mogo s tim živjet. S tim lažima i muljanjem.*“ FG23). Neki sudionici govore da ih je ovakvo stanje dovelo do psihičkog sloma te su razmišljali o suicidu, a neki su i pokušali izvršiti suicid (*„Ja sam fizički i psihički potpuno propao. Ja sam bio neprepoznatljiv, jel. I alkohol i kocka..To je postalo noćna mora….Ja sam za, ovaj, ja sam odlučio to završit suicidom….prije sedam mjeseci…nekim, imo sam sreće evo, nekim čudom sam preživio.*“ FG22). U tim situacijama navode kako su se osjećali besperspektivno i

cessation of gambling to the depletion of their financial resources – when they could no longer obtain money, either through gambling, borrowing, going into debt or financial wrongdoing (stealing): “*I started my treatment when I reached a wall where I could no longer get any money, I mean everyone stops gambling when they can't get money anymore. And I was already tired because of the wrongdoings I did at work*” FG11; “*I mean, if I hadn't lost all the money, I would still be borrowing, returning, gambling.*” FG21). The participants talked extensively about the debts incurred by gambling and the weight they felt because of them, as well as the effects of these debts on their families (“*How do I return the two million? How do I return it? How? Where will we be? Where? Where will we go? What, should my parents sell the house, and then where will we go? Out in the street? Are we going to live in our holiday home, the little one, all of us?”* FG13).

The feeling of psychological (emotional and mental) exhaustion and great burden was frequently mentioned as well (“*For me personally, the most important thing is that there are no more lies, sneaking, manipulation.*” FG13; “*But the peace you feel when you have nothing to hide…that is the most important thing.”* FG11; “*When you wake up in the morning and you are satisfied, and you can look at all the others around you in a normal way. You know that you haven't lied to anyone. You haven't stolen from anyone. You don't owe money to anyone.”* FG23), and it derived from hiding the gambling and debts, lying and manipulation of those closest to them, as well as justifications and escaping from money lenders and people who they borrowed money from (*“I asked for it on my own because I couldn't live with it any longer. With all the lies and sneaking.*” FG23). Some participants stated that such condition led them to a mental breakdown and they contemplated suicide, while some even attempted suicide (“*Physically and mentally I was a total ruin. I was unrecognizable, you know. Both alcohol and gambling… It became a nightmare… I was, you know, I decided to put an end to it with suicide… seven months ago… somehow I was lucky, you see, through some miracle I survived.*” FG22). They mentioned feeling hopeless and helpless in

bespomoćno („*Al bilo mi je došla ona pomisao dan prije neg bum im priznal, ono, da mi je najlakše bilo da se ubijem*.“ FG11; CITAT; „*I znači, jednostavno sam osjećao da sam dotaknuo nekakvo psihičko…dno. Bio sam iscrpljen …ono, emotivno rasturen, ne. Tužan i jadan*.“ FG34; „*Apsolutno bespomoćno i znači, zapravo nisam vidio nekakvu …znači niti društvenu ni financijsku, nikakvu budućnost*.“ FG36).

Odlazak na liječenje, odnosno **apstinencija** je kod njih dovela do osjećaja **rasterećenja** („*Znači sve to meni, ono, bilo, a ubiti, bilo mi je više da to prestane, znači da se sazna, da meni kamen sa leđa padne, padne na roditelje, na sestru taj teret, ali meni je bilo lakše.*“ FG13; „*Znači ja sam se osjećal lakše. I kaj sam bacil taj kamen, ovoga, sa srca, da sam priznal kaj sam napravil, kolko sve imam, kolko imam i dosta sam i otvoreno i na poslu, ovoga, baš sam poslal v Viber grupu poruku tak, tak i tak je, tak da je meni bilo važno da apsolutno svi znaju da ja imam problem i baš da promenim način života i kvalitetu života.*“ FG14; „*Ja sam isto došo u trenutku kad je tadašnja zaručnica shvatila, ne, kako ja živim život i to sve. Kad su laži se počele otpetljavat. Prekinuli smo vezu. Ja sam se vratio starcima i onda…ne znam, nakon par dana smo se opet našli, pričali. Pa ona me, da, kak da kažem, ne pritisnula*.“ FG33**)** te su liječenje shvatili kao zadnji resurs za pomoć. Pritom je kao ključni trenutak navode **osvještavanje svoje ovisnosti kao bolesti** („*Ja nisam znao, isto ono, da je to bolest. Da je to, kakva bolest, šta? Ja nisam niti gledo da ja imam problema s time*.“ FG21) što ih je motiviralo za daljnje liječenje. Čak i sudionik koji navodi kako je dugo uživao u ovisničkom stilu života (konzumacija sredstava ovisnosti, kockanje, manipulacije) spominje osjećaj rasterećenja nakon prestanka („*Ja sam kocko jer sam volio kockat. Ja sam se drogiro jer sam se volio drogirat. Znači, ja sam uživo u tome da, da kockam, uživo sam u tome da, da imam 10 priča za 10 kamatara, uživo sam u tome da, da kako doć do novaca. Meni je to sve, meni kad je bilo dobro, kad se niš*

those situations (“*But a thought came to me the day before admitting everything to them, that you know, the easiest thing to do would be to kill myself.*” FG11; QUOTE; “*And you know, I simply felt like I had reached some sort of a mental… bottom. I was exhausted… emotionally distraught, you know. Sad and miserable.*” FG34*; “Absolutely helpless and, I mean, I didn’t actually see any… social or financial future, no future at all.*” FG36).

Seeking treatment, i.e. **abstinence**, led them to a sense of **relief** (“*So, to me all of it, you know, essentially, was to make it stop, to make it known, to feel relief from this burden, to have it affect my parents, my sister, but just making easier for me.*” FG13; “*I mean, I felt better. Feeling relief from this burden, in my heart, having admitted to what I had done, everything I got, how much I had, and I made it openly clear at work, I mean, I really sent a message in the Viber group and explained how it was, and it was important to me to let absolutely everyone know that I had a problem and I was changing my lifestyle and quality of life.*” FG14; “*I also came at this moment when my then fiancée realized, you know, how I was living and all of that. All the lies started to unravel. We broke up. I went back to my parents and then… I don’t know, after a couple of days we met again, talked about it. Then she, how do I say it, pressured me.*” FG33) and they realized that treatment was their last resource to get help. In doing so, as the key moment they mentioned **realizing that their addiction was a disease** (“*I didn’t know, you know, that it was a disease. What disease, what? I didn’t see it that way, that I had a problem with it.*” FG21), which motivated them to further pursue the treatment. Even the participant who stated that for a long time he enjoyed this addictive lifestyle (substance abuse, gambling, manipulation) mentioned feeling relieved after quitting the lifestyle (“*I gambled because I liked to gamble. I did drugs because I liked doing drugs. So, I enjoyed this, this gambling, I enjoyed having 10 stories for 10 money lenders, I enjoyed this hunt for money. To me, all of this was good, when nothing happened, I was bored. Only when I lost everything, then I felt good. Not when I was winning. Not when I would win 100,000 kuna, but when I would lose 100,000 kuna, that last kuna, it would be*

ne događa, meni je bilo dosadno. Tek kad bi sve izgubio, sad se dobro osjećam. Znači ne kad bi dobio. Ne kad bi dobio 100.000 kuna, nego kad bi izgubio 100.000 kuna, onu zadnju kunu, ono ko da nemam, ne znam, ko da bi 20 kila tereta s mene pa okej, sad smo i to odradili. Idemo dalje. Sad se dobro osjećam." FG25; „*Nemaš tog grča u želudcu. Ne moraš, ono, razmišljat pred spavanje "Kaj moram sutra muljat, kaj moram ovom, kaj sam reko onom.", ono. Tak da ispunjenost. Ta neka sreća*." FG35). Prihvaćanje kockanja kao problema ovisnosti, odnosno bolesti, za sudionike je označavalo svojevrsnu novu dimenziju, a za neke i prekretnicu u razmišljanju. Postali su svjesni da je kockanje bolest, da su oni bolesni te ne mogu biti izliječeni, nego samo zaliječeni („*Kak je išlo liječenje, tak sam brzo uvidio da sam i ja taj slabić, to jest da je to bolest i jesam slabić, da je to bolest i jednostavno da ne možemo se tu izliječit nego zaliječit*." FG31). S jedne strane sudionici su time prihvatili svoju slabost te su se javila i razmišljanja o propuštenim (prokockanim) životnim prilikama u financijskom i odnosnom smislu („*Mislim, mogo si do sad već imati deset apartmana i opet i kapitalizirat da imaš još više. Da sam pametan bio, pod navodnicima*." FG21.). Uz prihvaćanje kockanja kao problema, priznavanja (sebi i svojoj okolini) laži, manipulacija i dugova dovodi do opraštanja sebi što povratno pozitivno djeluje na jačanje samopoštovanja. Metafore kojima opisuju apstinenciju su „*mir, rasterećenje, izlaz, izlaz iz magle, istina, olakšanje, oslobođenje, novi život, život punim plućima, čist mozak*". Faza apstinencije dovodi do rasterećenja jer se događa i odmicanje od stresnog ovisničkog načina života: prekida se konzumacija alkohola i opojnih droga, život općenito postaje uredniji s više strukture i uobičajenih svakodnevnih aktivnosti. Navodi se i kako odnosi s bližnjima postaju otvoreniji i bolji te da je veće zadovoljstvo samim sobom.

Važni socijalni odnosi, ponajviše s članovima obitelji te u nekim slučajevima s prijateljima, također su bili motivacija za liječenje. Mogući-

like not having, I don't know, like I would lose 20 kilos of weight that was weighing on me, so ok, now we have done this. Let's move on. Now I feel good." FG25; "*You don't have that knot in your stomach. You don't have to, you know, think before going to bed "What do I have to hustle tomorrow, what do I have to say to this guy, what did I say to that guy", you know. So, I felt fulfilled. Some sort of joy.*" FG35). Accepting gambling as an addiction problem, that is, a disease, symbolized a certain new dimension, and for some of them it was a turning point in their way of thinking. They became aware that gambling was a illness, that they were ill and could not be cured, only healed ("*As the treatment progressed, I soon realized that I was the weak one too, that it was a illness and I was weak, that it was a illness and we could not simply be cured, but only healed.*" FG31). On the one hand, in this way the participants accepted their weakness and started thinking about the opportunities in life that they had missed (gambled away) in terms of finances and relationships ("*I mean, I could have had ten apartments by now, and could have capitalized to have even more. Had I been smart, so as to say.*" FG21). Accepting gambling as a problem, admitting the lies, manipulations and debts (to oneself and to their surroundings), led them to forgive themselves, which in turn had a positive impact on improving their self-esteem. The metaphors used to describe abstinence included "*peace, unburdening, way out, leaving the fog, truth, relief, release, new life, living life to the fullest, clear brain*". The abstinence phase leads to unburdening because it also includes moving away from a stressful addictive lifestyle: alcohol and drug abuse stop, life generally becomes more orderly and has more structure, and involves more everyday activities. Relationships with the loved ones also become more open and better, and the individual feels greater satisfaction with themselves.

Important social relationships, mostly with family members and in some cases with friends, also represented a motivation for treatment. The possibility of losing important relationships and support prompted some participants to accept treatment. For some, the most important factor were their children ("*The only thing that mattered*

nost gubitka važnih odnosa i podrške rezultirali su kod nekih sudionika pristajanjem na liječenje. Za neke su najvažnije osobe bila djeca („*Jedino bilo bitno u tome svemu. Nisu mi čak ni roditelji koji su mi najveća potpora, djeca imaju 11 i 12 godina, nego mi je bilo najbitnije djecu ne izgubit.*“ FG25), ali i želja da ne razočaraju svoje bližnje. Dio sudionika govori i o ultimatumu koji su dobili od roditelja i partnerica što ih je u konačnici natjerao na liječenje („*Ja nisam sam shvatio. Ja sam došao ovde zbog ultimatuma od doma. Stari i sestra su mi rekli da više ne znaju šta će sa mnom jer ono, nakon 20 muljanja.*“ FG35; „*Ja sam u početku isključivo radi roditelja došo. Smatro sam da kocka nije bolest nego da je to stvar odabira, navike, to jest smatro sam da je to slabost, da nisam ja, da ne pripadam tu*.“ FG31). Podrška članova obitelji, prijatelja i poslodavaca prepoznaje se i kao važan zaštitni čimbenik u održavanju apstinencije.

Čimbenici koji podržavaju apstinenciju – pozitivan kapital za oporavak

Kao što je navedeno i u okviru prethodne teme, početak liječenja, odnosno apstinencije predstavlja i **potpunu promjenu životnog stila** ovisnika o kockanju. Taj promijenjeni, uredniji, način života prepoznaje se i kao ključni čimbenik u daljnjem održavanju apstinencije. Tamo gdje je u ovisnosti prevladavao nemir, stres, opterećenje i nestrukturiranost, u apstinenciji dolazi do smirenja, smanjenja stresa, rasterećenja i visoke strukture. Sudionici posebno ističu visoku strukturiranost vremena koja za njih znači u prvom redu odvraćanje pažnje od potencijalnih misli o kockanju i ispunjavanje dana smislenim aktivnostima („*Ja sam si sad posložil svoj dan ko domaćica bi se reklo (smijeh), zdravo seljački. Ja doma sve radim. Ja se zainteresiram sa svim stvarima koje sad ne bi, da pomognem mami, doma, čisto da i meni bude lakše.*“ FG13; „*U principu ispunjavam, znači, ispunjavam si vrijeme. Nemam praznog hoda. Ukoliko in all of this. Not even my parents, who are my biggest support, but my children who are 11 and 12, the most important thing for me was not to lose my children.*” FG25), but also the desire not to disappoint their loved ones. Some participants spoke of ultimatums they received from their parents and partners, which was the final push towards seeking treatment (“*I didn't realize it on my own. I came here because of the ultimatum I got at home. My old man and my sister told me that they didn't know anymore what to do with me, because I like, messed up 20 times.*”, FG35; “*In the beginning, I came exclusively for my parents' sake. I believed that gambling was not a disease, but a choice, a habit, I mean I considered this to be a weakness, that it's not for me, that I didn't belong here*.” FG31). Support from family members, friends and employers is recognized as an important protective factor in maintaining abstinence.

Factors supporting abstinence – positive recovery capital

As stated within the previous topic, the beginning of treatment, i.e. abstinence, also represents a **total change of lifestyle** for gamblers. This changed, more orderly, lifestyle is recognized as the key factor for further abstinence maintenance. While addiction was ruled by unrest, stress, burden and lack of structure, abstinence led to calm, reduced stress, relief and high structure. The participants specifically emphasized the highly structured time, which for them primarily meant distraction from potential thoughts about gambling, and filling their time with meaningful activities (“*I have now organized my day like a housewife, as you could say (laughter) in layman's terms. I do everything at home. I am interested in all the things that I would not have been, to help my mom, at home, to make it easier for myself as well*.” FG13; “*I basically, you know, fill my time. I don't idle. If such a moment appears, I generally reach for a book. I go for a walk*.” FG36). It was important for them not to feel bored, which previously led them to gambling, and to feel a sense of purpose. In that sense, they highly valued work, while some specifically mentioned physical work as healing for their body

mi dođe do praznog hoda, onda u principu, imam knjigu. Odem se prošetat." FG36). Važno im je da nemaju osjećaj dosade koji je prije vodio ka kockanju i da imaju osjećaj smisla. U tom smislu visoko vrednuju posao, odnosno rad, a neki specifično spominju i fizički rad koji smatraju iscjeljujućim za svoje tijelo i misli („*Da fizički imaš nekakvi doticaj da nešto baš ono, iz komada drveta napraviš skulpturu. Ne radim to, ali ono, nešto si stvorio, neku dodatnu vrijednost*." FG22; „*S tim da meni je trenutno, mislim da je fizički rad, pogotovo kad si početak apstinencije, ključan. A ja sam kompletno mentalno, ono, u poslu tak da, to mi malo fali. Stvarno se osjećaš, pročisti ti mozak*." FG34). Rad im daje osjećaj svrhe, stvaranja i produktivnosti naspram trošenju i gubicima za vrijeme kockanja („*Meni posao daje osjećaj da stvaram. Napokon da stvaram nešto, a ne da razaram jer s kockom sam razaro, a poso mi daje osjećaj da prihodujem*." FG21). Zarađeni novac troši se za životne troškove i za namirivanje dugova nastalih zbog kockanja što također donosi zadovoljstvo. U kontekstu radnog mjesta navode i kako je presudno da na radnom mjestu nemaju mogućnost raspolaganja novcem što za njih može predstavljati rizik. Osim posla, promjena životnog stila očituje se i većim okretanjem sebi, bavljenjem sobom i pronalaskom novih životnih ciljeva. Događa se promjena načina razmišljanja, vrednovanja malih stvari, naspram grandioznosti u razdoblju ovisnosti („*Tako da, sitne stvari. Kava s prijateljem. Razgovor. Pomoć preselit neki namještaj. Ne znam, obrezat jabuku punici*." FG21). Sudionici navode kako su pronašli nove hobije („*U zadnje vrijeme možda ta putovanja više. To me ispunjava više. S curom odemo na nekakav vikend*." FG35) te da više vremena provode s članovima obitelji. Navode i kako su naučili rješavati stres na novi, konstruktivan način (meditacijom, fizičkom aktivnošću). Kako govore sami sudionici „*gradim sebe*", „*tražim put kojim želim živjeti*". Promjena načina života dovodi i do većeg zadovoljstva i uživanja u životu, kao i otvorenije komunikacije („*To, ovaj, meni je jako pomoglo to* and mind ("*That you have some sort of a physical connection, that you really make a sculpture from a piece of wood. I don't do that, but you know, you create something, some additional value.*" FG22; "*For me at the moment, I think that physical work, especially if you are at the beginning of abstinence, is key. I am mentally completely involved in work, so, I'm kind of missing that. You really feel like you are clearing your mind.*" FG34). Work provided them with a sense of purpose, creation and productivity, as opposed to spending and losing money while gambling ("*For me, working feels like I am creating something. I am finally creating something and I am not destroying, because when I gambled, I destroyed, and work makes me feel like I am earning.*" FG21). The money earned would be spent on living expenses and settling the debts incurred by gambling, which also brought satisfaction. In the context of the workplace, they stated that it was crucial for them not to have the ability to handle money at work, which could pose a risk for them. In addition to work, the change in lifestyle was evident in greater introspection, self-care and finding new life goals. A change in the way of thinking occurred, as well as valuing the smaller things in life instead of the grandiosity which characterized the period of addiction ("*Well yes, the smaller things. Coffee with a friend. Conversation. Helping somebody move their furniture. I don't know, peeling an apple for my mother-in-law.*" FG21). The participants mentioned finding new hobbies ("*More travelling lately, I guess. It fulfills me to a greater extent. I spend a weekend away with my girlfriend.*" FG35), and spending more time with their family members. They also claimed to have learned how to handle stress in a new, constructive way (through meditation, physical activity). As they said, "*I am building myself up*", *"I am looking for the path I want to live on*". The change in lifestyle led to a greater satisfaction and enjoyment in life, as well as to more open communication ("*I mean, to me, it really helped that I created this kind of a situation at home where I could, you now, communicate everything. That I could, somehow, say everything. I mean, regardless of, I don't know, gambling. Of course, in terms of gambling as well, but I mean generally about life, like "Oh, this stressed me out today. It bothers*

kaj sam se stvorio, ono, doma nekakvu situaciju da mogu sve, sve iskomunicirat, ono. Nekak, ono, da se sve može reć. Mislim nevezano sad, ono, uz, ne znam, kockanje. Naravno i vezano uz kockanje, al ovak općenito uz život, ono „Joj ovo me danas istresiralo. Muči me. Osjećo sam se ovako i ovako u trenucima." FG26). Promjena životnog stila za sudionike je značila i potpuno izbjegavanje rizičnog društva- prijatelja i poznanika s kojima su kockali, ali i prijatelja koji kockaju, te potpuno izbjegavanje rizičnih okruženja (kafića, situacija u kojima se pije alkohol i sl.). Sljedeće izjave sudionika govore o ovim aspektima: *„A sve prijatelje koji su mi bili kao rizični, shvatio sam da mi nisu prijatelji i nemam kontakt s njima.*" FG24; *„Nema alkohola. Popijem kavu. Mirna, obiteljska atmosfera. Nema galame. Nema buke. Nema...ali u miru sjedneš, popiješ kavu.*" M21.J; *Sad se maknuo i apstiniram i od alkohola i od droge i kocke, jednostavno znam da, ako odem popijem jedno piće, da se sve vraća natrag.*" FG24; *„Ja jednom odem tamo gdje, u kafić gdje drugi piju, samo nek jednom jedan spomene. Ja sam gotov. Ja znam, možda ne taj put. Šesti, sedmi sam gotov. Ja ne želim uopće isprobavat. Ne želim ić uopće.*" FG34; *„Još uvijek se ne bi htio ni dovest u situaciju da moram 20 puta reć "Ne. Da." tak da. Ne znam, bar sam ja tak to gledam. Prekrižit to za sad neko vrijeme još dokraja. Pa jednog dana ko zna oću se moć družit s njima. Ja to mislim sad. Al najvjerojatnije ne. Siguran sam da ne.*" (FG31)

Izbjegavanje ovakvih situacija i okruženja dovodi do gubitka prijateljstava („*I da, nekak se to isfiltrira. Ima još par, ono, ljudi koji, koji sam, ono, bio uvjeren da su mi najbolji prijatelji, a koji dalje, ono, druženje se svodi na izlaske, listiće i ono, gledanje nogometa i to. Njima sam jasno dao do znanja da ću sudjelovat u bilo kakvim drugim aktivnostima, da u tome više neću nikad. I s vremenom, jednostavno su prestali se javljat i to. Tak da, nije, nije to ni loše.*" FG33), ali i do poboljšanja nekih odnosa i stvaranja novih. Izbjegavanje rizičnih okruženja za kockanje ponekad se odnosi i na obiteljsko okruženje, pri čemu *me. I felt like that or that in those moments.*" FG26). For the participants, the lifestyle changes also involved a complete avoidance of risky social circles – friends and acquaintances with whom they used to gamble, but also friends who gamble, and complete avoidance of risky environments (coffee bars, situations involving alcohol consumption, etc.). The following statements made by the participants refer to such aspects: "*And all the friends that were somewhat risky for me, I realized they are not my friends and I have no contact with them.*" FG24; "*No alcohol. I have a coffee. A calm, family atmosphere. No shouting. No noise. Nothing... but you peacefully sit down, you have a coffee.*" M21.J; "*I have now distanced myself and I am abstaining from alcohol, drugs and gambling, because I just now that if I have one drink, it will all come back.*" FG24; "*If I go once to such a place, a coffee bar where the others are drinking, only one person needs to mention it. I am done. I know, maybe not that time. But, sixth, seventh time, I will be done. I don't want to even try. I don't want to go there at all.*" FG34; "*I still don't want to even find myself in a situation where I have to say "No. Yes." 20 times, so that is that. I don't know, at least I view it that way. Totally avoiding it for some time until it is all done. And one day, who knows If I will be able to socialize with them. This is how I feel now. But most probably not. I am sure of that.*" (FG31).

Avoiding such situations and surroundings led to the loss of friendships ("*And yes, it filters out somehow. There are a couple of people that, you know, I was convinced were my best friends, and with whom still, you know, socializing with them involves only going out and about, filling out tickets and similar, watching football and stuff like that. I let them know very clearly that I will participate in any other activities, but in those never again. And over time, they simply stopped calling. So, you know, that's not bad either.*" FG33), but also to improvements in some relationships and the creation of some new ones. Avoiding risky environments relating to gambling sometimes refers to the family surroundings as well, wherein the understanding of family members is necessary, as well as changes in the habits of some family members with regard to occasional gambling ("*He (the father) also, you know, hasn't*

je potrebno razumijevanje obitelji i promjene navika članova obitelji vezanih uz povremeno kockanje *(„On (otac) isto, eto, o tad nije, ovoga, uplatio nijedan listić. Bar tak kaže. Nije da ga ja kontroliram i provjeravam, al vidim da i njegove navike su se promijenile.*" FG33).

Sumarno, promjena načina života zaista je cjelovita te obuhvaća sve segmente njihova života: od odnosa prema sebi (i sa sobom), obitelji, radnog okruženja, prijatelja i slobodnog vremena. Metaforički, ali i u riječima nekih sudionika, ovisnost ih je zatvarala u zasebni svijet u kojem su bili orijentirani sami na sebe, dok apstinencija dovodi do usmjeravanja na druge i osjećaja odgovornosti prema sebi i drugima (*„Mislim ja imam isto dijete. 15 godina. Nisam vidio, u principu, nisam promatrao tada sebe, odnosno nju ili nekakav naš odnos, kao motiv zbog kojeg bi ja otišo na nekakvo liječenje jer sam, jer sam bio toliko zapravo dolje da sam bio, ono, fokusiran možda samo na sebe i svoje nekakvo stanje, ovoga, beznađa. Al u svakom slučaju sad, nakon cijelog tog programa liječenja, se i naš odnos zapravo uvelike, ovoga, poboljšao i mogu reć da prvi put na neki način osjećam tek naša druženja*." FG36).

Pozitivni odnosi i socijalne mreže također su važan čimbenik u održavanju apstinencije. U tom se smislu ponajprije ističe obitelj kao ključna emocionalna, financijska i logistička podrška. Članovi obitelji: supruge, djeca, roditelji, braća i sestre, oni su bez kojih apstinencija ne bi bila moguća, oni pružaju podršku, ali i istovremeno kontroliraju i nadziru ponašanje i financije *(„Znači, potpora je važna. Ko se od familije, prijatelja, žene, supruge, prihvati toga taj mora s tobom biti do kraja.*" FG14*; „Od, ne znam, dijeljenja lokacije s roditeljima do, nemam nikakvih ono, nemam financija kojima ja upravljam nikakvih. Tak da. Ali što se tiče obitelji, bez obitelji, bez…bez podrške se ne može.*" FG21*)*. Sudionici navode i kako bi bez podrške obitelji teško bilo održati apstinenciju te ovu podršku opisuju kroz metafore *„sigurno okruženje, siguran kut, placed a bet since then either. At least he says so. I am not controlling him or checking on him, but I can see that his habits have also changed*." FG33).

In summary, the lifestyle change was quite complete and encompassed all the segments of their lives: from the attitude towards themselves (and with themselves), to the family, working environment, friends and free time. Metaphorically speaking, and paraphrasing some participants as well, addiction locked them into a separate world where they were oriented only to themselves, while abstinence led to directing themselves towards others and feeling responsible for themselves and others ("*I mean, I also have a child. Fifteen years old. I didn't see, generally, I didn't look at myself, or her, or our relationship at that time as a motivation to seek some type of treatment, because I was actually so deep down that I was, like, focused only on myself and my state of, you know, hopelessness. But in any case, now, after completing this entire treatment program, our relationship has, you know, greatly improved, and I can say that this is the first time that I am in some way experiencing our times together.*" FG36).

Positive relationships and social networks are also an important factor in maintaining abstinence. In that sense, family most prominently stands out as the key emotional, financial and logistical support. Without family members, the wives, children, parents, brothers or sisters, abstinence would not be possible because they provide support, but at the same time control and monitor the behavior and finances ("*I mean, support is important. Whoever in your family, friend group, your wife, spouse, decides to do it, they have to see it all the way through with you.*" FG14; "*From, I don't know, sharing my location with my parents to, like, me having no financial means that I control whatsoever. That's it. And when it comes to family, without family, without… without support, you can't do it.*" FG21). The participants also stated that it would be hard to maintain abstinence without family support, and described this support through metaphors such as "*safe environment, safe corner, mom is like a guardian angel*". Some participants mentioned how their family members abstained with them, in the sense that they abstained from gambling,

mama je kao anđeo čuvar". Neki sudionici navode kako i njihove obitelji apstiniraju s njima, u smislu suzdržavanja od kockanja, alkohola i slično („*Dokle ja apstiniram, recimo, meni je mama, najveća potpora i ona mora apstinirati*." FG14). Iako ih podržavaju u liječenju, članovi obitelji izražavaju i nepovjerenje u njih te imaju osjećaj da prate svaki njihov korak što im sudionici ne zamjeraju („*Mene mislim dosta toga mi je još pomoglo to njihova nepovjerenje prema meni. Znači to je valjda prvi put da sam ja došo do tog praga da oni više meni ne vjeruju. Ak ja kažem da idem na wc, vidim da im stoje upitnici jel idem na WC ili…znao sam i tamo kockat i sve*." FG23). Kod nekih sudionika došlo je do poboljšanja komunikacije u obitelji te se neki sudionici trude da poboljšaju narušene odnose u obitelji („*Drugačiji su odnosi, recimo i s kćerkama, više ono sam, tu sam, nisam više…nisam više ono ovoga di sam ono, kad sam bil u kocki, onda si…tu si, ali nisi tu, znači tijelom jesi, ali duhom nisi. I sad to je sasvim drugačiji odnos, ovoga, između, unutar familijski i sve i kažem, ono, novi život evo, ništ drugo*." FG12). Neki sudionici ističu kako im je važno da ne posrnu i ne razočaraju svoje bližnje („*Žrtvovat sad, kako bi reko, ovaj, taj mir koji napokon svi imamo tu, to normalno funkcioniranje, sad to sve žrtvovat zbog… Ma ne, nema veze kakvi su novci u pitanju da još jednom vidim onako razočarani…ne, ne. Ne isplati se*." FG22).

Osim članova obitelji u održanju apstinencije pomažu i drugi pozitivni socijalni odnosi i socijalna mreža: prijatelji te kolege na poslu i poslodavci koji su pokazali razumijevanje za bolest („*Znači čovjek koji je vlasnik firme…mi je prvi pomogel i to. Nije mi čak niti otkaz dal. Premestil me na drugo radno mesto. Imam dojam ko da je on, ko da je on prošel taj program pa veli „idi si izlječi tu bolest" pa sam prvo mislil da idem ovisnost liječit, ono, kaj, tek onda na liječenju sam shvatil da je to bolest*." FG11).

Dugovi i financijske restrikcije također podržavaju apstinenciju. Iako su u razdoblju ovisnosti dugovi predstavljali teret, oni se u fazi

alcohol, and similar activities ("*For example, as long as I abstain, my mom is my biggest support, so she has to abstain as well*" FG14). Although they provided support in the treatment, family members also expressed their distrust in them, and the participants had a feeling that they followed their every step, which they did not hold against them ("*I mean, this distrust that they had towards me really helped me in a lot of ways. I mean, this is probably the first time that I had reached this threshold where they did not trust me anymore. If I tell them that I am going to the toilet, I see that they are questioning whether I am going to the toilet or…because I would sometimes gamble there as well.*" FG23). Some participants experienced improvements in communication with their families, and some made an effort to improve the disrupted relationships they had with their families ("*The relationships are different, for example with my daughters, I am more present, I am there, I am no longer…I am no longer as I was when I was gambling, when you are…you are here, but you are not here, so you are here in body, but not in spirit. And now, that is a completely different relationship, I mean, between us, in the family and all, and I tell you it's a new life, nothing else.*" FG12). Some participants emphasized that it was important for them not to fall back and disappoint their loved ones ("*To sacrifice now, how can I say it, this peace that we all finally have here, this normal functioning, to sacrifice all that for…No, no matter what kind of money is in question, to see once more that disappointment…no, no. It is not worth it.*" FG22).

In addition to family members, other positive social relationships and social network also helped maintain abstinence: friends, as well as work colleagues and employers who showed consideration for the disease ("*I mean, the company owner…he was the first to help me and all. He didn't even fire me. He transferred me to another position. I got the impression like he also went through this program and said "Go and cure this disease", so I first thought that I was going to treat addiction, but then, I only realized during the treatment that it was a disease.*" FG11).

Debts and financial restrictions also help support abstinence. Although during the addiction period debts represented a burden, in the abstinence

apstinencije doživljavaju kao zaštitni čimbenik. Ključan aspekt toga je plan otplate dugova, blokada računa i nemogućnost raspolaganja novcem (*„Znači neki plafon mi je da imam stvarno pet do deset eura v novčaniku…i tu sam siguran da ne bi nekaj zeznul.*“ FG14; *„Ostavio sam onaj u Fini namjerno otvoren. Tako, on me drži, ovaj, znači, nisam u mogućnosti dić ni kredit ni pozajmicu. Dok god imam taj dug u Fini i njega ću ostavit.*“ FG22; *„Ja sam sretan da imam dugove. Ja sam sretan da sam i dalje u blokadi.*“ FG21). Zaštita je u tome da zapravo nemaju novaca kojim mogu raspolagati i potencijalno kockati: računi su ili u blokadi ili pod kontrolom supruga i članova obitelji *(„Reko meni je bilo super kad sam bil blokirani, zato jer si zblokirani i to je to. Imaš nekakvi osigurač.*“ FG12). Sudionici navode kako im prihvaćanje dugova te plan vraćanja pružilo osjećaj rasterećenja (*„Ja s novcima ne znam, znači i meni je sad, ovoga, drago da ja ne raspolažem s novcima, evo. Ja zbilja…ono, baš mi je olakšanje da ne raspolažem s novcima.*“ FG12). Neki sudionici nagomilali su iznimno velike dugove, no i oni napominju važnost prihvaćanja duga (*„Mi smo odma bili onak, normalno, šokirani svi, mama, tata, ne znaju kud bi oni, odma bi htjeli to sutra otplatiti. Ogromna svota, kam da se okrenu* FG13).

Liječenje, odnosno specifično **program tretmana ovisnosti o kockanju** u Klinici za psihijatriju „Sv.Ivan“ te na Odjelu za mentalno zdravlje, prevenciju i izvanbolničko liječenje pri Zavodu za javno zdravstvo Varaždinske županije imalo je veliko značenje za sudionike i ističu ga važnim u podržavanju apstinencije. Tretman u okruženju vršnjačke grupe sebi sličnih omogućio im je prihvaćanje i osjećaj da nisu jedini s takvim problemom (*„Najbolja stvar to da vidiš da ima ljudi istih kak si, kak si ti. Možda ne, ne s istim dugovima, ne znam, ali opet tu smo nekak svi isti, ne. To je zapravo ono, zapravo jedan drugome pomažemo.*“ FG12; *„Pa evo, meni dosta pomaže ovaj tu četvrtak, ova grupa podrške. Uvijek se nađem, mislim od ljudi koji*

phase they were seen as a protective factor. The key aspects were a debt repayment plan, account preservation and inability to manage money (“*So, a certain cap for me is to really have up to five or ten euro in my wallet…and then I’m sure that I won’t mess up.*” FG14; “*I left the* Fina *one open on purpose. It kind of keeps me afloat, I mean, I am not able to get a credit or a loan. That’s as long as I have that debt in* Fina*, and I will keep it.*” FG22; “*I am happy to have debts. I am happy that my account is still preserved.*” FG21). The protection lies in the fact that they actually had no money to manage and potentially gamble away: the accounts were either preserved or controlled by the wives and family members (“*I said, it was great for me to have the account preserved, because then it is blocked, and that’s it. You have some kind of a safeguard.*” FG12). The participants stated that accepting the debts and having a repayment plan provided them with a sense of unburdening (“*I cannot handle money, I mean for me now, I’m sort of glad to not manage money, there. I really…I mean, it is really a relief to not manage money.*” FG12). Some participants had incurred extremely large debts, but they also emphasized the importance of accepting the debts (“*We were immediately like, of course, all shocked, my mom, dad, they didn’t know what to do, wanted to pay them off immediately the next day. An enormous amount, what should they do.*” FG13).

Treatment, that is, specifically **the gambling disorder treatment programs** at the University Psychiatric Hospital Sveti Ivan and the Department of Mental Health, Prevention and Outpatient Treatment of the Institute of Public Health of the Varaždin County, were of great importance for the participants, and they credited them for maintaining abstinence. The treatment that involved a peer group of people similar to them enabled them to accept the situation and feel that they were not the only ones experiencing such problems (“*The best thing was seeing that there are people the same as you. Maybe not, not with the same debts, I don’t know, but we are somehow all alike, you know. That is the thing, we actually help each other.*” FG12; “*Well, I really find this Thursday quite helpful, this support group. I always find myself there, I mean from the people who are undergoing treatment, there are things*

su u tijeku liječenja imaju nešto, šta kažu svojim riječima vrlo dobro." FG23; „*Kad vidiš da je neko dobro i da je uspio. To je jako pomoglo*." FG22). Članovi terapijske grupe također su im bili podrška, a posebno ističu starije apstinente čije su im priče o uspjehu liječenja dale nadu („*Znači to su vjerojatno priče starijih apstinenti, ti zapravo prepoznaš sebe.*" FG11**; „***Kad vidim, ono, čovjeka koji ti ispriča isto nekakvu ludu priču. Ono, sve živo što je prošo, dugove, ovo ono. I onda veli "4 godine sam u apstinenciji. Super mi je. Lijepo mi je. … Ono, dobiš neku nadu. Uvijek sam mislio da nema nade.*" FG35). U ovim su se grupama osjećali prihvaćenima da otvoreno govore o svojim problemima, bez osuđivanja. Osim od drugih pacijenata u grupi, podršku su dobivali i od terapeuta. Od konkretnih metoda i tehnika u liječenju sudionici procjenjuju da su im najkorisnije bile edukacije (o matematici kockanja, tijeku bolesti, kognitivnim distorzijama, emocijama, komunikaciji) koje su im omogućile da osvijeste i razumiju svoju ovisnost – bolest. Nadalje, korisnim se procjenjuju i psihoterapija, obiteljska terapija te trening socijalnih vještina. Prednost programa liječenja je i struktura, odnosno ispunjavanje dana te intenzitet tretmana. Sudionici smatraju kako bi ovaj program trebalo produžiti, proširiti i na druge gradove u Hrvatskoj te zaposliti veći broj stručnjaka („*Program je izuzetno kvalitetan …Opće čudo da postoji ovakav program. Jer to naravno, to šta mi gledamo isto ko i za… Cijela država šuti, uzima lovu i to veliku lovu, pa onda, ovo je čisto formalnost jer svijet tako inzistira da imaš i ovaj program. A ovaj program bi trebo imat tu 50 zaposlenih.*" FG21).

Čimbenici koji ugrožavaju apstinenciju – negativni kapital za oporavak

Sudionici su govorili i o čimbenicima koji ugrožavaju apstinenciju te u tom smislu spominju rizike na individualnoj, obiteljskoj, prijateljskoj i na razini društva. Sumarno, može se

that they say very well in their own words." FG23; "*When you see that someone is well and that they have made it. That helped a lot*." FG22). The therapy group members also provided support, and they particularly emphasized the older abstainers whose stories of successful treatment gave them hope ("*So, these are probably the stories of older abstainers, you really recognize yourself*." FG11; "*When I see, you know, a man telling you this crazy story. Like, everything he's been through, the debts, this and that. And then he says "I have been abstaining for four years. I'm great. I feel nice… It, like, gives you a certain hope. I always thought there was no hope*." FG35). In these groups, they felt accepted and free to talk about their problems, without judgement. In addition to the other patients in the group, they also received support from their therapists. From all of the concrete methods and techniques applied during the treatment, the participants estimated that education was the most useful (they covered the topics of gambling math, the course of disease, cognitive distortions, emotions, communication), enabling them to realize and understand their own addiction/disease. Furthermore, psychotherapy, family therapy and social skills training were also evaluated as useful. The advantage of the treatment program was also in its structure, that is, filling up the day and feeling the intensity of the treatment. The participants believed that this program should be prolonged, expanded to other cities in Croatia as well, and that more experts should be employed ("*The program is of extremely high quality…It is generally a miracle that such a program exists. Because, of course, what we are looking at here is the same as… The entire country is silent, they take the money, great amounts of money, and then, this is pure formality because the world insists that you should have this program as well. And this program should have 50 employees*." FG21).

Factors threatening abstinence – negative recovery capital

The participants also spoke about the factors threatening abstinence, and in that sense, they mentioned risks at the individual, family, friend and societal levels. In summary, it could be said

reći kako bi za njih najveći rizik predstavljao gubitak kontrole, strukture i podrške te mogućnost neograničenog raspolaganja novcem. U svojem nošenju s ovisnošću o kockanju i dalje su u većoj mjeri oslonjeni na vanjsku podršku i nadzor. Govoreći o **rizicima na individualnoj razini**, sudionici napominju kako je za njih kockanje cjeloživotni rizik, dok neki smatraju kako je najrizičniji dio liječenja ne biti iskren prema sebi („*Znam sam sa sobom da ne lažem i da sam stvarno iskren pa mi je to bila jedna nagrada da idem dalje samo svaki dan*." FG21). Pritom napominju važnost otvorene komunikacije o svojoj ovisnosti („*Moja otvorenost i spremnost da pričam s ljudima o ovome svemu. Jako puno pomaže, ono. Od prvog dana tu, čak i prije nego što sam došo, sam sve podijelio i s prijateljima i na poslu sa...svim kolegama i to mi jako puno je pomagalo tad da opće ne moram, ono, izmišljat.*" FG35) i edukacija drugih ljudi. Neki sudionici prisjećaju se situacija kockanja, posebno negativnih i neugodnih situacija i štete koje je njihovo kockanje prouzročilo njima i njihovim bližnjima. Dio sudionika spominje i osjećaj grižnje savjesti koji bi mogao biti rizik („*To je moja najveća, meni najveći rizik, grižnja savjest. Što sam, za šta sam radio 25 godina s dva fakulteta, poslovne škole, direktor bio, ovo ono. Priznat u društvu da bi na kraju spao." FG21).* Smatraju također kako potencijalni neuspjeh u liječenju za njih može biti okidač za povratak kockanju. Neki sudionici kao rizik spominju svoje „*opsesiju sportom*" i „*opsjednutost video igrama*" („*Meni možda ta opsesija sportom i dalje, ono. To je, ono, glavna stvar i dalje u životu.*" FG24; „*Videoigre. To što sam na kompjuteru cijeli dan to mi je neka opsesija.*" FG25). Životni problemi s kojima se susreću također mogu biti čimbenik rizika.

Nadalje, važan rizik je nestrukturiranost vremena/dana, u kojem bi imali prostora za dosadu. U tom kontekstu ponovno ističu važnost toga da im je dan visoko strukturiran, bez praznog hoda *(„Pokušavam znači, ne dolazit u nekakve crne rupe slobodnog vremena jer...samim*

that they saw the biggest risk in the loss of control, structure and support, as well as having an unlimited ability to manage money. When coping with their gambling disorder, they still largely relied on external support and supervision. Speaking of **risks at the individual level**, the participants mentioned that for them gambling was a lifelong risk, while some believed that the riskiest part of the treatment was not being honest to oneself ("*I know in myself that I am not lying and that I am really honest, so that was one reward that encouraged me to go on every day.*" FG21). In that context, they mentioned the importance of open communication when it came to their addiction ("*My openness and readiness to talk to people about all of this. It helps a lot, you know. From the first day here, even before I came, I shared everything with my friends and at work with...all of my colleagues, and that helped me a lot, that I didn't have to, like, make up things.*" FG35) and educating others. Some participants remembered situations that involved gambling, especially negative and unpleasant situations, and the damage that their gambling had caused them and their loved ones. Some participants mentioned a feeling of guilt which could pose a risk ("*That is the biggest thing to me, my biggest risk, this guilt. What did I do, what did I work for in 25 years, having completed two colleges, business school, and being a manager, and all that. I was recognized in the society, and then I fell down to this.*" FG21). They believed that potential failure of the treatment could trigger them to fall back into gambling. Some participants mentioned their "*obsession with sports*" and "*obsession with video games*" as a risk ("*For me, maybe this continuing obsession with sports, and that. This is still, like, the main thing in my life.*" FG24; "*Video games. Being at the computer all day is some kind of an obsession.*" FG25). The problems that occur in everyday life could also represent a risk factor.

Furthermore, an important risk is the lack of structured time/days, in which they would have room for boredom. In that context, they again emphasized the importance of having a highly structured day, without idling ("*So, I am trying not to have any black holes in my free time because…*

time onda zapravo ideš tražit nekakvu zabavu." FG24). Dugovi i raspolaganje novcem snažan su čimbenik rizika. Zanimljivo je da su dugovi istovremeno i teret i zaštita i rizik. Sudionici u ovom kontekstu ponovno spominju svoj neadekvatan odnos prema novcu te smatraju kako bi za njih bilo rizično kad bi mogli raspolagati novcem bez ograničenja. Nemaju povjerenja u sebe te se aktivno odmiču od situacija u kojima bi trebali raspolagati novcem o čemu govore sljedeća izjava: *„Kažem, meni više, više me nekako strah toga šta će bit kad ja se riješim tih dugova pa onda ja krenem imat te novce. Dal će oni, ti novci mene počet svrbit il nešto.“ (*FG36). Već spomenuti dugovi mogu postati i rizik pogotovo ako je osoba i dalje opterećena vraćanjem duga ili kad nema plan za povrat dugova (*„Opasno, da za kockara koji ima dugove, koji ne zna kada će ih vratiti, koji nema jasan plan. To je veliki rizik.*“ FG11). U kontekstu novaca rizičnim se procjenjuju i poslovi u kojima postoji mogućnost kontakta s novcem ili raspolaganja novcem (npr. kartica od tvrtke itd.), kao i situacije u kojima bi im iznenada trebala veća količina novca.

Rizici koji se povezuju s obitelji odnose se na sljedeće aspekte: osuđivanje od obitelji, gubitak podrške obitelji te doživljavanje kockanja kao prihvatljivog od strane članova obitelji. Sudionici opisuju kako je teret njihove ovisnosti velikim dijelom pao i na njihovu obitelj u smislu zaduživanja te osjećaja iskorištenosti i manipulacije (*„Vjerojatno, ne znam, osjećaju se ko da ih je neko ono, maksimalno iskoristio.“; „Ja već općenito već uvlačio i suprugu u to. Ona nije, ona je imala toliko povjerenja da nije smatrala da je ponovno to. Nego je već i onda neke svoje laži imala, jel. Tolko sam je izmanipuliro da, ajmo reć, ne znam, ne znam kak to objasnit.*“FG25). Svjesni su toga da je i njihovim obiteljima potrebna podrška u nošenju s ovim situacijama i napominju kako im nije lako. Razumiju i njihovu ljutnju i predbacivanje, no napominju kako inzistiranje na osuđivanju i predbacivanju može biti okidač

in that alone, you start looking for some type of fun." FG24). Debts and money management form important risk factors. An interesting fact is that debts are at the same time a burden, protection and risk. In this context, the participants mentioned their inadequate money management again, and believed that it would be risky for them to manage money without limitations. They did not trust themselves and actively removed themselves from the situations in which they should manage money, which is evident in the following statement: "*I say, for me, I am more afraid of what will happen when I get rid of all the debts and I start keeping all this money. Will it, this money, start to burn a hole or something.*" (FG36). The abovementioned debts could become a risk, especially if the individual is still under the pressure of returning the debt or if they do not have a plan for paying off the debts (*"Dangerous, yes for a gambler in debt, who doesn't know when he will pay them off, who doesn't have a clear plan. That is a big risk.*" FG11). In the context of money, jobs where there is a possibility of contact with money or handling money are also considered risky (e.g. having a company card, etc.), as well as situations in which they would suddenly need a higher amount of money.

Family-related risks refer to the following aspects: condemnation by the family, loss of family support and perception of gambling as acceptable by the family members. The participants described how the burden of their addiction was greatly felt by their families in terms of debts and a feeling of being used and manipulated ("*Probably, I don't know, they feel like they have been used to the fullest.*"; *"I generally already pulled my wife into it as well. She didn't, she trusted me so much that she didn't believe it was happening again. But she already had some lies of her own then, you know. I had manipulated her so much that, let's say, I don't know, I don't know how to explain it.*" FG25). They were aware of the fact that their families needed help as well when it came to coming to terms with such situations, and mentioned that it was not easy for them. They understood their anger and resentment, but noted that insisting on condemnation and resentment could be a trigger for their return

za njihov povratak kockanju („*Osuđivanje je recimo najviše rizično. Osuđivanje znači, nametanje na glavu što s, što si ono, kolko si prokocko. Što smo moglo imat*." FG21). Jedan sudionik opisuje kako njegovi roditelji nisu prihvaćali njegovu ovisnost te kako nisu s njim o tome željeli razgovarati što ga je uznemiravalo („*Pa, meni je jako smetalo da, to što moji zaista prema tom su ponašali kao da to ne postoji, kao da ja svaki dan ne odlazim negdje, ne. Ono, bilo mi je to jako, ono, pff...ne znam, teško i naporno. Dođem, kao, doma, da ne smijem, ono, opće pričat o tome, da nije opće poželjno da ja spominjem da sam ja na nekakvom liječenju*." FG33). Potencijalni gubitak podrške i kontrole od obitelji također se doživljava kao rizik („*Ostat sam. Mislim, to je isto…ostane bez obitelji, supruge, mislim ne. Kako bi to drugačije sročio. Može se svašta u današnjem našem svijetu dogodit, al smatram da sam još prerano da bi mogo živjet sam.*" FG23). Pojedini sudionici navode kao rizik prihvatljivost kockanja u obitelji o čemu govori sljedeća izjava: „*Pokušavam, ono, što više bit odsječen od tog svijeta, a moji doma su ono, a mislim, gleda se, ono, nogomet koji god je moguć i svakakve takve stvari*". (FG33)

Rizik za održavanje apstinencije je i (ponovno) **druženje** sa **starim društvom koje kocka i konzumira sredstva ovisnosti** (droga, alkohol). Spominje se i izbjegavanje prijatelja koji kockaju, pa i prekid kontakta s bliskim osobama koje i dalje kockaju („*Kad sam ja priznao svoj problem, on je reko da ima isti taj problem. Kako? Nije u toj fazi, ali je tu. Di sam ja reko, znači, ja ti nažalost moram reć, znači ja s tobom više na samo ne mogu niti…ništ. Ni kavu popit niti pivu niti ništa . Ja čuvam sebe. Nikad ja neću otić. Još uvijek meni on sad drag i sve. Jel smo, svašta smo prošli. Nit sam ja znao za njegov problem nit je on, najžalosnije,…pričali smo svašta, samo ne o tome. Di je bila rana i meni i njemu.*" FG23). U tom kontekstu neki sudionici napominju kako su ostali bez prijatelja te su orijentirani samo na obitelj što također doživljavaju kao rizik u budućnosti („*Imam tu sreću da su mi još djeca dovoljno mala.*

to gambling ("*Condemnation is, let's say, the riskiest. I mean condemnation, putting it against me, what you, you know, what you gambled away. What we could have had.*" FG21). One participant described how his parents did not accept his addiction, and did not want to talk to him about it, which bothered him ("*Well, it bothered me a lot that my parents really behaved like it did not exist, like I wasn't going somewhere every day, you know. Like, it was really, I mean, pff…I don't know, hard and tedious. I, like, come home and I'm not, you know, allowed to talk about it, and I was not supposed to mention that I was undergoing any type of therapy.*" FG33). The potential loss of support and control from the family was also perceived as a risk ("*To be left alone. I mean, that is…to be left without a family, wife, I mean, you know. How do I put it differently. A lot of things could happen nowadays, but I think that it is still too early for me to live alone.*" FG23). Certain participants stated that acceptance of gambling within the family posed a risk, as evident in the following statement: *"I'm trying, you know, to distance myself from that world as much as possible, and my folks at home are like, I mean, watching football whenever possible and all that type of stuff.*" (FG33).

Socializing (again) **with old friends who gamble and engage in substance abuse** (drugs, alcohol) also represents a risk for maintaining abstinence. The participants mentioned avoiding friends who gamble, even breaking contact with the close persons in their lives who continue to gamble ("*When I admitted to my problem, he said that he had the same problem. How? Not at that phase, but still there it was. To which I responded, I mean, unfortunately I have to tell you, this means that I can't be alone with you anymore, or do…anything. Not even have coffee or a beer or anything. I am taking care of myself. I will never leave. I still like him and everything. Because we, we have been through a lot. I didn't know about his problem and he didn't know about mine, which is the saddest thing…we talked about a lot of stuff, just not about that. We both had the same wound.*" FG23). In that context, some participants mentioned losing friends and being oriented only towards family, which they also perceived as a risk for the future ("*I am lucky that my*

Naravno, imaju svojih prijatelja i prijateljica… ali su još u tim godinama gdje, gdje apsolutno svaki svoj slobodan trenutak koji mogu, odlazim i provodim vrijeme s njima. Socijalnog života drugog nema. Znači, od nikakve, niti…niti cure, žene, niti jednog prijatelja. I dok imam njih, na primjer, meni vikend automatski, ja da nisam s njima, na primjer da ne odem, vikend provedem s njima… Ja sam čovjek koji ne zna bit sam." FG25). Razgovori o kockanju i klađenju također se smatraju rizičnima. Sudionici navode kako takve situacije aktivno izbjegavaju, kao i noćne izlaske i situacije u kojima se pije alkohol.

Na **razini društva**, sudionici prepoznaju sljedeće rizike: suvremeni dinamični način života, nedovoljnu zakonsku reguliranost kockanja te neprihvaćanje kockanja kao bolesti. Suvremeni život neki sudionici opisuju kao užurban, uz prevladavanje konzumerizma i korupcije („*Taj užurbani dio života u kojem jesmo. Svi ganjaju nešto da bi pokazali, da bi kupili novi auto na kredit za novce koje nemaju, da bi druge tjerali da to isto rade i svo to nerealno posloženo.*" FG21). Usmjerenost na materijalna postignuća i želja za društvenim statusom mogu biti rizik za povratak kockanju. Nadalje, sudionici smatraju kako je kockanje nedovoljno regulirano od strane države, posebno velika prisutnost reklama, kladionica i kladomata („*Problem je veliki i v tom internet klađenju i s tim bombardiranjem, tim reklamama*." FG13; „*Znači ova država. Znači koja je organizirala sve žive gluposti. Znači koje znači, evo, kad je nedjelja niš ne radi osim kladionice.*" FG12; „*Što je više i više to društvo prihvatilo normalno da ljudi kockaju. Šta, ne znam, za 10 godina će valjda svi kockati. Bit će, ono, normalno. Mislim sad je već normalno da svi kockaju i društvo, ne znam. Gledam, gledam sve te mlade i, ne znam, na kioscima, u tramvaju i to. Svi kockaju i to je normalno.*" FG35). Spominju i veliku dostupnost *online* klađenja, kao i negativan utjecaj društvenih mreža te influencera koji promoviraju kockanje („*Gura se, ne znam kakva moć ovo ono. Sve neke nakaradne iskrivljene stvari. Ništa*

kids are still young enough. Of course, they have their friends… but they are still at the age where, I get to spend absolutely every free moment that I can with them, I go and spend time with them. There is no other social life. Meaning, there is no…girlfriend, wife, there are no friends. As long as I have them, for example, that is automatically my weekend, if I weren't with them, if for example I didn't go, and spend the weekend with them…I am a man who doesn't know how to be alone." FG25). Conversations about gambling and betting are also considered risky. The participants stated that they actively avoided such situations, as well as nightlife and situations that would involve alcohol consumption.

At the **societal level**, the participants recognized the following risks: the modern dynamic lifestyle, insufficient legal regulations in terms of gambling, and lack of acceptance of gambling as a disease. Some participants described the modern lifestyle as busy, with prevailing consumerism and corruption ("*This busy lifestyle we are in. Everyone is chasing something in order to show off, to buy a new car on a loan, for money they don't have, and to make others do the same things, and it is all unrealistically set up.*" FG21). Focus on material achievements and desire for a social status can represent a risk for returning to gambling. Furthermore, the participants believed that gambling was insufficiently regulated by the state, particularly because of the abundant presence of advertisements, betting shops and betting terminals ("*It is a big problem both with this internet betting and bombarding us with these advertisements.*" FG13; "*I mean, this state. That has organized all kinds of stupid things. I mean, here you go, nothing works on Sundays except for the betting shops*" FG12; "*The more the society accepted it, the more normal it became for people to gamble. I mean, I don't know, I guess in 10 years everyone will gamble. It will be, like, normal. I think it is already normal for everyone to gamble, and the society, I don't know. I look, I look at all these young people and, I don't know, at the kiosks, in the tram and all that. Everyone is gambling and that is normal.*" FG35). They also mentioned the great availability of online betting, as well as the negative influence of social networks and influencers

opće bitno. Guraju se neke debilne reklame, debilne ličnosti, ovi Andrew Tateovi. Bolesnici, samo neki retardi ispadaju kao poznati. I sam ti uđu ti u mozak." FG34). Iako je kockanje široko dostupno i gotovo normalizirano, sudionici navode kako su sami kockari stigmatizirani pogotovo u odnosu na ovisnike o cigaretama, alkoholu i drogama. Smatraju kako društvo još uvijek ne prihvaća ovisnost kao bolest, već je doživljava relativno bezazlenom pojavom („*Znači niti ne razumiju, al stvarno ne razumiju. Jer misli si „pa dobro, taj je malo, ono, z listićima i z novcima*." FG14).

Uključenost u liječenje također donosi sa sobom određene rizike pri čemu neki pacijenti romantiziraju dobitke te pozitivno govore o kockanju („*Mene recimo osobno živcira i smeta romantizam od tam pojedinih, pojedinih…članova koji su došli liječit, a onda nakon svake pauze romantizam „jaj pa kad sam dobil 15.000 kuna" pa ovo pa ono.*" FG12). Sudionici govore kako susreću pacijente koji nemaju istinsku motivaciju za liječenje pa i dalje kockaju s malim iznosima te manipuliraju grupu i terapeute („*Je dečko je našel to pravilo, iskoristil. Donesel je račun doma za 12 kuna, ne znam, vrednosti 12 kuna. On je s tih 12 kuna igral.*" FG14). Zanimljivo je i kako neki sudionici smatraju kako se na liječenju mogu naučiti i novi načini manipuliranja i prikrivanja („*Kad ideš u program, dobiješ te ideje. Dobiješ, vidiš šta je potrebno promijenit kod mene da bi sada mogao bolje još lagat*." FG21). Dodatni rizik koji je povezan s liječenjem je i dnevna bolnica koja je otvorenog tipa.

RASPRAVA

Iz etiološke perspektive, dobiveni rezultati u skladu su s različitim bio-psiho-socijalnim modelima razvoja ovisnosti o kockanju, a prije svega Modelom puteva (84,85) koji razlikuje bihevioralno uvjetovane ovisnike, emocionalno ranjive te antisocijalno impulzivne ovisnike. Unutar fokusnih grupa odgovori vezani uz promoting gambling ("*They are pushing this, I don't know what kind of power, this or that. All of these ridiculous distorted things. Nothing important at all. They are pushing stupid advertisements, stupid personalities, these Andrew Tates. Sick individuals, just some retards who end up famous. And they just enter your brain.*" FG34). Although gambling is widely available and practically normalized, the participants stated that the gamblers themselves were stigmatized, especially when compared to individuals addicted to cigarettes, alcohol and drugs. They believed that the society still does not accept addiction as a disease, but perceives it as a relatively harmless phenomenon ("*So, they don't understand it, but really don't understand it. They think it's just "well ok, he's a little, you know, playing with gambling tickets and money.*" FG14).

Involvement in treatment also brings about certain risks, whereby some patients romanticized the winnings and had a positive attitude towards gambling ("*For example, I am personally annoyed and bothered by the romanticism of certain, certain…members who came here for treatment, and then after each break they romanticize "oh, when I won 15,000 kuna" and this and that.*" FG21). The participants talked about meeting patients who did not have a true motivation for treatment, so they still gambled with small amounts and manipulated the group and the therapists ("*Yes, the boy found this rule, used it. He brought home a receipt for 12 kuna, I don't know, in the value of 12 kuna. He played with those 12 kuna.*" FG14). Another interesting fact is that some participants believed that during the treatment they could learn new methods to manipulate and hide ("*When you enter the program, you get these ideas. You get, you see what needs to be changed in you so that now you could lie even better.*" FG21). Another risk associated with treatments are also open-type day hospitals.

DISCUSSION

From the etiological perspective, the obtained results correspond to the different bio-psycho-social models of gambling disorder development,

emocionalnu nezrelost, nefunkcionalne mehanizme nošenja sa stresom i/ili dosadom, impulzivnošću, kao i antisocijalnim životnim stilom, zauzimali su značajno mjesto. Emocionalne teškoće su, kao antecedenti, ali i u komorbiditetu, prepoznati kod ovisnika o kockanju u brojnim istraživanjima (86). Isto je i s komorbiditetom u odnosu na druga sredstva ovisnosti (87). Neadekvatan i nezdrav odnos prema novcu, materijalizam, ali i problematični partnerski/obiteljski odnosi također su identificirani kao etiološki čimbenici sudionika ovog istraživanja, što je na tragu vrlo sličnih rezultata fokusnih grupa koje su proveli Rogier i sur. (88) s 15 ovisnika uključenih u liječenje u kliničkom centru u Rimu.

Vrlo zanimljivi odgovori sudionika ovog istraživanja vezani su uz nešto manje istraživane varijable i u međunarodnom kontekstu, a koje svakako upućuju na potrebu da se takve uzročne atribucije detaljnije ispitaju u narednim studijama. Prije svega, kao osobno rizično obilježje navodi se interes za sport. U suvremenom svijetu industrija igara na sreću, a posebno industrija sportskog klađenja, značajno se je integrirala s industrijom sporta, te se i pojedine inozemne studije usmjeravaju prema istraživanju kockanja i rizika za razvoj ovisnosti o kockanju kod sportaša (89) i/ili osoba zainteresiranih za sport (90). Tome u Hrvatskoj svakako doprinosi i rizičan društveni kontekst velike izloženosti sportaša kockanju, kao i osoba koje intenzivno prate sport, s obzirom na izraženost oglašavanja i sponzorstava o čemu su Ricijaš, Maglica i Dodig Hundrić pisali analizirajući rizičnu regulativu igara na sreću u Hrvatskoj (80). Istovremeno i ovim fokusnim grupama s liječenim ovisnicima je izloženost oglasima prepoznata kao negativni kapital za oporavak, sukladno nekim inozemnim studijama (91). U tom smislu, možemo očekivati da će nove izmjene Zakona o igrama na sreću (92) u Hrvatskoj, a kojima bi od početka 2026. godine oglašavanje trebalo biti značajno ograniče-

and primarily to the Pathways Model (84, 85) which differentiates between behaviorally conditioned gamblers, emotionally vulnerable, and antisocial – impulsivist gamblers. Within the focus groups, answers relating to emotional immaturity, nonfunctional mechanisms of coping with stress and/or boredom, impulsivity, as well as antisocial lifestyle, had significant roles. Emotional difficulties, as antecedents but in comorbidity as well, were recognized in gambling addicts in numerous studies (86). It is the same with comorbidity in relation to other addictive substances (87). Inadequate and unhealthy attitudes towards money, materialism, as well as problematic partner/family relationships, were also identified as etiological factors among the participants in this study, which resembles the very similar results of focus groups conducted by Rogier et al. (88), which included 15 addicts who participated in a treatment protocol at a medical center in Rome.

Very interesting answers obtained from the participants in this study also relate to the somewhat less researched variables in the international context, and definitely point to a need for such causal attributions to be further examined in future studies. Above all else, interest in sports is stated as a personal risky feature. In the modern world, the gambling industry, and especially the sports betting industry, has been significantly integrated with the sports industry, therefore some international studies are focusing on researching gambling and the risk of addiction development in athletes (89) and/or individuals interested in sports (90). In Croatia, this is certainly greatly supported by the risky social context of high exposure of athletes to gambling, as well as individuals intensively following sports, considering the prominence of advertisements and sponsorships, which was the topic of the paper written by Ricijaš, Maglica and Dodig Hundrić who analyzed the risky regulation of gambling in Croatia (80). At the same time, these focus groups of recovering gamblers also recognized the exposure to advertisements as negative recovery capital, in accordance with some international studies (91). In that sense, we can expect that the new amend-

no, doprinijeti manjim rizicima za ovu ranjivu skupinu. Nadalje, predložene zakonske izmjene možebitno će imati i pozitivan učinak na druga dva zanimljiva rezultata ovih fokusnih grupa, a to su ritualno i normativno prihvaćanje kockanja te prepoznavanje rizičnih zanimanja, kao i izraženu dostupnost i pristupačnost igara na sreću. Navedeni rizici prepoznati su i u inozemnim studijama (93–96).

Iako je uključivanje u liječenje pokazalo značajno pozitivne učinke na mentalno zdravlje korisnika, te je obitelj imala značajnu ulogu u tome, fokusne grupe istaknule su da se točka preokreta događa nakon iznimne psihofizičke iscrpljenosti od vrlo štetnog, rizičnog i kaotičnog načina života. Radi se o efektu doticanja dna (engl. *hitting bottom*) koji je prepoznat kao važan moment i u inozemnim studijama koje su se bavile liječenjem i kapitalom za oporavak u području ovisnosti o drogama i kriminalnom ponašanju (97,98), ali i ovisnosti o kockanju (99).

Podteme pozitivnog i negativnog kapitala za oporavak sukladne su domenama i kategorijama koje su Gavriel-Fried i Lev-el (67,78) dobile u svojim studijama u Izraelu, te zapravo potvrđuju i produbljuju dobivene spoznaje u drukčijem regulatornom i kulturološkom kontekstu. Primjerice, u odnosu na pozitivan kapital za oporavak, teme vezane uz postavljanje ciljeva, primjene načina razmišljanja, potrebe za rad na sebi, važnost obiteljske i vršnjačke podrške, kao i profesionalna podrška u potpunosti se podudaraju s rezultatima Gavriel-Fried i Lev-el (67). Vezano uz negativan kapital, najviše sličnosti s izraelskim istraživanjem vezane su uz kognitivne distorzije povezane s kockanjem, neugodne emocije i *coping* strategije, žudnju, traženje uzbuđenja te dosadu, odnosno nestrukturirano provođenje vremena (78). I hrvatsko i izraelsko istraživanje je istaknulo raznolike društvene rizike, kako one vezane uz obitelj i prijatelje kao uži, tako i zajednicu i regulatorni kontekst, kao širi društvenu rizik.

ments to the Gambling Act (92) in Croatia, which should significantly limit advertising as of the beginning of 2026, will contribute to lowering the risks for this vulnerable group. Furthermore, the proposed legal amendments could possibly also have a positive effect on the other two interesting results relating to these focus groups, which are ritual and normative acceptance of gambling and recognition of risky professions, as well as the pronounced availability and accessibility of gambling. These risks were also recognized in international studies (93–96).

Although inclusion in treatment showed significant positive effects on the mental health of the users, in which family also played a significant role, focus groups emphasized that the turning point occurs after extreme psychophysical exhaustion due to a very harmful, risky and chaotic lifestyle. This is the "hitting bottom" effect, which has been recognized as an important moment even in the international studies that examined treatment and recovery capital in the field of drug addiction and criminal behavior (97, 98), but also gambling disorder (99).

The subthemes of positive and negative recovery capital correspond to the domains and categories obtained by Gavriel-Fried and Lev-el (67, 78) in their studies in Israel, and in fact confirm and deepen the knowledge obtained in a different regulatory and culturological context. For example, in relation to positive recovery capital, the themes relating to goal setting, changes in the ways of thinking, need to work on oneself, the importance of family and peer support, as well as professional support, completely correspond to the results obtained by Gavriel-Fried and Lev-el (67). In relation to the negative capital, most of the similarities with the Israelian study relate to the cognitive distortions associated with gambling, unpleasant emotions and coping strategies, desire, sensation seeking and boredom, i.e. unstructured time management (78). Both the Croatian and Israeli studies emphasized the various social risks, both those in connection to family and friends as a closer risk, and the community and regulatory context as a wider social risk.

Uz raznolike aspekte podrške, podteme pozitivnog kapitala za oporavak posebno su istaknule potrebu za značajnom promjenom životnih navika, rituala i obrazaca ponašanja, čime se, naravno, posljedično mijenjaju i stavovi te sustav vrijednosti u širem smislu. Negativni kapital za oporavak također značajan fokus stavlja na kvalitetu obiteljskih odnosa, čime je naglašena potreba uključivanja članova obitelji u proces podrške podršku ovisniku. No, ne smije se zanemariti savjetodavna podrška 'značajnim drugima' u ovom procesu, budući da su i oni iscrpljeni, izmanipulirani, prepuni nevjerice i stresa, zbog čega trebaju razvijati brojne konstruktivne mehanizme s ciljem ponovne izgradnje odnosa i povjerenja. Brojna inozemna istraživanja štete povezane s kockanjem sa značajnim drugima potvrđuju silinu nevolja i stresora kojima su posebno partnerice (supruge) i roditelji izloženi (4,100,101).

ZAKLJUČAK I ISTRAŽIVAČKA OGRANIČENJA

Ova probna studija nastoji pružiti preliminarni uvid u atribucije i kapital za oporavak liječenih ovisnika o kockanju analizirajući njihove osobne i okolinske čimbenike koji olakšavaju ili otežavaju održavanje apstinencije. Rezultati su pokazali da je proces oporavka vrlo složen i višedimenzionalan, a ključnu ulogu imaju promjene u načinu života, svjesnom (re) strukturiranju vremena, podršci obitelji kao i sudjelovanje u grupama podrške. Sudionici su prepoznali kako je priznavanje vlastite ovisnosti, kao i prihvaćanje odgovornosti za vlastito ponašanje prekretnica u procesu oporavka. U Hrvatskoj nedostaju kvalitativne studije s ovisnicima o kockanju, stoga vjerujemo da ovo istraživanje doprinosi boljem razumijevanju ovog područja.

Kao istraživačka ograničenja istaknuli bismo relativno malen uzorak sudionika, iako on nije nekarakterističan za kvalitativne studije. No,

In addition to the various aspects of support, the subthemes of positive recovery capital have especially emphasized the need for a significant change in everyday habits, rituals and behavior patterns, which consequently changes the attitudes and value system in a broader sense. Negative recovery capital also puts significant focus on the quality of family relationships, which emphasizes the need for including family members into the support process for the gambler. However, advisory support for the 'significant others' in this process should not be overlooked either, since they too are exhausted, manipulated, full of disbelief and stress, which makes them develop numerous constructive mechanisms in order to rebuild the relationship and trust. Numerous international studies addressing the damage associated with gambling and significant others confirm the intensity of troubles and stressors faced by the partners (wives) and parents (4, 100, 101).

CONCLUSION AND STUDY LIMITATIONS

The aim of this pilot study was to provide preliminary insight into the attributions and recovery capital of recovering gamblers by analyzing their personal and environmental factors which facilitate or hinder abstinence maintenance. The results have shown that the recovery process is very complex and multidimensional, while changes in the lifestyle, conscious (re)structuring of time, family support and participation in support groups play a key role. The participants recognized that admitting to their own addiction and accepting responsibility for their own behavior were the turning points for their recovery. Qualitative studies on gamblers are scarce in Croatia, therefore we believe that this study contributes to a better understanding of this field.

In terms of study limitations, we would like to emphasize the relatively small sample of participants, although this is not uncharacteristic of qualitative studies. However, bias is certainly present in the fact that the study included only

pristranost sigurno postoji u činjenici da se radi isključivo o muškarcima (nedostaju žene s problemom ovisnosti o kockanju), kao i osobama koje nisu uključene u grupe podrške, a koje potencijalno imaju drukčiju percepciju i/ili izazove u procesu održavanja apstinencije. Jedno od ograničenja je i činjenica da je protokol nastojao sveobuhvatno, unutar jedne fokusne grupe obuhvatiti raznolike teme te niti jedna nije dubinski istražena. Predlažemo da buduća istraživanja dublje i preciznije istraže pojedine aspekte atribucija i kapitala za oporavak, kao što vidimo i potencijale da se ove teme počnu istraživati kvantitativnom metodologijom. Vjerujemo da ova pilot studija ima i korisne praktične implikacije za bolje razumijevanje prevencije relapsa, kako u pravnoj regulativi industrije, tako i u kliničkom radu, naglašavajući nužnost post-tretmanske podrške u procesu liječenja i oporavka.

men (no women with gambling problems were involved), as well individuals who did not take part in support groups, but who could potentially have a different perception and/or challenges in the process of abstinence maintenance. One of the limitations also lies in the fact that the protocol tried to comprehensively encompass various themes within one focus group, and did not fully examine any of them. We propose that future studies examine more deeply and precisely the individual aspects of attributions and recovery capital, as we can see the potential to begin exploring these topics through quantitative methodology. We believe that this pilot study also has practical implications for a better understanding of relapse prevention, both in the legal regulations pertaining to the industry, and in clinical work, emphasizing the need for post-treatment support in the treatment and recovery processes.

ZAHVALE

Autori bi prije svega htjeli zahvaliti svim sudionicima fokusnih grupa što su podijelili svoje osobne priče i omogućili nam uvid u vlastitu percepciju procesa razvoja ovisnosti, kao i trenutnih snaga i izazova u fazi održavanja apstinencije. Kolegama zahvaljujemo na podršci, susretljivosti i organizaciji provedenih fokusnih grupa.

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Longitudinalno istraživanje heterogenosti simptoma adolescentske depresije

/ A Longitudinal Study of the Heterogeneity of Adolescent Depression Symptoms

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Adolescenti imaju povećan rizik za razvoj psihičkih poremećaja uključujući depresiju. Malo je istraživanja koja su longitudinalno ispitivala heterogenost depresije u populaciji adolescenata. Ovo istraživanje ispitalo je postojanje različitih profila depresivnih simptoma među adolescentima te kako pojedinci prelaze između tih profila tijekom vremena. Istraživanje je provedeno na velikom probabilističkom uzorku adolescenata, koji su na početku istraživanja bili u prvom i drugom razredu srednje škole. Ispunili su upitnik za procjenu DSM-5 simptoma depresije u tri vremenske točke, s razmakom od šest mjeseci (n_{t1} = 1338, n_{t2} = 1214, n_{t3} = 1331). Analizom prijelaza latentnih profila identificirana su četiri različita i mjerno invarijantna profila kroz sve valove: „Bez simptoma", „Niski simptomi", „Somatsko-vegetativni simptomi" i „Visoko izraženi simptomi depresije". Adolescenti koji su pripadali profilu "Somatsko-vegetativni simptomi" izvijestili su o povišenoj razini umora, poremećajima spavanja i problemima s apetitom, ali ne i o povećanoj suicidalnosti. Nasuprot tome, oni u profilu „Visoko izraženi simptomi depresije" pokazivali su povišene razine gotovo svih depresivnih simptoma. Iako su profili pokazali određenu vremensku stabilnost, uočeni su i prijelazi između profila. Tako su neki adolescenti prelazili iz profila Niski simptomi u profil „Somatsko-vegetativni simptomi" ili čak u profil „Visoko izraženi simptomi depresije". S druge strane, mnogi su adolescenti prelazili iz težih profila u blaže, primjerice iz „Visoko izraženi simptomi depresije" u „Somatsko-vegetativni simptomi" ili „Niski simptomi". U odvojenim analizama provedenima na djevojkama i mladićima dodatno je identificiran profil „Simptomi suicidalnosti" koji je upućivao na taj povišeni simptom. Ovi nalazi naglašavaju dinamičnu prirodu depresivne simptomatologije u adolescenciji i ističu važnost uzimanja u obzir različitih profila simptoma u dijagnostici i intervencijama.

/ Adolescents are at an increased risk of developing mental disorders, including depression. Few studies have longitudinally examined the heterogeneity of depression in the adolescent population. This study investigated the existence of different depressive symptom profiles among adolescents, as well as the ways in which individuals transition between these profiles over time. The study included a large probabilistic sample of adolescents, who were in their first and second year of high school at the study onset. They completed a questionnaire designed to assess depression symptoms according to DSM-5 criteria at three time points, each six months apart (n_{p1} = 1338, n_{p2} = 1214, n_{p3} = 1331). Using latent profile transition analysis, four distinct and measurement invariant profiles were identified across all waves: No Symptoms, Low Symptoms, Somatic-Vegetative Symptoms, and Severe Depression Symptoms. Adolescents in the Somatic-Vegetative Symptoms profile reported elevated levels of fatigue, sleep disturbances and appetite problems, but no increased suicidality. In contrast, those in the Severe Depression Symptoms profile exhibited elevated levels of nearly all depressive symptoms. Although the profiles demonstrated a degree of temporal stability, transitions between profiles were also observed. Notably, some adolescents transitioned from the Low Symptoms profile into the Somatic-Vegetative Symptoms or even the Severe Depression Symptoms profile. Conversely, many adolescents transitioned from more severe profiles to less severe ones, for example, from Severe Depression Symptoms profile to Somatic-Vegetative Symptoms or Low Symptoms profile. In separate analyses conducted on girls and boys, an additional profile, Suicidality Symptoms, was identified, which pointed to that elevated symptom. These findings underscore the dynamic nature of depression symptomatology in adolescence and highlight the importance of considering different symptom profiles in both the diagnostic and intervention efforts.

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UVOD

Adolescencija je razdoblje intenzivnog fizičkog i neurološkog razvoja (1) kao i socijalnog, kognitivnog, emocionalnog i moralnog razvoja (2). Turbulentnost ovog razdoblja povećava osjetljivost adolescenata na različite psihičke poremećaje. Ova povećana osjetljivost nadograđuje se na prethodne čimbenike rizika poput stresa u ranom životu, odnosno traume, nasilja i drugih oblika zlostavljanja (3) te autoritativnog roditeljstva i negativnih iskustava u školi (4). Stoga značajan broj adolescenata razvija simptome depresije. Depresija je jedan od najčešćih poremećaja, a u jednoj meta-analizi procijenjeno je da je oko 8 % adolescenata (95 % CI = 5 % – 12 %) na globalnoj razini patilo od depresije unutar posljednje godine (5). Nadalje, prevalencija povišenih simptoma depresije kod adolescenata porasla je između 2001. i 2010., te ponovno između 2011. i 2020. godine (5).

Adolescentska depresija težak je poremećaj koji može imati ozbiljne posljedice poput rizičnih ponašanja i školskih problema (6), interpersonalnih teškoća (7), lošijeg tjelesnog zdravlja (8) te samoozljeđivanja i samoubojstva (9). Podatci Svjetske zdravstvene organizacije (10) pokazuju da je depresija četvrti vodeći uzrok bolesti i invaliditeta među adolescentima, dok je samoubojstvo treći vodeći uzrok smrti.

Depresija je u DSM-5 definirana putem devet simptoma (11) od kojih barem jedan mora biti

INTRODUCTION

Adolescence is a period of intense physical and neurological development (1), as well as social, cognitive, emotional, and moral development (2). The turbulence of this period increases the sensitivity of adolescents to various mental disorders. This increased sensitivity builds on the prior risk factors such as early life stress, i.e. trauma, violence and other forms of maltreatment (3), authoritative parenting and negative school experiences (4). Consequently, a substantial number of adolescents develops symptoms of depression. Depression is one of the most common disorders, and it was estimated in a meta-analysis that around 8% of adolescents (95% CI = 5% – 12%) globally have suffered from depression within the last year (5). Furthermore, the prevalence of elevated depression symptoms in adolescents increased in the period between 2001 and 2010, and again between 2011 and 2020 (5).

Adolescent depression is a debilitating disorder which can have severe consequences such as risky behaviors and academic problems (6), interpersonal problems (7), poorer physical health (8), and self-harm and suicide (9). The data published by the World Health Organization (10) indicate that depression is the fourth leading cause of illness and disability among adolescents, while suicide is the third leading cause of death.

Depression is defined by nine symptoms in DSM-5 (11), of which at least one must be either depressed mood or loss of interest and pleasure.

depresivno raspoloženje ili gubitak interesa i zadovoljstva. Ostali simptomi uključuju gubitak ili povećanje tjelesne težine, nesanicu ili pretjeranu pospanost, umor ili gubitak energije, osjećaje bezvrijednosti, smanjenu koncentraciju ili neodlučnost te suicidalnost. Depresija se tradicionalno promatrala kao jedinstven konstrukt pri čemu upravo taj konstrukt uzrokuje promjene u simptomima depresije. Često se koristi analogija s medicinskim bolestima poput prehlade ili gripe kod kojih simptomi poput povišene temperature ili curenja nosa ukazuju na zajednički uzrok, tj. samu bolest. Ta je perspektiva i dalje duboko ukorijenjena u psihijatriji, gdje se psihički poremećaji često shvaćaju kao bolesti mozga (12).

Istraživanja su osporila ovu pretpostavku pokazujući da različiti simptomi depresije imaju različite čimbenike rizika (13) te da je teško pronaći robustne i valjane biomarkere za psihičke poremećaje općenito, a posebno za depresiju (14). Ti nalazi se nadovezuju na mrežnu teoriju (15) koja pretpostavlja da psihički poremećaji proizlaze iz međudjelovanja samih simptoma te interakcija između simptoma i unutarnjeg i vanjskog okruženja, a ne iz zajedničkog uzroka. Mrežna teorija pretpostavlja kako postoje kauzalne veze između simptoma koje mogu imati različite osnove (15) kao što je biološka osnova (problemi sa spavanjem uzrokuju umor) ili psihološka osnova (osjećaj depresije i beznađa uzrokuje poteškoće s koncentracijom). Ipak, ona ne propisuje kako bi simptomi depresije konkretno trebali uzrokovati jedni druge, dijelom i zato što se pretpostavlja da se interakcije simptoma razlikuju za različite osobe.

Povezana s tim je i ideja kako je depresija heterogena, što već dulje vrijeme pokazuju istraživanja (16). Fried i Nesse (12) su izračunali kako je 3703 pacijenata s depresijom imalo ukupno 1030 različitih kombinacija simptoma koji su činili njihove kliničke slike. Posljedica takve heterogenosti je to da tretman nije učinkovit za mnoge osobe s depresijom. Na primjer, dobiveno je kako psihološki tretman depresije ima skromne učinke kod djece i adolescenata (17).

The other symptoms include weight loss or gain, insomnia or hypersomnia, fatigue or loss of energy, feeling worthless, decreased concentration or indecisiveness, and suicidality. Depression was traditionally seen as a unitary construct, whereby this very construct causes changes in depression symptoms. An analogy is often used, referring to medical diseases such as a cold or the flu, in which symptoms such as fever or a runny nose point to a common cause, i.e. the disease itself. This perspective is still deeply rooted in psychiatry, where mental disorders are often viewed as brain dysfunctions (12).

Studies have challenged this assumption by showing that different symptoms of depression have different risk factors (13), and that it is difficult to find robust and valid biomarkers for common mental disorders in general, and for depression in particular (14). These findings build on the network theory (15), which posits that mental disorders arise from interactions between the symptoms themselves, as well as interactions between symptoms and the internal and external environments, and not from a common cause. The network theory assumes that there are causal connections between symptoms, which may be grounded in different mechanisms (15) such as biological mechanisms (sleep problems cause fatigue) or psychological mechanisms (feelings of depression and hopelessness cause concentration difficulties). However, it does not prescribe how depression symptoms should specifically cause one another, partly because it is assumed that symptom interactions differ across individuals.

Related to that is the idea that depression is heterogenous, which has been observed in studies for a long time (16). Fried and Nesse (12) calculated that among the 3703 examined patients with depression, there were 1030 different symptom combinations which made up their clinical pictures. A consequence of such heterogeneity is ineffectiveness of treatment in numerous depressive patients. It has been found, for example, that psychological depression treatment produces only modest effects in children and adolescents

Druga istraživanja pokazala su kako podtipovi depresije dobiveni istraživanjima imaju različitu terapijsku prognozu, odnosno da reagiraju na tretman kognitivno bihevioralnom terapijom s različitim ishodima (18).

Različita druga istraživanja koristila su analizu latentnih klasa kako bi identificirala moguće podtipove depresije (16). Sistematski pregled literature pokazao je kako kod osoba s depresijom nisu identificirani konzistentni podtipovi depresije (16). Ipak, uključena istraživanja su rijetko koristila svih devet DSM-5 simptoma depresije i pregled literature nije uključio istraživanja provedena na osobama mlađima od 18 godina. Na uzorku depresivnih adolescenata Loadesova i sur. (18) identificirali su tri klastera, odnosno klasa simptoma: Ozbiljni simptomi, Umjereni simptomi i Povišeni „Somatsko-vegetativni simptomi". Tri klase pokazale su sličan odgovor na tretman, ali sudionici u klasi sa somatsko-vegetativnim simptomima nisu se nastavili oporavljati nakon završetka tretmana.

Ovi nalazi su vrijedni, ali je također potrebno proučiti podtipove depresije na uzorku adolescenata iz opće populacije, gdje samo manji broj adolescenata ispunjava kriterije za dijagnozu depresije. Naime, moguće je da postoje adolescenti kojima ne bi bila dijagnosticirana depresija, ali pokazuju neke klinički značajne simptome. Klinička istraživanja uoči izlaska DSM-5 pokazala su kako je pouzdanost dijagnoze depresije vrlo niska, čak oko 0,30 (19) te je moguće da se depresija u nekih adolescenata i ne dijagnosticira točno. Vremenska dimenzija je također bitna pa tako neki adolescenti mogu tek kasnije razviti depresiju. Istraživanja također pokazuju da se psihički poremećaji u adolescenciji često ne prepoznaju jer ih okolina pogrešno shvati kao posljedicu stresa ili prolaznu fazu te se tako procjenjuje da se depresija dijagnosticira kod svega 50 % ili i manje adolescenata prije odrasle dobi (5). Većina istraživanja koristila je kros-sekcijski pristup pri čemu su analizirala samo trenutno zatečeno stanje.

(17). Other studies have shown that subtypes of depression observed in studies have different therapeutic prognoses, i.e. they have different outcomes following cognitive behavioral therapy (18).

Various other studies have thus used latent class analysis to identify the possible subtypes of depression (16). A systematic literature review showed that no consistent depression subtypes have been identified in individuals with depression (16). However, the included studies rarely used all nine DSM-5 depression symptoms, and the literature review did not include studies conducted on individuals under 18 years of age. On a sample of adolescents with depression, Loades et al. (18) identified the following three clusters, i.e. classes of symptoms: Severe Symptoms, Moderate Symptoms, and Elevated Somatic-Vegetative Symptoms. A similar treatment response was observed in these three classes, however the recovery of participants in the class with somatic-vegetative symptoms did not continue after the completion of treatment.

These insights are valuable, but it is also necessary to examine the depression subtypes on a sample of adolescents in the general population, where only a smaller number of adolescents meets the criteria for depression diagnosis. Namely, it is possible that there are adolescents who would not be diagnosed with depression, but who exhibit some clinically relevant symptoms. The results of clinical studies conducted ahead of the DSM-5 publication showed that the reliability of depression diagnosis is very low, as low as 0.30 (19), and it is possible that some adolescents may not be correctly diagnosed with depression. The temporal dimension is important as well, as some adolescents could transition into depression only later. Research has also shown that mental disorders in adolescence often go unrecognized because those in their surroundings mistakenly interpret them as stress-related or as a passing phase. As a result, it is estimated that depression is diagnosed in only about 50% or fewer adolescents before adulthood (5). Most studies utilized a cross-sec-

Nekoliko longitudinalnih istraživanja (npr. 20, 21) identificiralo je različite putanje adolescentskih simptoma depresije, poput Stabilno niski, Rano visoki ili Rastući. Ipak, ta istraživanja nisu proučavala heterogenost simptoma depresije u svakoj vremenskoj točki. Analiza prijelaza latentnih profila (engl. *Latent transition profile analysis (* 22)) prikladna je za takvo istraživačko pitanje jer omogućuje proučavanje ne samo podtipova adolescentske depresije, već i njihovih razvojnih putanja. Prema saznanjima autora ovog rada, samo je jedno istraživanja do sad slijedilo ovaj pristup (23). Istraživači su otkrili tri profila u koje su se grupirali adolescenti s obzirom na simptome depresije. Adolescenti koji su pripadali posljednjim dvama profilima imali su povišene simptome depresije i također su otkrivene značajne vjerojatnosti prelaska iz profila u profil. Ipak, istraživači su koristili 20 indikatora za mjerenje depresivnosti, koji se nisu u potpunosti slagali sa simptomima depresije iz DSM-5. Također, zbog velikog broja indikatora koji je korišten kako bi se adolescenti grupirali u profile, bilo je teže interpretirati rezultate.

Cilj ovog istraživanja bio je istražiti obrasce depresivne simptomatologije među adolescentima s posebnim naglaskom na mogućnost postojanja različitih profila i njihovu promjenu kroz vrijeme. Dodatni cilj bio je istražiti obrasce depresivne simptomatologije odvojeno na djevojkama i mladićima.Korišten je upitnik depresije koji mjeri DSM-5 kriterije i veliki, probabilistički uzorak adolescenata. Ovo je bilo eksploratorno istraživanje te stoga nisu unaprijed postavljene hipoteze.

METODE

Postupak i sudionici

Podatci su prikupljeni kao dio većeg istraživačkog projekta *Longitudinalna studija stresa u adolescenciji* (STRESS LOAD). Istraživanje je odobrilo etičko povjerenstvo Instituta društvenih

tional approach, where they only analyzed the current situation.

Several longitudinal studies (e.g. 20, 21) identified different trajectories of adolescent depression symptoms, such as Stable Low, Early High or Increasing. However, these studies did not examine the heterogeneity of depression symptoms at each time point. Latent profile transition analysis (22) is appropriate in this research context, as it allows an examination of not only the subtypes of adolescent depression, but also of their developmental trajectories. According to this author's knowledge, only one study so far has followed this approach (23). The researchers identified three profiles of adolescents based on their depression symptoms. Adolescents belonging to the last two profiles had elevated depression symptoms, and significant probabilities of transitioning between profiles were discovered as well. However, the researchers used 20 indicators for measuring depression, which did not completely correspond to the DSM-5 depression symptoms. Furthermore, due to the high number of indicators used to group the adolescents into profiles, findings were more difficult to interpret.

The aim of this study was to examine the patterns of depressive symptoms among adolescents, with particular emphasis on the possible existence of different profiles and their change over time. An additional aim was to explore the patterns of depressive symptoms in boys and girls separately. A depression questionnaire that measures the DSM-5 criteria was used, along with a large, probabilistic sample of adolescents. This was an exploratory study, therefore no a-priori hypotheses were set.

METHODS

Procedure and participants

Data were collected as part of a larger research project entitled *Longitudinal Adolescent Stress Study* (STRESS LOAD). The study was approved by the Ethics Committee of the Ivo Pilar Institute

znanosti Ivo Pilar (Broj odluke: 11-73/20-479). Svaki sudionik uključen u istraživanje dao je svoj informirani pristanak. Za sudionike mlađe od 16 godina dobiven je i pristanak roditelja elektroničkom poštom. Uzorak je definiran kao probabilistički klaster uzorak javnih srednjih škola u Zagrebu, stratificiran prema dominantnom tipu nastavnog programa (gimnazije ili strukovne škole). Od ukupno 55 javnih srednjih škola u Zagrebu konačni uzorak uključivao je 7 od 20 gimnazija i 9 od 35 strukovnih škola. Nekoliko je škola odustalo zbog drugih obaveza te su zamijenjene sličnim zamjenskim školama. To nije utjecalo na reprezentativnost uzorka s obzirom na dob i spol. U svakoj školi planiralo se uključiti 10 razreda ili oko 200 učenika, ali se taj broj razlikovao ovisno o izostancima učenika i spremnosti škola da uključe toliki broj razreda. U prosjeku je između 10 % i 20 % učenika izostalo s nastave zbog bolesti ili drugih izvanrednih okolnosti, no od prisutnih učenika otprilike 95 % sudjelovalo je u istraživanju. Učenici su sudjelovali u istraživanju ispunjavajući upitnike na svojim pametnim telefonima.

Podatci su prikupljeni u tri vala istraživanja, s razmacima od otprilike šest mjeseci. Korišten je razmak od šest mjeseci između mjerenja budući da su u ovom istraživanju korišteni podatci iz većeg istraživačkog projekta u kojem je interval od šest mjeseci procijenjen kao optimalan za opažanje promjena u različitim konstruktima mentalnog zdravlja kod adolescenata, uključujući i depresiju. Dodatno, interval mjerenja poklapao se i s polugodištima u srednjim školama te je školama uključenima u istraživanje bilo prihvatljivo osigurati jedan termin za mjerenje po razredu u svakom polugodištu. Analize su provedene na sudionicima koji su sudjelovali u najmanje dva od tri vala istraživanja i uspješno prošli pitanja za provjeru pažnje. U svakom valu nalazila su se tri pitanja za provjeru pažnje, koja su od sudionika tražila da odaberu određeni odgovor kako bi pokazali da pažljivo čitaju pitanja (npr. „Odaberi broj 4 na ovom pitanju kako bi pokazao da čitaš pitanja."). Konačni uzorak uključivao je n_{t1}

of Social Sciences (Ref. No. 11-73/20-479). Informed consent was obtained from every participant involved in the study. For participants under 16 years of age, parental consent was obtained via e-mail as well. The sample was defined as a probabilistic cluster sample of public high schools in Zagreb, stratified according to the dominant type of curriculum (gymnasiums or vocational schools). Out of a total of 55 public high schools in Zagreb, the final sample included 7 out of 20 gymnasiums, and 9 out of 35 vocational schools. Several schools dropped out due to other commitments and were replaced by similar substitute schools. This did not affect the representativeness of the sample with regards to age and sex. It was planned that 10 classes or around 200 students would be included in each school, however this number varied depending on the students' absences and the readiness of the schools to include this many classes. On average, between 10% and 20% of students were absent from class due to illness or other extraordinary circumstances, while approximately 95% out of those who were present participated in the study. The students participated in the study by filling out the questionnaires on their smartphones.

The data were collected in three study waves which were set apart by approximately six months. A six-month interval between measurements was used because this study used data from a larger research project in which a six-month interval was estimated as optimal for observing changes in various mental health constructs among adolescents, also including depression. In addition, the measurement interval coincided with school semesters in high schools, and it was acceptable to the participating schools to provide one measurement session per class in each semester. The analyses were conducted on those participants who participated in at least two out of three study waves, and successfully passed the attention check questions. Within each wave there were three attention check questions, asking the participants to select a specific answer to prove that they were reading the questions attentively (e.g. "Select number 4 on this question to show

= 1338 sudionika u prvom valu, n_{t2} = 1214 sudionika u drugom valu i n_{t3} = 1331 sudionika u trećem valu, koji su na početku istraživanja pohađali prvi ili drugi razred srednje škole. U prvom valu uzorak je činilo 43 % mladića i 57 % djevojaka (prosječna dob = 15,8; *SD* = 0,66), u drugom valu 41 % mladića i 59 % djevojaka (prosječna dob = 16.4; *SD* = 0,66), a u trećem valu 39 % mladića i 61 % djevojaka (prosječna dob = 16,8; *SD* = 0,67). Razlika u dobi manja od šest mjeseci koja se opaža između drugog i trećeg vala istraživanja je posljedica toga da su u nekim školama prihvatljivi termini za provođenje istraživanja bili nešto ranije nego što bi bilo potrebno da se ispuni interval od šest mjeseci. Anonimnost sudionika u ovom istraživanju pažljivo je čuvana budući da je istraživanje provedeno aplikacijom koju je za potrebe ovog istraživanja razvila tvrtka za razvoj aplikacija. Sudionici su se u svakom valu ulogirali svojom elektroničkom adresom te su na taj način automatski spajani njihovi rezultati iz pojedinih valova, a te elektroničke adrese nisu bile dostupne istraživačima. Aplikacija je uključivala i automatski generiranu povratnu informaciju na kraju istraživanja, koja se aktivirala ako bi sudionik prešao granični rezultat na korištenom upitniku depresivnosti. Povratna informacija upućivala je sudionika kako bi bilo dobro razgovarati s bliskom osobom i/ili potražiti stručnu pomoć te su navedene neke mogućnosti traženja stručne pomoći. U slučaju vrlo visokih simptoma depresivnosti sudioniku je prikazana verzija povratne informacije koja je dodatno naglašavala potrebu za traženjem stručne pomoći.

Instrumenti

Za mjerenje simptoma depresije korišten je *Upitnik o zdravlju pacijenta - 9 (*engl.. *Patient Health Questionnaire -9)*(PHQ-9) (24). Riječ je o instrumentu samoprocjene u kojem sudionici procjenjuju u kojoj mjeri su doživjeli svaki od DSM-IV-TR dijagnostičkih kriterija u posljednja dva tjedna (25) (npr. „Mali interes ili zadovoljstvo u obavljanju stvari“), na ljestvici od 0 that you are reading the questions.”). The final sample included n_{p1} = 1338 participants in the first wave, n_{p2} = 1214 in the second wave, and n_{p3} = 1331 participants in the third wave, who were in first or second grade of high school at the beginning of the study. The first wave comprised 43% of boys and 57% of girls (M_{age} = 15.8, *SD*= 0.66), the second wave comprised 41% of boys and 59% of girls (M_{age} = 16.4, *SD*= 0.66), while the third wave had 39% of boys and 61% of girls (M_{age} = 16.8, *SD*= 0.67). The age difference of less than six months observed between the second and third waves of the study was due to the fact that in some schools the acceptable time slots for conducting the study were somewhat earlier than would have been required to meet the six-month interval. Participant anonymity in this study was carefully safeguarded, as the research was conducted through an application developed by a software company specifically for this study. In each wave, the participants logged in with their e-mail address, which automatically linked their results across the waves, but these e-mail addresses were not accessible to the researchers. The application also included automatically generated feedback at the end of the survey, which was activated if a participant exceeded the cutoff score on the depression questionnaire used. The feedback suggested to the participant that they could benefit from talking to a close person and/or seeking professional help, and listed several possibilities for accessing professional help. In case of very high depressive symptoms, participants were shown a version of the feedback that placed additional emphasis on the need to seek professional help.

Instruments

The *Patient Health Questionnaire-9* (PHQ-9) (24) was used to measure depression symptoms. This is a self-report instrument in which participants rate themselves on each of the DSM-IV-TR diagnostic criteria in the past two weeks (25) (e.g. “Little interest or pleasure in doing things.”) on a scale from 0 (“Not at all”) to 3 (“Nearly every

(„Uopće ne“) do 3 („Gotovo svaki dan“). Dijagnostički kriteriji iz DSM-IV-TR koji se mjere ovim instrumentom odgovaraju i kriterijima iz DSM-5 za depresiju (11). PHQ-9 je najraširenij instrument za procjenu depresije u istraživanjima i u kliničkoj praksi diljem svijeta (26). Pouzdanost upitnika u tri vala istraživanja bila je dobra do izvrsna: α_{t1} = .90, α_{t2} = .88 i α_{t3} = .88.

REZULTATI

Prije provođenja glavnih analiza izračunati su postotci sudionika koji su premašili granične vrijednosti na PHQ-9 upitniku (24) u svakom valu istraživanja (tablica 1).

Može se primijetiti kako je postotak sudionika s teškom depresijom opadao tijekom tri vala, dok su postotci onih s umjerenim i umjereno teškim simptomima depresije ostali otprilike isti. Umjereno teški i teški simptomi depresije bili su znatno zastupljeniji kod djevojaka nego kod mladića.

Kako bi se ispitala heterogenost simptoma depresije tijekom vremena, podatci su analizirani analizom prijelaza latentnih profila (LPTA) (22). Pri izgradnji i procjeni pristajanja modela korišteni su postupci opisani u literaturi (27,28). U prvom koraku odvojeno su odabrani najprikladniji modeli za svaku vremensku točku primjenom latentne analize profila (LPA; tablica 2).

day"). The DSM-IV-TR diagnostic criteria measured with this instrument also correspond to the DSM-5 criteria for depression (11). PHQ-9 is the most widely used instrument worldwide for the assessment of depression in research and clinical practice (26). Scale reliability estimates for the three study waves were good to excellent: α_{p1}=.90, α_{p2}=.88 and α_{p3}=.88.

RESULTS

Before conducting the main analyses, the percentages of participants who surpassed the cutoff scores on the PHQ-9 questionnaire (24) in each study wave were computed (Table 1).

It can be observed that the percentage of severely depressed participants decreased across the three waves, whereas the percentages of those exhibiting moderately and moderately severe depression symptoms remained roughly the same. Moderately severe and severe depression symptoms were substantially more common in girls than in boys.

In order to examine the heterogeneity of depression symptoms over time, the data were analyzed using the latent profile transition analysis (LPTA) (22). The procedures described in (27) and (28) were used while building and evaluating the model fit. In the first step, the most suitable models for each time point were separately selected by using latent profile analysis (LPA; Table 2).

TABLICA 1. Postotci adolescenata koji su prešli graničnu vrijednost na upitniku PHQ-9 u tri vala istraživanja
TABLE 1. Percentages of adolescents who exceeded the cut-off scores on the PHQ-9 across all three study waves

Val / Wave	Umjereno depresivni / Moderately depressed (PHQ-9: 10 – 14)			Umjereno teško depresivni / Moderately severely depressed (PHQ-9: 15 – 19)			Teško depresivni / Severely depressed (PHQ-9: 20 – 27)		
	Svi / All	D / G	M / B	Svi / All	D / G	M / B	Svi / All	D / G	M / B
Prvi val / Wave 1	19.4	23.4	14.4	11.5	16.3	4.96	9.1	12.6	4.08
Drugi val / Wave 2	20.4	24.4	14.9	11.4	14.2	7.66	7.6	10.2	3.43
Treći val / Wave 3	18.9	21.8	14.3	11.3	14.7	5.87	5.2	7.05	2.35

Napomena: Vrijednosti u tablici izražene su u postotcima. Svi = cijeli uzorak, D = djevojke, M= mladići.Prosječna dob svih sudionika u prvom valu bila je *M*= 15.8 (*SD* = 0.66), u drugom valu *M* = 16.4 (*SD* = 0.66), a u trećem valu *M* = 16.8 (*SD* = 0.67).Prosječna dob djevojaka u prvom valu bila je *M*= 15.8 (*SD* = 0.66), u drugom valu *M* = 16.3 (*SD* = 0.67), a u trećem valu *M* = 16.8 (*SD* = 0.67).Prosječna dob mladića u prvom valu bila je *M* = 15.9 (*SD* = 0.65), u drugom valu *M* = 16.4 (*SD* = 0.64), a u trećem valu *M* = 16.9 (*SD* = 0.67).

/ *Note*: The values in the table are expressed as percentages. All = total sample, G = girls, B = boys. The mean age of all participants in the first wave was *M* = 15.8 (*SD* = 0.66), in the second wave it was *M* = 16.4 (*SD* = 0.66), while in the third wave it was *M* = 16.8 (*SD* = 0.67). The mean age of girls in the first wave was *M* = 15.8 (*SD* = 0.66), in the second wave it was *M* = 16.3 (*SD* = 0.67), while in the third wave it was *M* = 16.8 (*SD* = 0.67). The mean age of boys in the first wave was *M* = 15.9 (*SD* = 0.65), in the second wave it was *M* = 16.4 (*SD* = 0.64), while in the third wave it was *M* = 16.9 (*SD* = 0.67).

TABLICA 2. Rezultati LPA u svakoj točki mjerenja
TABLE 2. The results of the LPA at each time point

	AIC	BIC	VLMR-LRT	BLRT	Entropija / Entropy	DF	PP
Prva točka mjerenja / Time point 1							
2 profila / 2 profiles	29598.90	29744.47	<.001	<.001	.919	28	.98, .96
3 profila / 3 profiles	28371.15	28568.71	<.001	<.001	.915	38	.94, .97, .99
4 profila / 4 profiles	27957.12	28206.70	.015	<.001	.933	48	.95, .95, .97 ,.95
5 profila / 5 profiles	27346.53	27648.07	<.001	<.001	.950	58	.94, .97, .95, .99, .97
6 profila / 6 profiles	27088.11	27441.64	.066	<.001	.871	68	.93, .89, .97 ,.96, .96, .99
Druga točka mjerenja / Time point 2							
2 profila / 2 profiles	26592.86	26735.77	<.001	<.001	.909	28	.98, .96
3 profila / 3 profiles	25817.54	26011.40	<.001	<.001	.854	38	.90, .94, .95
4 profila / 4 profiles	25340.79	25585.67	.069	<.001	.932	48	.97, .94, .97, .95
5 profila / 5 profiles	24922.17	25218.06	<.001	<.001	.865	58	.92,.91, .98, .87, .98
6 profila / 6 profiles	24762.05	25108.97	.148	<.001	.862	68	.90, .98, .86, .83, .89, .98
Treća točka mjerenja / Time point 3							
2 profila / 2 profiles	28410.45	28555.89	<.001	<.001	.907	28	.98, .95
3 profila / 3 profiles	27591.76	27789.15	.210	<.001	.824	38	.94, .89, .94
4 profila / 4 profiles	27029.06	27278.39	.002	<.001	.921	48	.89, .94, .97, .96
5 profila / 5 profiles	26502.03	26803.31	<.001	<.001	.864	58	.87, .92, .90, .94, .97
6 profila / 6 profiles	25922.72	26275.94	<.001	<.001	.884	68	.91, .96, .92, .85, .96, 1.00

Napomena: AIC = Akaikeov informacijski kriterij, BIC = Bayesijanski informacijski kriterij, VLMR-LRT = Vuong-Lo-Mendell-Rubin test omjera, BLRT = Bootstrapirani test omjera vjerojatnosti, DF = stupnjevi slobode, PP = prosječna posteriorna vjerojatnost klasifikacije u profile – prvi broj odnosi se na prvi profil, drugi broj na drugi profil i tako dalje.
/ *Note:* AIC = Akaike Information Criterion, BIC = Bayesian Information Criterion, VLMR-LRT = Vuong-Lo-Mendell-Rubin Likelihood Ratio Test, BLRT = Bootstrapped Likelihood Ratio Test, DF = degrees of freedom, PP = average posterior classification probability – the first number on the left refers to the first profile, the second to the second profile, and so on.

Testirani su modeli s dva do šest latentnih profila. Razmatrani su različiti statistički pokazatelji za određivanje optimalnog rješenja (29): Akaikeov informacijski kriterij (AIC) i Bayesijanski informacijski kriterij (BIC) koji ukazuju na relativnu prikladnost modela, Vuong-Lo-Mendell-Rubinov test omjera vjerojatnosti (VLMR-LRT) i *bootstrapirani* test omjera vjerojatnosti (BLRT), koji se koriste za izravnu usporedbu dvaju rješenja s k i k-1 profila. Korištena je prosječna posteriorna prediktivna vjerojatnost latentnih profila, koja označava preciznost klasifikacije sudionika u profile, te entropija, koja mjeri općenitu točnost klasifikacije.

Uz statističke kriterije u obzir je uzeta i interpretabilnost te smislenost profila (30). BLRT

The models with two to six latent profiles were tested. Different statistical indicators were considered to determine the optimal solution (29), as follows: the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) which indicate relative model fit, the Vuong-Lo-Mendell-Rubin Likelihood Ratio Test (VLMR-LRT) and Bootstrapped Likelihood Ratio Test (BLRT), which are used to directly compare the two solutions pertaining to k and k-1 profiles. Average latent profile posterior predictive probability was used, indicating the precision of the classification of participants into profiles, as well as entropy, which measures the general certainty of classification.

In addition to statistical criteria, the interpretability and meaningfulness of the profiles was considered

je bio statistički značajan za sva testirana rješenja zbog čega taj kriterij nije uzet obzir, jer nije pružao dodatne informacije (30). Rješenja s četiri i pet profila imala su najbolje statističke pokazatelje u svim vremenskim točkama. Rješenje s pet profila imalo je bolju prikladnost prema VLMR-LRT testu u svakoj vremenskoj točki, kao i niži AIC i BIC. Međutim, rješenje s četiri profila imalo je veću entropiju i više posteriorne vjerojatnosti klasifikacije pojedinaca u profile, gotovo uvijek više od idealne vrijednosti od 0,9 (29). Rješenje s četiri profila bilo je također smislenije, lakše za interpretaciju i *parsimoničnije* zbog čega je i odabrano.

U drugom koraku analize (27,28) rješenje s četiri profila primijenjeno je na sve vremenske točke te je testirana njegova mjerna invarijantnost (tablica 3).

Premda je hi-kvadrat test razlike bio značajan, poznato je da se vrijednost hi-kvadrata povećava s velikim uzorcima te da čak i trivijalne razlike između modela mogu biti značajne (31). Stoga su korišteni relativni pokazatelji prikladnosti pri čemu je BIC bio niži u mjerno invarijantnom rješenju. Preporučuje se da se BIC preferira nad AIC-om kod velikih uzoraka (32). Vizualnim pregledom su u mjerno neinvarijantnom rješenju također uočene vrlo male razlike u oslobođenim aritmetičkim sredinama čestica za pojedine profile tijekom vremena, stoga je odabrano mjerno invarijantno rješenje.

U trećem koraku analize proučeno je odabrano rješenje i opisani su dobiveni latentni profili. Srednje vrijednosti profila prikazane su u tablici 4 i na slici 1. Procijenjene prevalencije profila u vremenskim točkama prikazane su u tablici 5.

as well (30). The BLRT was statistically significant for all tested solutions, due to which this criterion was not taken into account, as it did not provide additional information (30). The solutions with four and five profiles had the best statistical indicators in all the time points. The solution with five profiles had a better fit according to the VLMR-LRT test in every time point, as well as lower AIC and BIC. However, the four-profile solution had higher entropy and higher posterior probability of classifying individuals into profiles, almost always higher than the ideal value of 0.9 (29). The four-profile solution was also more meaningful, easier to interpret and more parsimonious, and was thus selected.

In the second step of the analysis (27, 28), the four-profile solution was applied across all time points, and its measurement invariance was tested (Table 3).

Although the chi-square difference test was significant, it is known that the chi-square value increases with large samples, and that even trivial differences between models can be significant (31). The relative fit indicators were therefore used, whereby the BIC was lower in the measurement invariant solution. It is recommended that BIC be preferred over AIC in large samples (32). Upon visual inspection, very small differences in the released item means for individual profiles over time were observed in the measurement non-invariant solution, therefore the measurement invariant solution was selected.

In the third step of the analysis, the selected solution was examined and the obtained latent profiles were described. The profile mean values are presented in Table 4 and depicted in Figure 1. The estimated profile prevalences across time points are presented in Table 5.

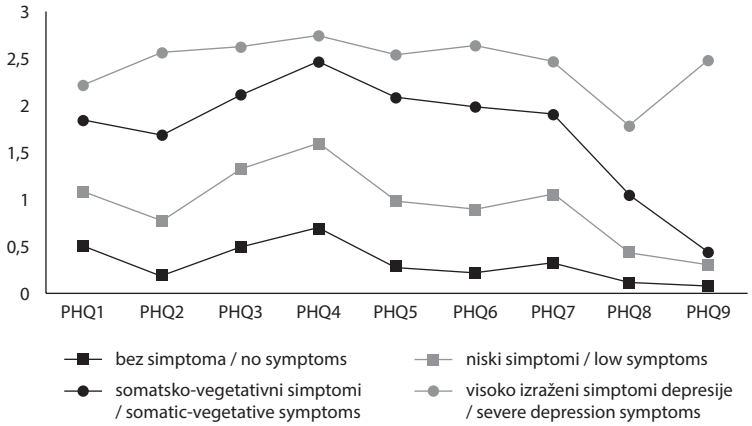
TABLICA 3. Rezultati testiranja longitudinalne mjerne invarijantnosti
TABLE 3. Results of longitudinal measurement invariance testing

Mjerna invarijantnost / Measurement invariance	AIC	BIC	DF	Logaritamska vjerojatnost / Logarithmic likelihood	Razlika hi kvadrata / Chi-square difference	P vrijednost / P-value
Da / Yes	79413.39	79902.21	90	-39616.70		
Ne / No	79384.70	80264.57	162	-39530.35	168.17	<.001

Napomena:Razlika hi kvadrata izračunata je iz transformirane razlike u logaritamskim vjerojatnostima između dva modela.
/ Note: The chi-square difference was computed from the transformed difference in logarithmic likelihoods of the two models.

TABLICA 4. Aritmetičke sredine čestica PHQ-9 za svaki od četiri latentna profila
TABLE 4. Means across the PHQ-9 item for each of the four latent profiles

Čestica PHQ-9 / PHQ-9 item	Prvi profil "Bez simptoma" / Profile 1 "No Symptoms"	Drugi profil "Niski simptomi" / Profile 2 "Low Symptoms"	Treći profil "Somatsko-vegetativni simptomi" / Profile 3 "Somatic-Vegetative Symptoms"	Četvrti profil "Visoko izraženi simptomi depresije" / Profile 4 "Severe Depression Symptoms"
PHQ 1	0.510	1.101	1.855	2.229
PHQ 2	0.182	0.779	1.694	2.585
PHQ 3	0.494	1.330	2.120	2.642
PHQ 4	0.710	1.604	2.487	2.760
PHQ 5	0.273	0.992	2.094	2.549
PHQ 6	0.224	0.908	1.994	2.651
PHQ 7	0.325	1.059	1.919	2.485
PHQ 8	0.115	0.424	1.051	1.787
PHQ 9	0.076	0.316	0.444	2.496



SLIKA 1. Četiri latentna profila depresivnosti adolescenata i aritmetičke sredine tih profila za čestice PHQ-9
FIGURE 1. The four latent profiles of adolescent depression and their means in PHQ-9 items

TABLICA 5. Prevalencije četiriju profila kroz tri točke mjerenja
TABLE 5. Prevalences of the four profiles across three time points

Profil / Profile	Prva točka / Time point 1	Druga točka / Time point 2	Treća točka / Time point 3
Bez simptoma / No Symptoms	39.50%	34.56%	36.85%
Niski simptomi / Low Symptoms	32.35%	38.90%	39.75%
„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms	15.27%	17.67%	15.72%
„Visoko izraženi simptomi depresije" / Severe Depression Symptoms	12.89%	8.89%	7.68%

Napomena: Prosječna dob sudionika u prvom valu bila je *M*= 15.8 (*SD* = 0.66), u drugom valu *M* = 16.4 (*SD* = 0.66), a u trećem valu *M* = 16.8 (*SD* = 0.67).
/ *Note*: The mean age of the participants in the first wave was *M* = 15.8 (*SD* = 0.66), in the second wave it was *M* = 16.4 (*SD* = 0.66), while in the third wave it was *M* = 16.8 (*SD* = 0.67).

Odabiranje 2 ili 3 na jednoj od prvih osam čestica PHQ-9 upitnika i odabiranje 1, 2 ili 3 na devetoj čestici (suicidalnost) odgovara prisutnosti simptoma depresije prema algoritamskom načinu bodovanja PHQ-9 (33). To znači da je osoba navela da joj je simptom stvarao poteškoće najmanje više od pola dana u posljednja dva tjedna za prvih osam simptoma i barem nekoliko dana za simptom suicidalnosti. Ovo je služilo kao općenita smjernica pri opisu profila, te je profil opisan kao onaj koji ima simptom ako je aritmetička sredina simptoma bila viša od 2.

Adolescenti u najvećem profilu, nazvanom „Bez simptoma" (vidi tablice 4 i 5 te sliku 1), imali su niske vrijednosti na svim simptomima. Drugi najveći profil nazvan je „Niski simptomi", budući da su adolescenti u njemu imali blago povišene, ali i dalje nisko izražene simptome. Među povišenim simptomima isticao se simptom 4: „osjećaj umora ili nedostatka energije". Adolescenti koji su pripadali trećem profilu, nazvanom „Somatsko-vegetativni simptomi", imali su više simptoma iznad vrijednosti 2, a to su bili simptomi 3, 4 i 5 koji se mogu opisati kao Somatsko-vegetativni („poteškoće sa spavanjem ili prekomjerno spavanje", „osjećaj umora ili nedostatka energije", „slab apetit ili prekomjerno jedenje"). Međutim, imali su niske psihomotorne teškoće i vrlo nisku suicidalnost. Konačno, adolescenti u najmanjem profilu, nazvanom „Visoko izraženi simptomi depresije", imali su praktički sve simptome s vrijednostima višim od 2.

Nakon opisa profila ostalo je pitanje kako su adolescenti prelazili između profila tijekom tri vala istraživanja. Latentne vjerojatnosti tranzicija između profila ispitane su u četvrtom koraku analize (tablica 6).

Kao što se vidi iz tablice 6, profili „Bez simptoma" i „Niski simptomi" bili su najstabilniji u vremenskim točkama, a slijede ih profili „Somatsko-vegetativni simptomi" i „Visoko izraženi simptomi depresije". Od t1 do t2 adolescenti su imali 21,2 % vjerojatnosti prelaska iz profila

Selecting 2 or 3 in one of the first eight PHQ-9 items and selecting 1, 2 or 3 in the ninth item (suicidality) corresponds to the presence of depression symptoms according to the algorithmic scoring approach of the PHQ-9 (33). This means that an individual stated that they experienced difficulties due to a symptom for at least more than half of the days in the last two weeks for the first eight symptoms, and at least several days for the suicidality symptom. This served as a general guide in profiles description, and a profile was described as featuring a symptom if the arithmetic mean of a symptom was higher than 2.

Adolescents in the largest profile, entitled "No Symptoms" (see Tables 4 and 5 and Figure 1), presented low values for all symptoms. The second largest profile was named "Low Symptoms", as those adolescents experienced slightly elevated, but still low symptoms. Among the elevated symptoms, symptom 4 was pronounced: "feeling tired or having little energy". Adolescents who were part of the third profile, entitled "Somatic-Vegetative Symptoms", had multiple symptoms above the value of 2, and these were symptoms 3, 4 and 5, which could be described as Somatic-Vegetative ("trouble falling or staying asleep, or sleeping too much", "feeling tired or having little energy", "poor appetite or overeating"). However, their psychomotor difficulties were low, and they had a very low suicidality rate. Finally, adolescents who were part of the smallest profile, entitled "Severe Depression Symptoms", displayed practically all symptoms at a value higher than 2.

After the profiles were described, the question remained on how adolescents transitioned between the profiles in the course of the three study waves. Latent transition probabilities between profiles were examined in the fourth step of the analysis (Table 6).

As can be seen in Table 6, the profiles "No Symptoms" and "Low Symptoms" were the most stable across the time points, followed by the profiles "Somatic-Vegetative Symptoms" and "Severe Depression Symptoms". From p1 to p2, adolescents had a 21.2% probability of switching from

TABLICA 6. Latentne vjerojatnosti prijelaza između profila iz vremenske točke 1 u vremensku točku 2 i iz vremenske točke 2 u vremensku točku 3
TABLE 6. Latent transition probabilities between the profiles from time point 1 to time point 2, and from time point 2 to time point 3

Profil / Profile	Bez simptoma / No Symptoms	Niski simptomi / Low Symptoms	„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms	„Visoko izraženi simptomi depresije" / Severe Depression Symptoms
Prijelaz iz točke 1 u točku 2 / Transition from time point 1 to time point 2				
Bez simptoma / No Symptoms (n=666)	.767 (n=511)	.212 (n=141)	.021 (n=14)	.000 (n=0)
Niski simptomi / Low Symptoms (n=547)	.083 (n=45)	.751 (n=411)	.139 (n=76)	.027 (n=15)
„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms (n=257)	.054 (n=14)	.215 (n=55)	.628 (n=161)	.103 (n=27)
„Visoko izraženi simptomi depresije" / Severe Depression Symptoms (n=218)	.059 (n=13)	.229 (n=50)	.211 (n=46)	.500 (n=109)
Profil / Profile	Bez simptoma / No Symptoms	Niski simptomi / Low Symptoms	„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms	„Visoko izraženi simptomi depresije" / Severe Depression Symptoms
Prijelaz iz točke 2 u točku 3 / Transition from time point 2 to time point 3				
Bez simptoma / No Symptoms (n=421)	.856 (n=360)	.121 (n=51)	.011 (n=5)	.012 (n=5)
Niski simptomi / Low Symptoms (n=473)	.169 (n=80)	.740 (n=350)	.079 (n=37)	.013 (n=6)
„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms (n=215)	.024 (n=5)	.321 (n=69)	.581 (n=125)	.073 (n=16)
„Visoko izraženi simptomi depresije" / Severe Depression Symptoms (n=108)	.030 (n=3)	.125 (n=13)	.228 (n=25)	.617 (n=67)

*Napomena:*Brojevi sudionika u zagradama predstavljaju brojeve sudionika za koje je model procijenio da pripadaju određenom profilu i onih koji su prešli iz jednog profila u drugi između vremenskih točaka.Prosječna dob sudionika u prvom valu bila je *M*= 15.8 (*SD* = 0.66), u drugom valu *M* = 16.4 (*SD* = 0.66), a u trećem valu *M* = 16.8 (*SD* = 0.67).
/ *Note:* The numbers of participants in the brackets represent model-estimated numbers of participants belonging to a given profile, and those who transitioned from a profile to another profile between time points. The mean age of the participants in the first wave was *M* = 15.8 (*SD* = 0.66), in the second wave it was *M* = 16.4 (*SD* = 0.66), while in the third wave it was *M* = 16.8 (*SD* = 0.67).

„Bez simptoma" u „Niske simptome". Imali su i 13,9 % vjerojatnosti prelaska iz profila „Niski simptomi" u profil „Somatsko-vegetativni simptomi", što uključuje procijenjenih *n* = 76 pojedinaca. Također, vjerojatnost prelaska iz profila „Somatsko-vegetativni simptomi" u „Visoko izraženi simptomi depresije" iznosila je 10,3 %, odnosno uključivala je procijenjenih 27 sudionika. Uz prelazak prema težim simptomima, dio sudionika prelazio je i u profile s manje izraženim simptomima.Između profila „Somatsko-vegetativni simptomi" i manje ozbiljnog profila „Niski simptomi" postojala je vjerojatnost prijelaza od 21,5 %, što je uključivalo 55 potencijalnih sudionika. Postojala je i vjerojatnost od 21,1 % za prijelaz iz profila „Visoko izraženi simptomi depresije" u profil „Somatsko-vegetativni simptomi" te vjerojatnost od 22,9 % za prijelaz iz tog profila u profil „Niski simptomi".

the "No Symptoms" profile to the "Low Symptoms" profile. They also had a 13.9% probability of switching from the "Low Symptoms" profile to the "Somatic-Vegetative Symptoms" profile, which involved an estimated *n*=76 of individuals. Moreover, the probability of switching from the "Somatic-Vegetative Symptoms" profile to the "Severe Depression Symptoms" profile was 10.3%, i.e. it involved an estimated 27 individuals. Besides switching towards more severe symptoms, some participants also switched to profiles with less pronounced symptoms. There was a 21.5% probability of switching from the "Somatic-Vegetative Symptoms" profile to the less severe "Low Symptoms Profile", which involved 55 potential participants. Furthermore, there was a 21.1% probability of switching from the "Severe Depression Symptoms" profile to the "Somatic-Vegetative Symptoms" profile, and a 22.9% probability of switching from this profile to the "Low Symptoms" profile.

Od mjerenja t2 do t3 adolescenti su imali vjerojatnost od 12,1 % za prijelaz iz profila „Bez simptoma“u profil „Niski simptomi“. Imali su i 7,9 % vjerojatnosti za prijelaz iz profila „Niski simptomi“ u profil „Somatsko-vegetativni simptomi“, a taj je prijelaz uključivao 37 sudionika. Nadalje, postojala je vjerojatnost od 7,3 % za prijelaz iz profila „Somatsko-vegetativni simptomi“ u profil „Visoko izraženi simptomi depresije“. Osim sudionika koji su prešli u profile s izraženijim simptomima, neki su prešli i u profile s nižim razinama rizika. Naime, 16.9% sudionika prešlo je iz profila Niski simptomi u profil Bez simptoma između t2 i t3, a taj prijelaz je uključivao procijenjenih *n* = 80 sudionika. Čak 32.1% sudionika (*n* = 69) prešlo je iz profila „Somatsko-vegetativni simptomi“ u profil Niski simptomi. Dodatno, 22.8% sudionika prešlo je iz profila „Visoko izraženi simptomi depresije“ u profil „Somatsko-vegetativni simptomi“, a 12.5% (*n* = 13) prešlo je iz tog profila u profil „Niski simptomi“.

Nakon provedenih analiza na cijelom uzorku adolescenata, u nastavku su provedene analize odvojeno za djevojke i mladiće. Prvo je provjereno je li dobiveno rješenje s četiri profila optimalno za muške i ženske poduzorke. Testirana su i uspoređena rješenja s tri, četiri i pet profila tijekom tri točke mjerenja, odvojeno za djevojke i mladiće (tablica 7).

Rješenja s pet profila za djevojke i mladiće imala su nešto niže AIC i BIC indikatore od rješenja s četiri profila, ali su rješenja s četiri profila imala bolju entropiju, bila su smislenija i nisu imala problema s konvergencijom. Stoga su za poduzorke djevojaka i mladića potvrđena rješenja s četiri profila. U sljedećem koraku su opisani dobiveni latentni profili odvojeno za djevojke i mladiće. Srednje vrijednosti profila prikazane su u tablici 8 i tablici 9 i na slici 2 i slici 3. Procijenjene prevalencije profila u vremenskim točkama prikazane su u tablici 10 i tablici 11.

Between the p2 and p3 measurements, the adolescents had a 12.1% probability of transitioning from the “No Symptoms” profile to the “Low Symptoms” profile. They had a 7.9% probability of transitioning from the “Low Symptoms” profile to the “Somatic-Vegetative Symptoms” profile, and this transition involved 37 participants. Furthermore, there was a 7.3% probability of transitioning from the “Somatic-Vegetative Symptoms” profile to the “Severe Depression Symptoms” profile. In addition to the participants who switched to profiles with more pronounced symptoms, some also switched to profiles with lower risk levels. Namely, 16.9% of the participants switched from the “Low Symptoms” profile to the “No Symptoms” profile between p2 and p3, which included an estimated 80 participants. As many as 32.1% of the participants (n=69) switched from the “Somatic-Vegetative Symptoms” profile to the “Low Symptoms” profile. Furthermore, 22.8% of the participants switched from the “Severe Depression Symptoms” profile to the “Somatic-Vegetative Symptoms” profile, and 12.5% (*n*=13) switched from that profile to the “Low Symptoms” profile.

After the analyses were conducted on the entire adolescents’ sample, additional analyses were performed separately for girls and boys. First, it was examined whether the previously obtained four-profile solution was optimal for the male and female subsamples. Solutions with three, four, and five profiles were tested and compared across the three measurement points separately for girls and boys (Table 7).

The five-profile solutions for girls and boys yielded somewhat lower AIC and BIC indicators than the four-profile solutions, but the four-profile solutions had better entropy, were more interpretable, and did not have convergence problems. Therefore, the four-profile solutions were confirmed for the subsamples of girls and boys. In the next step, the obtained latent profiles were described separately for girls and boys. The mean values of the profiles are presented in Tables 8 and 9, and Figures 2 and 3. The estimated profile prevalences across time points are shown in Tables 10 and 11.

TABLICA 7. Indikatori pristajanja za modele s različitim brojem profila kod djevojaka i mladića
TABLE 7. Fit indices for models with different numbers of profiles for girls and boys

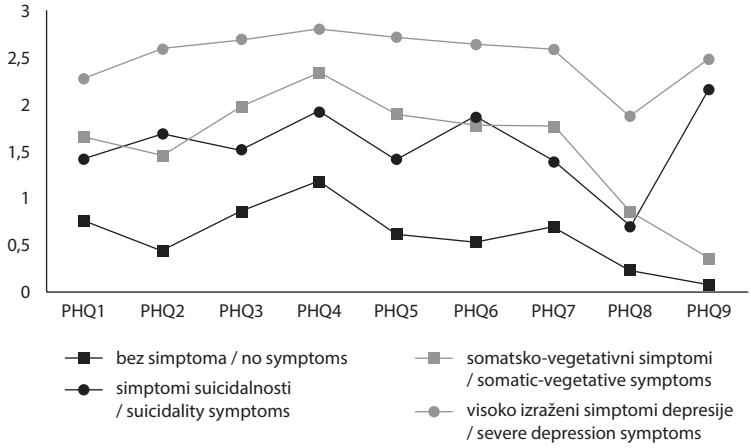
	AIC	BIC	Entropija / Entropy
Djevojke / Girls			
3 profila / 3 profiles	48375.79	48708.14	.800
4 profila / 4 profiles	47605.52	48045.40	.832
5 profila / 5 profiles	46508.85	47075.80	.824
Mladići / Boys			
3 profila / 3 profiles	30870.45	31179.24	.783
4 profila / 4 profiles	29887.51	30296.21	.838
5 profila / 5 profiles	29574.52	30101.28	.824

TABLICA 8. Aritmetičke sredine čestica PHQ-9 za svaki od četiri latentna profila za djevojke
TABLE 8. Arithmetic means of PHQ-9 items for each of the four latent profiles for girls

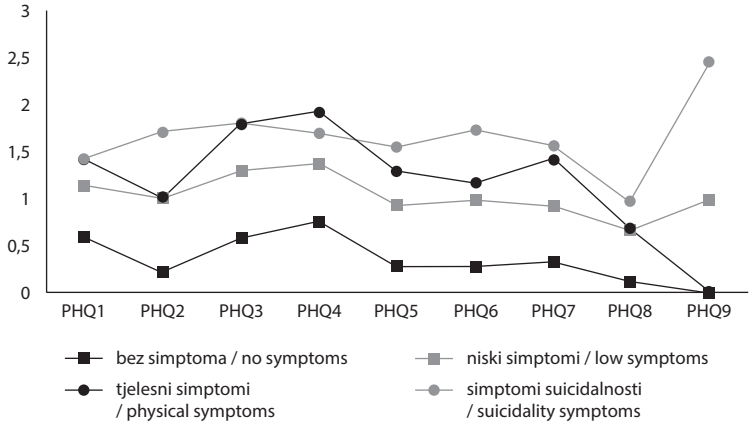
Čestica PHQ-9 / PHQ-9 item	Prvi profil "Bez simptoma" / Profile 1 "No Symptoms"	Drugi profil "Somatsko-vegetativni simptomi" / Profile 2 "Somatic-vegetative symptoms"	Treći profil "Simptomi suicidalnosti" / Profile 3 "Suicidality Symptoms"	Četvrti profil "Visoko izraženi simptomi depresije" / Profile 4 "Severe Depression Symptoms"
PHQ 1	0.777	1.672	1.440	2.292
PHQ 2	0.441	1.473	1.692	2.613
PHQ 3	0.872	1.986	1.541	2.721
PHQ 4	1.189	2.372	1.968	2.841
PHQ 5	0.633	1.920	1.434	2.742
PHQ 6	0.533	1.797	1.906	2.688
PHQ 7	0.696	1.786	1.403	2.613
PHQ 8	0.215	0.871	0.701	1.876
PHQ 9	0.090	0.360	2.210	2.496

TABLICA 9. Aritmetičke sredine čestica PHQ-9 za svaki od četiri latentna profila za mladiće
TABLE 9. Arithmetic means of PHQ-9 items for each of the four latent profiles for boys

Čestica PHQ-9 / PHQ-9 item	Prvi profil "Bez simptoma" / Profile 1 "No Symptoms"	Drugi profil "Niski simptomi" / Profile 2 "Low Symptoms"	Treći profil "Somatsko-vegetativni simptomi" / Profile 3 "Somatic-Vegetative Symptoms"	Četvrti profil "Simptomi suicidalnosti" / Profile 4 "Suicidality Symptoms"
PHQ 1	0.596	1.163	1.445	1.455
PHQ 2	0.227	1.024	1.032	1.720
PHQ 3	0.580	1.298	1.812	1.808
PHQ 4	0.773	1.384	1.954	1.722
PHQ 5	0.291	0.950	1.304	1.556
PHQ 6	0.281	0.999	1.188	1.751
PHQ 7	0.351	0.940	1.452	1.577
PHQ 8	0.136	0.679	0.692	0.955
PHQ 9	0.000	1.000	0.000	2.428



SLIKA 2. Četiri latentna profila depresivnosti kod djevojaka i aritmetičke sredine tih profila za čestice PHQ-9
FIGURE 2. The four latent profiles of depression and their arithmetic means across PHQ-9 items for girls



SLIKA 3. Četiri latentna profila depresivnosti kod mladića i aritmetičke sredine tih profila za čestice PHQ-9
FIGURE 3. The four latent profiles of depression and their arithmetic means across PHQ-9 items for boys

TABLICA 10. Prevalencije četiriju profila kroz tri točke mjerenja za djevojke
TABLE 10. Prevalences of the four profiles across three measurement points for girls

Profil / Profile	Prva točka / Time point 1	Druga točka / Time point 2	Treća točka / Time point 3
Bez simptoma / No Symptoms	50.18%	52.21%	57.26%
„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms	30.43%	32.96%	29.89%
„Simptomi suicidalnosti" / Suicidality Symptoms	7.64%	6.67%	6.63%
„Visoko izraženi simptomi depresije" / Severe Depression Symptoms	11.73%	8.15%	6.22%

Napomena: Prosječna dob djevojaka u prvom valu bila je *M*= 15.8 (*SD* = 0.66), u drugom valu *M* = 16.3 (*SD* = 0.67), a u trećem valu *M* = 16.8 (*SD* = 0.67).
/ *Note:* The mean age of girls in the first wave was *M* = 15.8 (*SD* = 0.66), in the second wave it was *M* = 16.3 (*SD* = 0.67), while in the third wave it was *M* = 16.8 (*SD* = 0.67).

TABLICA 11. Prevalencije četiriju profila tijekom tri točke mjerenja za mladiće
TABLE 11. Prevalences of the four profiles across three measurement points for boys

Profil / Profile	Prva točka / Time point 1	Druga točka / Time point 2	Treća točka / Time point 3
Bez simptoma / No Symptoms	63.52%	57.13%	57.43%
Niski simptomi / Low Symptoms	13.56%	13.92%	15.02%
„Somatsko-vegetativni simptomi" / Somatic-vegetative Symptoms	15.52%	18.38%	16.57%
„Simptomi suicidalnosti" / Suicidality Symptoms	7.40%	10.58%	10.98%

Napomena: Prosječna dob mladića u prvom valu bila je *M*= 15.9 (*SD* = 0.65), u drugom valu *M* = 16.4 (*SD* = 0.64), a u trećem valu *M* = 16.9 (*SD* = 0.67).
/ *Note:* The mean age of boys in the first wave was *M* = 15.9 (*SD* = 0.65), in the second wave it was *M* = 16.4 (*SD* = 0.64), while in the third wave it was *M* = 16.9 (*SD* = 0.67).

Djevojke su općenito imale izraženije simptome depresije od mladića u ukupnom uzorku. Najveći profil kod djevojaka i dalje je bio „Bez simptoma“, kao i u ukupnom uzorku. Ipak, kod djevojaka su ostala tri profila ukazivala na klinički indikativne poteškoće, Drugi najveći profil kod djevojaka, „Somatsko-vegetativni simptomi“, ukazivao je na povišene simptome 3,4 i 5, kao i u ukupnom uzorku. I kod djevojaka je postojao profil „Visoko izraženi simptomi“ depresije, koji je ukazivao na praktički sve povišene simptome depresije, s vrlo visokim srednjim vrijednostima. Međutim kod njih je otkriven i profil „Simptomi suicidalnosti“, koji je ukazivao na povišen deveti simptom depresije („razmišljali ste kako bi bilo bolje da ste mrtvi ili da se ozlijedite na neki način“) te na povišene rezultate blizu granične vrijednosti od 2 na simptomu 4 („osjećaj umora ili nedostatka energije“) i simptomu 6 („loš osjećaj u svezi sebe samog – ili da niste uspjeli u životu, ili da ste iznevjerili sebe ili svoju obitelj“).

Kod mladića je najveći profil bio „Bez simptoma“ te su taj profil i profil „Niski simptomi“ zajedno obuhvaćali oko 70 % ili više sudionika u sva tri vala. Postojao je i profil „Somatsko-vegetativni simptomi“, koji je za razliku od sličnog profila na ukupnom uzorku i kod djevojaka obuhvaćao rezultate blizu granične vrijednosti od 2 na simptomima 3 i 4 („poteškoće sa spavanjem ili prekomjerno spavanje“ i „osjećaj umora ili nedostatka energije“), ali ne i na simptomu 5 („oslabljeni apetit ili prejedanje“). Uočen je i četvrti profil „Simptomi suicidalnosti“, koji je uključivao povišen deveti simptom depresije te u kojem dio ostalih simptoma depresije također nije bio daleko od vrijednosti 2.

Kao što se vidi iz tablica 12 i 13, najstabilniji profil kod djevojaka i mladića bio je „Bez simptoma“, kod kojeg su uočeni vrlo visoki postotci sudionika, u pravilu iznad 80 %, koji su ostajali u tom profilu u valovima. Kod djevojaka je sljedeći po stabilnosti bio profil „Somatsko-vegetativni simptomi“, a profili „Simpto-

Depression symptoms were generally more pronounced in girls than in boys and in the total sample. The largest profile among girls was still the “No Symptoms” profile, as in the total sample. However, the other three profiles among girls indicated clinically significant difficulties. The second largest profile in girls, the “Somatic-Vegetative Symptoms” profile, showed elevated scores on symptoms 3, 4 and 5, the same as in the total sample. The “Severe Depression Symptoms” profile was present among girls as well, which indicated that practically all depression symptoms were elevated, with very high mean values. However, they also exhibited the “Suicidality Symptoms” profile, characterized by an elevated ninth depression symptom (“thoughts that you would be better off dead, or thoughts of hurting yourself in some way”) and elevated scores close to the cutoff value of 2 on symptom 4 (“feeling tired or having little energy”) and symptom 6 (“feeling bad about yourself – or that you are a failure or have let yourself or your family down”).

Among boys, the most prevalent profile was “No Symptoms”, and together with the “Low Symptoms” profile, it encompassed about 70% or more of the participants across all three waves. The “Somatic-Vegetative Symptoms” profile was also present which, unlike the similar profile in the total sample and among girls, included scores close to the cutoff value of 2 on symptoms 3 and 4 (“trouble falling or staying asleep, or sleeping too much” and “feeling tired or having little energy”), but not on symptom 5 (“poor appetite or overeating”). A fourth profile, “Suicidality Symptoms”, was also identified, which included an elevated ninth depression symptom, and in which some of the other depressive symptoms were also not far from the value of 2.

As evident in Tables 12 and 13, the most stable profile both in girls and in boys was the “No Symptoms” profile, involving very high percentages of the participants, generally above 80%, who remained in that profile across the waves. Among the girls, the next most stable profile was “Somatic-Vegetative Symptoms”, while the “Suicidality Symptoms” and “Severe Depression

TABLICA 12. Latentne vjerojatnosti prijelaza između profila iz vremenske točke 1 u vremensku točku 2 i iz vremenske točke 2 u vremensku točku 3 za djevojke
TABLE 12. Latent transition probabilities between the profiles from time point 1 to time point 2, and from time point 2 to time point 3 for girls

Profil / Profile	Bez simptoma / No Symptoms	„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms	„Simptomi suicidalnosti" / Suicidality Symptoms	„Visoko izraženi simptomi depresije" / Severe Depression Symptoms
Prijelaz iz točke 1 u točku 2 / Transition from time point 1 to time point 2				
Bez simptoma / No Symptoms (n=492)	.846 (n=416)	.131 (n=65)	.019 (n=9)	.003 (n=2)
„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms (n=298)	.233 (n=69)	.668 (n=199)	0.043 (n=13)	.056 (n=17)
„Simptomi suicidalnosti" / Suicidality Symptoms (n=75)	.215 (n=16)	.303 (n=23)	.435 (n=32)	.103 (n=4)
„Visoko izraženi simptomi depresije" / Severe Depression Symptoms (n=115)	.089 (n=10)	.318 (n=37)	.090 (n=10)	.504 (n=58)
Profil / Profile	Bez simptoma / No Symptoms	„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms	„Simptomi suicidalnosti" / Suicidality Symptoms	„Visoko izraženi simptomi depresije" / Severe Depression Symptoms
Prijelaz iz točke 2 u točku 3 / Transition from time point 2 to time point 3				
Bez simptoma / No Symptoms (n=511)	.864 (n=441)	.106 (n=54)	.028 (n=14)	.003 (n=2)
„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms (n=323)	.280 (n=90)	.632 (n=205)	.062 (n=20)	.026 (n=8)
„Simptomi suicidalnosti" / Suicidality Symptoms (n=65)	.372 (n=24)	.119 (n=8)	.452 (n=29)	.058 (n=4)
„Visoko izraženi simptomi depresije" / Severe Depression Symptoms (n=80)	.054 (n=4)	.334 (n=27)	.018 (n=1)	.595 (n=48)

Napomena: Brojevi sudionika u zagradama predstavljaju brojeve sudionika za koje je model procijenio da pripadaju određenom profilu i onih koji su prešli iz jednog profila u drugi između vremenskih točaka. Prosječna dob djevojaka u prvom valu bila je *M*= 15.8 (*SD* = 0.66), u drugom valu *M* = 16.3 (*SD* = 0.67), a u trećem valu *M* = 16.8 (*SD* = 0.67). / *Note:* The numbers of participants in brackets represent model-estimated numbers of participants belonging to a given profile, and those who transitioned from a profile to another profile between time points. The mean age of girls in the first wave was *M* = 15.8 (*SD* = 0.66), in the second wave it was *M* = 16.3 (*SD* = 0.67), while in the third wave it was *M* = 16.8 (*SD* = 0.67).

mi suicidalnosti" i „Visoko izraženi simptomi depresije" bili su manje stabilni. Između t1 i t2 može se uočiti da su imale 13,1 % vjerojatnosti prelaska iz profila „Bez simptoma" u ozbiljniji profil „Somatsko-vegetativni simptomi", a taj je prijelaz uključivao procijenjenih 65 sudionica. Imale su i 23,3 % vjerojatnosti prelaska iz profila „Somatsko-vegetativni simptomi" u profil „Bez simptoma", a taj prijelaz uključivao je procijenjenih 69 sudionica. Značajniji prijelazi uključivali su i prijelaz iz profila „Simptomi suicidalnosti" u profil „Somatsko-vegetativni simptomi" (30,3 % vjerojatnosti, n = 23) te također iz profila „Visoko izraženi simptomi depresije" u profil „Somatsko-vegetativni simptomi" (31,8 % vjerojatnosti prelaska, n = 37).

Symptoms" profiles were less stable. Between p1 and p2, girls had a 13.1% probability of transitioning from the "No Symptoms" profile to the more severe "Somatic-Vegetative Symptoms" profile, which encompassed an estimated 65 participants. They also had a 23.3% probability of transitioning from the "Somatic-Vegetative Symptoms" profile to the "No Symptoms" profile, involving an estimated 69 participants. Other notable transitions included moving from the "Suicidality Symptoms" profile to the "Somatic-Vegetative Symptoms" profile (30.3% probability, n = 23), and from the "Severe Depression Symptoms" profile to the "Somatic-Vegetative Symptoms" profile (31.8% probability, n = 37). Similar transitions were observed between p2 and p3 in

TABLICA 13. Latentne vjerojatnosti prijelaza između profila iz vremenske točke 1 u vremensku točku 2 i iz vremenske točke 2 u vremensku točku 3 za mladiće
TABLE 13. Latent transition probabilities between the profiles from time point 1 to time point 2, and from time point 2 to time point 3 for boys

Profil / Profile	Bez simptoma / No Symptoms	Niski simptomi / Low Symptoms	„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms	„Simptomi suicidalnosti" / Suicidality Symptoms
Prijelaz iz točke 1 u točku 2 / Transition from time point 1 to time point 2				
Bez simptoma / No Symptoms (n=440)	.793 (n=349)	.094 (n=41)	.070 (n=31)	.043 (n=19)
Niski simptomi / Low Symptoms (n=94)	.326 (n=31)	.304 (n=28)	0.181 (n=17)	.189 (n=18)
„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms (n=108)	.081 (n=9)	.165 (n=18)	.669 (n=72)	.086 (n=9)
„Simptomi suicidalnosti" / Suicidality Symptoms (n=51)	.145 (n=7)	.172 (n=9)	.149 (n=8)	.534 (n=27)
Profil / Profile	Bez simptoma / No Symptoms	Niski simptomi / Low Symptoms	„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms	„Simptomi suicidalnosti" / Suicidality Symptoms
Prijelaz iz točke 2 u točku 3 / Transition from time point 2 to time point 3				
Bez simptoma / No Symptoms (n=396)	.852 (n=338)	.096 (n=38)	.028 (n=11)	.023 (n=9)
Niski simptomi / Low Symptoms (n=97)	.242 (n=24)	.281 (n=27)	.300 (n=29)	.177 (n=17)
„Somatsko-vegetativni simptomi" / Somatic-Vegetative Symptoms (n=127)	.238 (n=30)	.165 (n=21)	.557 (n=71)	.040 (n=5)
„Simptomi suicidalnosti" / Suicidality Symptoms (n=73)	.097 (n=7)	.243 (n=18)	.050 (n=4)	.610 (n=44)

Napomena: Brojevi sudionika u zagradama predstavljaju brojeve sudionika za koje je model procijenio da pripadaju određenom profilu i onih koji su prešli iz jednog profila u drugi između vremenskih točaka. Prosječna dob mladića u prvom valu bila je *M*= 15.9 (*SD* = 0.65), u drugom valu *M* = 16.4 (*SD* = 0.64), a u trećem valu *M* = 16.9 (*SD* = 0.67). / *Note:* The numbers of participants in brackets represent model-estimated numbers of participants belonging to a given profile, and those who transitioned from a profile to another profile between time points. The mean age of boys in the first wave was *M* = 15.9 (*SD* = 0.65), in the second wave it was *M* = 16.4 (*SD* = 0.64), while in the third wave it was *M* = 16.9 (*SD* = 0.67).

Slični prijelazi uočeni su i između t2 i t3 kod djevojaka. Dodatno, između t2 i t3 sudionice su imale 37,2 % vjerojatnosti prelaska iz profila „Simptomi suicidalnosti" u profil „Bez simptoma", a taj je prelazak uključivao n=24 procijenjene sudionice.

Kod mladića se može uočiti da je najstabilniji bio već spomenuti profil Bez simptoma, a poslije njega su slijedili profili „Somatsko-vegetativni simptomi" i „Simptomi suicidalnosti", dok je najmanje stabilan bio profil Niski simptomi. Kod tog profila je vjerojatnost prelaska u profil „Simptomi suicidalnosti" bila 18,9 %, što je uključivalo n=18 potencijalnih sudionika. U profil „Simptomi suicidalnosti" su također prelazili sudionici iz preostala dva profila. Između t2 i t3 dodatno se može uočiti da su mladići prelazili iz profila „Somatsko-vegetativni simptomi" u profil „Bez simptoma" (23,8 % vjerojatnosti prelaska, n = 30 sudionika) i u

girls. Additionally, between t2 and t3, girls had a 37.2% probability of moving from the "Suicidality Symptoms" profile to the "No Symptoms" profile, which involved an estimated 24 participants.

Among boys, the most stable profile was again the "No Symptoms" profile, followed by the "Somatic-Vegetative Symptoms" and "Suicidality Symptoms" profiles, while the "Low Symptoms" profile was the least stable. In this profile, the probability of transitioning to the "Suicidality Symptoms" profile was 18.9%, which involved 18 potential participants. Participants also transitioned to the "Suicidality Symptoms" profile from the other two profiles. Between p2 and p3, additional transitions were observed of boys moving from the "Somatic-Vegetative Symptoms" profile to the "No Symptoms" profile (23.8% probability, n = 30 participants) and to the "Low Symptoms" profile (16.5% probability, n = 21 participants). A considerable proportion also transitioned from the "Low Symptoms" profile to the "Somatic-Vegeta-

profil „Niski simptomi“ (16,5 % vjerojatnosti prelaska, n = 21 sudionik). Značajan ih je dio prelazio i iz profila „Niski simptomi“ u profil „Somatsko-vegetativni simptomi“ (30 % vjerojatnosti prelaska, n = 29 sudionika).

RASPRAVA

U ovom je istraživanju ispitivano koji profili simptoma depresije postoje kod adolescenata i kako adolescenti prelaze između profila u različitim vremenskim točkama. Model s četiri profila odabran je jer je najbolje pristajao podatcima i bio najsmisleniji u sve tri vremenske točke te se pokazao mjerno invarijantnim. Ovaj model opisuje četiri profila depresivnih simptoma kod adolescenata: „Bez simptoma“, „Niski simptomi“, „Somatsko-vegetativni simptomi“ i „Visoko izraženi simptomi depresije“. Profil „Visoko izraženi simptomi depresije“ „ukazivao je na najozbiljniju kliničku sliku, jer su gotovo svi simptomi imali prosječne vrijednosti iznad 2, što ukazuje na prisutnost simptoma. Adolescenti iz profila „Somatsko-vegetativni simptomi“ imali su poteškoće s umorom, spavanjem i apetitom, no imali su nisku suicidalnost. Vjerojatnosti tranzicija pokazale su da su neki sudionici prelazili iz manje ozbiljnih u ozbiljnije profile između valova. Posebno izraženi bili su prijelazi iz profila „Niski simptomi“ u profil „Tjelesni simptomi te iz profila „Somatsko-vegetativni simptomi“ u „Visoko izraženi simptomi depresije“. Sudionici su također prelazili iz ozbiljnijih u manje ozbiljne profile, primjerice iz profila „Visoko izraženi simptomi depresije“ u profile „Somatsko-vegetativni simptomi“ ili „Niski simptomi“.

Istraživanje je pružilo važne uvide u strukturu i razvoj depresije kod adolescenata. Postojanje profila „Somatsko-vegetativni simptomi“ potvrdilo je raniji nalaz dobiven na kliničkom uzorku. Loadesova i suradnici (18) identificirali su ovaj profil na većem uzorku adolescenata s depresijom. U njihovom istraživanju adolescentive Symptoms” profile (30% probability, n = 29 participants).

DISCUSSION

This study examined which profiles of depression symptoms exist among adolescents and how adolescents transition between the profiles at different time points. The model with four profiles was selected because it had the best fit with the data, and was the most logical at all three time points. It also proved to be measurement invariant. This model describes the following four profiles of depressive symptoms in adolescents: “No Symptoms”, “Low symptoms”, “Somatic-Vegetative Symptoms” and “Severe Depression Symptoms”. The “Severe Depression Symptoms” profile indicated the most severe clinical picture, as the mean value of almost all symptoms was above 2, thus indicating the presence of symptoms. Adolescents who were in the “Somatic-Vegetative Symptoms” profile had problems with fatigue, sleep and appetite, but had low suicidality scores. Transition probabilities revealed that some participants tended to switch from less serious profiles to more serious profiles between the waves. The most notable were switches from the “Low Symptoms” profile to the “Somatic Vegetative Symptoms” profile, and from the “Somatic-Vegetative Symptoms” profile to the “Severe Depression Symptoms” profile. Participants also tended to switch from more serious to less serious profiles, for example from the “Severe Depression Symptoms” profile to the “Somatic-Vegetative Symptoms” or “Low Symptoms” profiles.

This study provided important insights into the structure and development of depression in adolescents. The existence of the “Somatic-Vegetative Symptoms” profile confirmed a previous finding obtained on a clinical sample. Loades et al. (18) identified this profile on a larger sample of adolescents with depression. In their study, adolescents had problems with sleep, appetite and fatigue, but they also experienced psychomotor difficulties, which were not present in the “So-

ti su imali probleme sa spavanjem, apetitom i umorom, ali i psihomotornim teškoćama, koje nisu bile izražene u profilu „Somatsko-vegetativni simptomi“ dobivenom u ovom istraživanju. Razlika bi se mogla objasniti kliničkom prirodom tog uzorka, za razliku od populacijskog uzorka u ovoj studiji koji je obuhvatio širi raspon adolescenata.

Koristeći uzorak iz opće populacije i mjereći simptome depresije i anksioznosti, van Lang i suradnici (34) identificirali su pet različitih klasa adolescenata, uključujući klase s malom vjerojatnošću postojanja simptoma te klasu s izraženim problemima sa spavanjem i prehranom. S druge strane, Ling i suradnici (35) identificirali su samo klase adolescenata temeljene na težini simptoma depresije, poput niske depresije, subkliničke depresije i vjerojatne kliničke depresije. Međutim, oni su dihotomizirali simptome depresije i koristili upitnik koji mjeri širi raspon simptoma od onih prisutnih u DSM-5. Ovo istraživanje doprinosi dosadašnjim ograničenim spoznajama identificiranjem klinički značajne kategorije adolescenata s povišenim somatsko-vegetativnim simptomima. Njihova kvaliteta života zasigurno je narušena, iako možda nisu u potpunosti depresivni te možda ne bi prešli granične vrijednosti na uobičajeno korištenim instrumentima za dijagnosticiranje depresije. Osim suicidalnosti i psihomotornih simptoma koji su znatno niži u ovoj grupi, njihovi ostali simptomi nisu bili daleko od vrijednosti 2. Za neke adolescente ovo bi mogao biti drugačiji oblik depresije koji se može ili ne mora razviti u punoj mjeri. Nadalje, istraživanje je pokazalo da adolescenti obično prelaze u ovaj profil iz profila „Niski simptomi“ te iz njega mogu prijeći u profil „Visoko izraženi simptomi depresije“ i obrnuto. Buduća istraživanja trebala bi ispitati faktore rizika i zaštitne faktore za ove tranzicije te mogućnosti terapijskih intervencija. Loadesova i suradnici (18) pokazali su da adolescenti s depresijom koji imaju izražene tjelesne simptome imaju lošije

matic-Vegetative Symptoms” profile obtained in this study. The difference may be explained by the clinical nature of that sample, as opposed to the general population sample that was used in this study, which captured a broader range of adolescents.

Using a general population sample and measuring the symptoms of depression and anxiety, van Lang et al. (34) identified five different classes of adolescents, including classes with a low probability of exhibiting symptoms, and a class with pronounced sleeping and eating problems. In contrast, Ling et al. (35) identified only classes of adolescents based on depression symptom severity, such as low depression, subthreshold depression and probable clinical depression. However, they dichotomized depression symptoms and used a questionnaire that measures a broader range of symptoms than the ones present in DSM-5. This study contributes to the current limited body of knowledge by identifying a clinically meaningful category of adolescents with elevated somatic-vegetative symptoms. Their quality of life is surely impaired, although they may not be completely depressed and would perhaps not exceed the threshold values of the commonly used depression screening instruments. Besides suicidality and psychomotor symptoms that are markedly lower in this group, their other symptoms were not far from the mean value of 2. For some adolescents this could be a different form of depression that may or may not become full-blown. This study further revealed that adolescents usually transition to this profile from the “Low Symptoms” profile, and that they could transition from this profile to the “Severe Depression Symptoms” profile and vice-versa. Future studies should examine the risk and protective factors for these transitions, as well as the possibilities of therapeutic interventions. Loades et al. (18) observed that depressed adolescents with pronounced physical symptoms have worse treatment outcomes, and Bohman et al. (36) determined that pronounced “Somatic-Vegetative Symptoms” within depression imply longer duration, greater severity of the disorder, and greater

terapijske ishode, a Bohman i suradnici (36) utvrdili su da izraženi „Somatsko-vegetativni simptomi“ unutar depresije upućuju na dulje trajanje, veću ozbiljnost poremećaja i više komorbiditeta. Stoga bi adolescenti koji prelaze iz profila „Somatsko-vegetativni simptomi“ u profil „Visoko izraženi simptomi depresije“ mogli potencijalno patiti od težeg tijeka depresije.

Dobiveno je i da se veličina profila „Visoko izraženi simptomi depresije“ općenito smanjivala tijekom istraživanja. Prethodna istraživanja pokazuju kako prevalencija depresije i teške depresije naglo raste na prijelazu iz djetinjstva u adolescenciju (37). No, sudionici su već na početku istraživanja bili adolescenti pa je moguće da je razina njihove depresije već dosegnula vršnu vrijednost. Neke longitudinalne studije pokazuju da se veličina depresivne skupine adolescenata smanjuje s godinama (38). U svakom slučaju, prosječna dob od 15,5 godina u kojoj su adolescenti bili na početku istraživanja, je vrijeme kada su oni vjerojatno i najranjiviji za razvoj depresivnih poremećaja (39). U toj dobi oni se suočavaju s nizom razvojnih promjena i izazova. Sudionici su u prvom valu bili u prvim razredima srednje škole, a prelazak u srednju školu je značajan i dugotrajniji stresor, koji uključuje drugačije i veće obrazovne zahtjeve, uklapanje u nove vršnjačke grupe, provođenje sve više vremena s vršnjacima, više sukoba s roditeljima i nove dnevne rutine. Često to uključuje i anksioznost povezanu s iščekivanjem tih promjena te snažnije reakcije na stresore povezane s učinkom nego u djetinjstvu (39). Neka istraživanja također pokazuju da u toj dobi dolazi do snažnijih utjecaja gena na razvoj depresije (40) te da dolazi do snažnije aktivacije amigdale nego kasnije u odrasloj dobi, posebno u situacijama poput vršnjačkog odbacivanja (39). Dodatno, pokazuje se i da kognitivne distorzije i neadaptivni stavovi postaju sve stabilniji i nalik na osobine u toj dobi rane adolescencije (39). Svi ovi faktori mogu objasniti najveći udio adolescenata u najtežem profilu upravo u prvom valu istraživanja. U

comorbidity. Therefore, adolescents transitioning from the “Somatic-Vegetative Symptoms” profile to “Severe Depression Symptoms” profile could potentially suffer from a more severe course of depression.

This study also revealed that the size of the “Severe Depression Symptoms” profile generally decreased over the course of the study. Previous studies have shown that the prevalence of depression and severe depression dramatically increases in the transition period from childhood to adolescence (37). However, the participants were already adolescents at the time the study began, and it is possible that their depression levels had already plateaued. Some longitudinal studies have shown that the size of the depressed group of adolescents decreases over the years (38). In any case, the participants’ average age of 15.5 years at the beginning of the study is a period in which they are likely most vulnerable to the development of depressive disorders (39). At this age, they face a range of developmental changes and challenges. The participants were in the first grade of high school during the first wave, and the transition to high school represents a significant and prolonged stressor, which involves different and greater educational demands, adaptation to new peer groups, spending increasing amounts of time with peers, more frequent conflicts with parents, and new daily routines. This also often includes anxiety related to the anticipation of these changes, and stronger reactions to performance-related stressors compared to childhood (39). Moreover, some studies showed that at this age the genetic influences on the development of depression become stronger (40), and that there is greater amygdala activation than later in adulthood, especially in situations such as peer rejection (39). Furthermore, cognitive distortions and maladaptive attitudes become increasingly stable and trait-like during this early stage of adolescence (39). All these factors may explain why the largest proportion of adolescents was observed in the most severe profile precisely in the first wave of the study. In their review of studies that examined the devel-

pregledu istraživanja koja su ispitivala razvojne putanje simptoma depresije u adolescenciji Ellis i suradnici (41) utvrdili su da istraživanja obično identificiraju skupinu koja već u kasnom djetinjstvu pokazuje izražene simptome depresije, ali se oni smanjuju kako adolescencija napreduje. Istraživanja su također identificirala drugu skupinu koja počinje razvijati ozbiljnije simptome depresije na početku adolescencije, a veličina te skupine se povećava kako adolescencija napreduje. Ta je skupina također imala najizraženije komorbiditete.

Ovo istraživanje uzelo je u obzir heterogenost u načinu na koji se depresivni simptomi grupiraju unutar svake vremenske točke i time prikazalo složenost depresije kod adolescenata. Profil „Visoko izraženi simptomi depresije“ općenito se smanjivao po veličini, ali su sudionici također prelazili u njega i izvan njega u druge profile. Može se pretpostaviti da su oni koji su ostali u ovom profilu tijekom svih mjerenja patili od najtežeg i najviše kroničnog oblika depresije. Istraživanja također pokazuju da osobe koje su ranije bile depresivne i dalje imaju narušenu emocionalnu regulaciju, koristeći više disfunkcionalnih, a manje funkcionalnih strategija u usporedbi s osobama u kontrolnoj skupini koje nikada nisu bile depresivne (42). Osobe koje su prethodno doživjele depresivne epizode također mogu pokazivati višu emocionalnu inerciju u odnosu na osobe koje nikad nisu imale depresiju, što znači da su više „zarobljene“ u negativnom afektu i niskoj razini pozitivnog afekta, čak i kada se kontroliraju brojni drugi čimbenici (43). Stoga, čak i oni sudionici koji su prešli iz profila „Visoko izraženi simptomi depresije“ u profil „Niski simptomi“ vjerojatno nisu potpuno psihički zdravi ili „sigurni“ od daljnjih epizoda depresije koje bi mogle imati razoran učinak na njihove odnose, obrazovanje, posao i zdravlje (6,7,9).

U istraživanju su se pokazale i spolne razlike između dobivenih profila simptoma depresije. Djevojke su imale općenito znatno izraženije simptome depresije od mladića, što se vidjelo

opmental trajectories of depression symptoms in adolescence, Ellis et al. (41) found that studies usually identify a group that exhibited severe depression symptoms as early as in late childhood, but they decreased as adolescence progressed. Studies have also identified another group that started developing more serious depression symptoms at the beginning of adolescence, and the size of this group increased as adolescence progressed. This group also had the most pronounced comorbidities.

Our study took into account the heterogeneity of the manner in which depression symptoms group within each time point, and thus presented the complexity of depression in adolescents. The “Severe Depression Symptoms” profile generally decreased in size, but participants also fluctuated in and out of it to other profiles. It could be assumed that those who stayed in this profile during all measurements suffered from the most severe and chronic form of depression. Studies have also shown that previously depressed individuals still showed impaired emotional regulation, using more dysfunctional and fewer functional strategies when compared to the individuals in the control group who had never been depressed (42). Individuals who have previously experienced depressive episodes may also exhibit higher emotional inertia than those who have never gone through depression, meaning that they are more “trapped” in the negative affect and the low positive affect, even after numerous other factors had been controlled for (43). Therefore, even those participants who transitioned from the “Severe Depression Symptoms” profile to the “Low Symptoms” profile are probably not completely mentally healthy or “safe” from experiencing further depression episodes that could have a crushing effect on their relationships, education, work and health (6, 7, 9).

The study also revealed gender differences in the obtained profiles of depression symptoms. Girls generally had markedly more pronounced depressive symptoms than boys, which was also evident in the much higher percentage of girls exceeding the cutoff values for moderately severe

iu višestruko većem postotku djevojaka koje su prelazile granične vrijednosti za umjereno tešku i tešku depresiju na PHQ-9 upitniku u sva tri vala. Ti nalazi su poznati u literaturi i slični su dobivenima u prethodnim istraživanjima (4), a u ovom istraživanju su dobiveni i na probabilističkom uzorku adolescenata u Hrvatskoj. Profili dobiveni na djevojkama i mladićima pokazuju sličnosti s profilima dobivenim na cijelom uzorku. Pojavljuje se profil „Somatsko-vegetativni simptomi", iako taj profil kod mladića ne sadrži simptom 5 „slab apetit ili prekomjerno jedenje". Veća izraženost tog simptoma kod žena poznata je iz prethodnih istraživanja (13). Romansova i suradnici (44) ukazuju na to da bi ta razlika mogla biti posljedica većeg naglaska koji žene zbog društvenih pritisaka stavljaju na ograničavanje unosa kalorija te zbog emocionalnih problema u depresiji kod njih dolazi do relativno većih promjena u apetitu. Za razliku od nalaza dobivenih na cijelom uzorku, u odvojenim analizama po spolu pojavio se i profil „Simptomi suicidalnosti", koji je bio prisutan i kod djevojaka i kod mladića. Taj profil, prema saznanjima autora, još nije zabilježen u prethodnim istraživanjima. Treba, međutim, napomenuti da su analize latentnih profila simptoma depresije rijetko provođene odvojeno na djevojkama i mladićima, a posebno ne na uzorcima adolescenata koji nisu klinički, a u kojima se može i istaknuti ovaj profil. Općenito, prethodna istraživanja na adolescentima pokazuju da su smrti uzrokovane samoubojstvom češće kod mladića, a djevojke se češće samoozljeđuju (9). U svakom slučaju, postojanje ovog profila simptoma depresivnosti potrebno je ozbiljno shvatiti. U ovom istraživanju je pokazano i da u ovaj profil češće prelaze adolescenti iz profila „Somatsko-vegetativni simptomi" kod djevojaka te iz profila „Niski simptomi" kod mladića. Buduća istraživanja trebala bi replicirati postojanje ovog profila na drugim uzorcima djevojaka i mladića. Konačno, profil „Visoko izraženi simptomi depresije", koji je dobiven na cijelom uzorku, bio je prisutan u uzorku djevojaka, ali ne i u uzorku mladića. Osim već spomenute veće

and severe depression in the PHQ-9 across all three waves. These findings are well documented in the literature and are similar to those reported in previous studies (4), while in this study they were obtained on a probabilistic sample of adolescents in Croatia. The profiles obtained for girls and boys showed similarities to those obtained in the full sample. The "Somatic-Vegetative Symptoms" profile appeared, although among boys it did not include symptom 5, "poor appetite or overeating". Greater expression of this symptom in women has been reported in previous studies (13). Romans et al. (44) suggested that this difference could be a consequence of women putting greater emphasis on limiting caloric intake due to social pressures, and due to emotional issues caused by depression, they therefore experience relatively greater changes in appetite. In contrast to the results obtained from the full sample, in the analyses conducted separately by gender, the "Suicidality Symptoms" profile also emerged, which was present among both girls and boys. To the author's knowledge, this profile has not been reported in previous research. It should, however, be noted that latent profile analyses of depressive symptoms have rarely been conducted separately for girls and boys, particularly not in non-clinical adolescent samples where this profile could be highlighted. In general, previous studies in adolescents have shown that deaths by suicide are more common among boys, while girls more often engage in self-injury (9). In any case, the existence of this depressive symptom profile should be taken seriously. This study also showed that adolescents more often transitioned to this profile from the "Somatic-Vegetative Symptoms" profile among girls, and from the "Low Symptoms" profile among boys. Future studies should replicate the existence of this profile in other samples of girls and boys. Finally, the "Severe Depression Symptoms" profile, which was obtained in the full sample, was present in the girls' sample but not in the boys' sample. In addition to the already mentioned greater severity of depressive symptoms among girls, which this profile configura-

izraženosti simptoma depresivnosti kod djevojaka na koju ova konfiguracija profila ukazuje, vjerojatno je i da profil „Simptomi suicidalnosti“ kod mladića sadrži u sebi i neke mladiće koji imaju visoko izražene gotovo sve simptome depresivnosti. Ipak, vjerojatno ih nije bilo dovoljno da učine samostalni profil.

Istraživanje je imalo važne prednosti, ali i određena ograničenja. Prednosti su bile veliki probabilistički uzorak adolescenata, korištenje instrumenta usklađenog s DSM-5 kriterijima i analize prijelaza latentnih profila za ispitivanje heterogenosti simptoma depresije. Ograničenja uključuju samoprocjenu simptoma depresije, što može povećati procijenjenu prevalenciju simptoma depresije (45). Međutim, čak i ako su veličine profila pod povećanim rizikom bile precijenjene, njihova bi struktura trebala biti manje pogođena samoprocjenom simptoma. Uloženi su napori kako bi se osiguralo da adolescenti pažljivo odgovaraju na pitanja uključivanjem pitanja za provjeru pažnje. Ovi su rezultati dobiveni i na uzorku adolescenata specifične dobi iz Zagreba. Budući da je ovo jedno od rijetkih istraživanja koja longitudinalno ispituju heterogenost depresivnih simptoma u adolescenciji, buduća istraživanja trebala bi replicirati ove nalaze na drugim uzorcima adolescenata u drugim državama te osigurati dulje, višegodišnje praćenje kako bi se pratile promjene iz profila u profil. Prikupljanje podataka bilo bi poželjno započeti već u srednjem ili kasnom djetinjstvu, kada se kod mnogih počinju razvijati simptomi depresije (37). S tim je povezana i mogućnost da je na dobivene rezultate o stabilnosti i prijelazima između profila utjecala duljina intervala između ponovljenih mjerenja. Interval od 6 mjeseci između mjerenja često je korišten u longitudinalnim istraživanjima depresije kod adolescenata (npr., 46), kako bi se pratile razvojne promjene u duljim razdobljima također iz praktičnih razloga. Ipak, moguće je da se te promjene događaju i u kraćim vremenskim razmacima između mjerenja te bi buduća istraživanja mogla koristiti intervale od primjerice tri mjeseca ili kraće

tion indicates, it is also likely that the “Suicidality Symptoms” profile among boys included some boys who had highly elevated scores in relation to nearly all depressive symptoms. Nevertheless, there were probably not enough of them to form a separate profile.

There were notable advantages to this study, but also certain limitations. Its strengths included using a large probabilistic sample of adolescents, using an instrument that closely followed the DSM-5 criteria, and using a latent profile transition analysis to examine the heterogeneity of depression symptoms. The limitations of this study include the self-assessment of depression symptoms, which can inflate the estimates of depression symptom prevalence (45). However, even if the sizes of at-risk profiles were inflated, their structure should be less affected by the self-assessment of the symptoms. Efforts were made to ensure that adolescents answered the questions attentively, by including attention check questions. Furthermore, these results were obtained on a sample of adolescents of a specific age in Zagreb. Since this is one of the very few studies that examined heterogeneity of adolescent depression symptoms longitudinally, future studies should replicate these findings on other samples of adolescents in other countries and offer a longer, multi-year follow-up in order to track profile-to-profile transitions. Data collection should preferably start as early as mid- or late childhood, when depression symptoms start to develop in many individuals (37). This is associated with the possibility that the length of the interval between repeated measurements influenced the obtained results in terms of profile stability and transitions between profiles. A six-month interval between measurements has often been used in longitudinal studies on adolescent depression (e.g. 46) so as to track developmental changes over longer periods, and also for practical reasons. However, it is possible that such changes also occur over shorter time intervals between measurements, and future studies could employ intervals of, for example, three months or less, and compare the obtained

te usporediti tako dobivene rezultate s onima dobivenima na duljim vremenskim intervalima.

Nalazi ovog istraživanja mogli bi se praktično primijeniti u osmišljavanju odgovarajućih intervencija usmjerenih na različite profile adolescenata. Primjerice, adolescenti s profilom „Niski simptomi" mogli bi imati koristi od preventivnih sadržaja usmjerenih na unaprjeđenje mentalnog zdravlja, dok bi se adolescenti s profilima „Somatsko-vegetativni simptomi" i „Visoko izraženi simptomi depresije" vjerojatno trebali uključiti u tretman. Sam tretman mogao bi se dodatno prilagoditi tim dvjema skupinama adolescenata. Slično vrijedi i za profil „Simptomi suicidalnosti" koji je dobiven u odvojenim analizama po spolu. Nalazi istraživanja ukazuju da se adolescentska depresija ne razlikuje samo po težini među pojedincima, nego i po obrascima simptoma koji mogu varirati tijekom vremena. Ako se provodi probno testiranje depresije kod adolescenata, trebalo bi razmotriti i postojanje profila „Somatsko-vegetativni simptomi" te također profila „Simptomi suicidalnosti", posebno kod djevojaka, u kojih je taj profil odvojen od profila „Somatsko-vegetativni simptomi" i „Visoko izraženi simptomi depresije". Budući da je pokazano kako je najteži profil „Visoko izraženi simptomi depresije" bio najzastupljeniji u prvom valu istraživanja, intervencije bi najbolje bilo provoditi kad su adolescenti mlađi, po mogućnosti pri prelasku u srednju školu.

ZAKLJUČAK

Adolescenti se grupiraju u različite profile na temelju svojih depresivnih simptoma te su profili „Somatsko-vegetativni simptomi" i „Visoko izraženi simptomi depresije" klinički indikativni. Javlja se i profil „Simptomi suicidalnosti". Profili su pokazali vremensku stabilnost, no dio adolescenata imao je tendenciju prelaska među njima, a klinički indikativni profili bili su obilježeni češćim prijelazima u njih i izvan njih. Nalazi ovog istraživanja trebaju biti replicirani, no koresults with those from longer measurement intervals.

The findings of this study could be practically applied in designing appropriate interventions that could target the different profiles of adolescents. For example, adolescents with the "Low Symptoms" profile could benefit from preventive content aimed at improving mental health, whereas adolescents with "Somatic-Vegetative Symptoms" and "Severe Depression Symptoms" profiles should probably undergo treatment. Treatment itself could be further tailored to these two adolescent groups. The same applies for the "Suicidality Symptoms" profile as well, which was obtained in separate gender-based analyses. The study findings indicate that adolescent depression does not only differ in severity between individuals, but also in symptom patterns that can vary across time. If depression screening were conducted among adolescents, the existence of the "Somatic-Vegetative Symptoms" profile should also be considered, as well as the "Suicidality Symptoms" profile, particularly among girls where this profile was separate from the "Somatic-Vegetative Symptoms" and "Severe Depression Symptoms" profiles. Since it was shown that the most severe profile, the "Severe Depression Symptoms" profile, was most prevalent in the first wave of the study, interventions would be best implemented when adolescents are younger, preferably at the time of transition into high school.

CONCLUSION

The adolescents were grouped into different profiles according to their depression symptoms, and the "Somatic-Vegetative Symptoms" and "Severe Depression Symptoms" profiles were clinically indicative. The "Suicidality Symptoms" profile was also observed. The profiles showed temporal stability, but some adolescents tended to transition between them, and the clinically indicative profiles were characterized by more frequent transitions in and out of them. The findings of this study should be replicated, but they represent a

rak su prema boljem razumijevanju i ublažavanju ozbiljnog problema adolescentske depresije.

step further towards a better understanding of the serious problem of adolescent depression and how it can be alleviated.

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Životni ciljevi studenata zdravstvenih profesija u Hrvatskoj: Probno opservacijsko istraživanje

/ Life Goals of Healthcare Students in Croatia: A Pilot Observational Study

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Razumijevanje životnih ciljeva studenata zdravstvenih profesija ključno je za razvoj obrazovnih programa, jer intrinzične i ekstrinzične vrijednosti oblikuju njihovu profesionalnu motivaciju, otpornost i mentalno zdravlje. Cilj ovog opservacijskog presječnog istraživanja bio je ispitati koje životne ciljeve studenti najviše cijene te kako su sudjelovala 203 studenta (85,7 % žena; 76,4 % u dobi 18–24 godine) pri čemu je većina pohađala prijediplomski studij sestrinstva (69,7 %) i živjela s roditeljima (66,3 %). Korišten je pouzdan upitnik koji mjeri važnost 16 životnih ciljeva u četiri domene: moć, postignuće, intimnost i altruizam. Najviše su vrednovani ciljevi postignuća (M = 4,57), intimnosti (M = 4,54) i altruizma (M = 4,54), dok je moć ocijenjena znatno niže (M = 3,65). Žene su značajno više ocijenile intimnost (p = 0,004) i altruizam (p = 0,004), dok su studenti diplomskih studija više vrednovali postignuće (p = 0,026). Dob i način stanovanja nisu pokazali značajan utjecaj. Rezultati potvrđuju snažnu usmjerenost studenata prema intrinzičnim i prosocijalnim ciljevima, važnima za njihov profesionalni identitet. Uočene razlike upućuju na potrebu individualizirane podrške u obrazovanju s naglaskom na jačanje otpornosti i očuvanje mentalnog zdravlja budućih zdravstvenih djelatnika.

/ Understanding the life goals of healthcare students is crucial for the development of educational programs, as intrinsic and extrinsic values shape their professional motivation, resilience, and mental health. The aim of this cross-sectional observational study was to examine which life goals students value the most. A total of 203 students participated in the survey (85.7% women; 76.4% aged 18–24 years), most of whom were enrolled in undergraduate nursing study programs (69.7%) and lived with their parents (66.3%). A reliable questionnaire was used to assess the importance of 16 life goals across four domains: power, achievement, intimacy, and altruism. The most highly rated goals were achievement (M = 4.57), intimacy (M = 4.54), and altruism (M = 4.54), while power was rated significantly lower (M = 3.65). Women rated intimacy (p = 0.004) and altruism (p = 0.004) substantially higher, while graduate students placed more importance on achievement (p = 0.026). Age and living arrangements were observed to have no significant influence. The results confirmed a strong orientation of students toward intrinsic and prosocial goals, which are essential for their professional identity. The observed differences underscore the importance of individualized support in education, with emphasis on enhancing resilience and preserving the mental health of future healthcare professionals.

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UVOD

U svakodnevnom životu mnogo vremena posvećujemo razmišljanju, biranju i ostvarivanju ciljeva koji su nam važni i koji ujedno daju smisao i strukturu našem životu (1). Ciljevi se u psihologiji ličnosti obično definiraju kao unutarnje reprezentacije željenih budućih stanja koje usmjeravaju čovjekove misli i ponašanje pojedinca te životu daju smisao i značenje (2). Životni ciljevi se općenito kategoriziraju u intrinzične i ekstrinzične tipove. Dok intrinzični životni ciljevi služe za zadovoljenje osnovnih psiholoških potreba za kompetencijom, autonomijom i povezanošću (npr. osobni rast, doprinos zajednici), ekstrinzični životni ciljevi (npr. bogatstvo, slava) imaju za cilj dobivanje vanjskih nagrada i ovise o procjenama drugih (3). Ekstrinzični ciljevi mogu pomoći u ostvarivanju psiholoških potreba, ali ako postanu važniji od intrinzičnih ciljeva i u odnosu na njih neuravnoteženi, vjerojatno će smanjiti osjećaj dobrobiti jer postaju ovisni o okolnostima i zajednici u kojoj žive (1). Kod studenata zdravstvenih profesija, koji se već tijekom obrazovanja susreću s izraženim profesionalnim i etičkim zahtjevima, ravnoteža između intrinzičnih i ekstrinzičnih životnih ciljeva može imati posebno značenje za njihovu osobnu dobrobit, motivaciju i buduću profesionalnu usmjerenost.

Razumijevanje razvojnih razlika u životnim stavovima i ciljevima ključno je za proučava-

INTRODUCTION

In everyday life, we devote a significant amount of time to thinking about, selecting, and pursuing goals that are important to us and that provide structure and meaning to our lives (1). In personality psychology, goals are typically defined as internal representations of desired future states which guide an individual's thoughts and behaviors, providing direction and significance to life (2). Life goals are generally categorized as intrinsic and extrinsic. While intrinsic life goals aim to fulfill the basic psychological needs for competence, autonomy and relatedness (e.g. personal growth, contributing to the community), extrinsic life goals (e.g. wealth, fame) are oriented toward obtaining external rewards and depend on the evaluations of others (3). Extrinsic goals can support the fulfillment of psychological needs, however, if they become more important than intrinsic goals or are unbalanced in relation to them, they are likely to diminish the sense of well-being because they become dependent on external circumstances and the surrounding social context (1). For students in healthcare professions, who are exposed to significant professional and ethical demands already during their education, the balance between intrinsic and extrinsic life goals may be crucial for their personal well-being, motivation, and future professional orientation.

Understanding developmental differences in life attitudes and goals is crucial for studying young

nje mladih u razdoblju rane odrasle dobi, kada mnogi studenti prolaze kroz prijelaz iz adolescencije i nastavljaju oblikovati svoj identitet i vrijednosti. Iz literature proizlazi da postoje spolne i dobne razlike u životnim stavovima adolescenata pri čemu se stariji adolescenti više usmjeravaju na osobnu sreću i rast, dok mlađi više vrednuju obiteljsko blagostanje i društvenu jednakost (3–8). To može biti relevantno za studente jer je rana odrasla dob (otprilike od 18 do 29 godina) obilježena nastavkom formiranja identiteta i životnih ciljeva (9). Ovo razdoblje donosi značajne promjene u autonomiji – poput iseljavanja iz roditeljskog doma, potrebe za planiranjem obrazovanja te suočavanja s financijskim i društvenim izazovima – kao i povećanu razinu stresa tijekom akademskog razvoja (10-12). Suočavanje s novim odgovornostima i izazovima često potiče mlade odrasle na redefiniranje svojih vrijednosti i prioriteta usmjeravajući ih prema ostvarivim i relevantnim ciljevima koji podupiru njihov osobni i profesionalni razvoj.

U ovom kontekstu, razumijevanje formiranja životnih ciljeva kod mladih odraslih, posebno studenata zdravstvenih profesija, ključno je za podršku njihovom akademskom i osobnom napredovanju. Razvoj i usmjerenost životnih ciljeva u ovoj fazi imaju ključnu ulogu u oblikovanju profesionalnog identiteta i motivacije, osobito kod studenata zdravstvenih profesija čiji izbor karijere često proizlazi iz intrinzičnih vrijednosti poput altruizma i želje za pomaganje drugima (13,14). Istraživanja pokazuju da jasno definirani životni ciljevi i svijest o životnoj svrsi značajno doprinose otpornosti i akademskoj ustrajnosti studenata, čak i u izazovnim uvjetima poput pandemije COVID-19, što naglašava važnost podrške razvoju životnih ciljeva tijekom visokog obrazovanja (15). Razumijevanje i poticanje razvoja životnih ciljeva u studentskoj populaciji može imati dugoročne pozitivne učinke na njihovo profesionalno djelovanje i psihosocijalno blagostanje, budući da život bogat svrhom, osobnim rastom i kvalitet-

people in early adulthood, a period during which many students transition from adolescence and continue to form their identities and values. The literature suggests that gender and age differences exist in the life attitudes of adolescents, whereby older adolescents tend to focus more on personal happiness and growth, while younger adolescents place greater value on family well-being and social equality (3–8). This can be relevant for students, since early adulthood (ages approximately between 18 and 29) is marked by the continued development of identity and life goals (9). This period also brings significant changes in autonomy – such as moving out of the parental home, the need to plan one's education, and confronting financial and social challenges – along with increased stress levels during academic development (10-12). Facing new responsibilities and challenges often prompts young adults to redefine their values and priorities, directing them toward achievable and relevant goals that support both personal and professional development.

In this context, understanding the formation of life goals in young adults, especially among healthcare students, is crucial for supporting their academic and personal progress. The development and direction of life goals during this stage play a vital role in shaping professional identity and motivation, especially for students in healthcare professions whose career choices often stem from intrinsic values such as altruism and a desire to help others (13, 14). Studies have shown that clearly defined life goals and a sense of purpose in life significantly contribute to students' resilience and academic persistence, even in challenging circumstances such as the COVID-19 pandemic, highlighting the importance of supporting life goal development in the course of higher education (15). Understanding and encouraging the development of life goals in the student population can have long-term positive effects on their professional performance and psychosocial well-being, since a life

nim međuljudskim odnosima doprinosi boljem mentalnom i fizičkom zdravlju (16). Unatoč tome istraživanja koja se izravno bave razvojem i značenjem životnih ciljeva kod studenata zdravstvenih profesija te njihovom povezanošću sa sociodemografskim čimbenicima i dalje su rijetka što naglašava potrebu za daljnjim proučavanjem ovog područja.

Cilj ovog istraživanja bio je istražiti životne ciljeve studenata zdravstvenih profesija te utjecaj ključnih sociodemografskih čimbenika (spol, dobne skupine, vrste studija i način stanovanja) na važnost koju pridaju različitim životnim ciljevima, s posebnim naglaskom na ciljeve povezane s budućim profesionalnim životom i osobnim vrijednostima. Očekivalo se da će studenti zdravstvenih profesija najviše vrednovati altruističke životne ciljeve vezane uz pomaganje drugima, očuvanje zdravlja i doprinos zajednici, dok će materijalni ciljevi poput bogatstva, slave i društvenog statusa biti manje važni. Nadalje, predviđeno je da će žene i stariji studenti pridavati veću važnost vrijednostima usmjerenima na obitelj, zajednicu i dobrobit drugih u usporedbi s muškarcima i mlađim studentima. Također se pretpostavljalo da će studenti koji žive samostalno (u unajmljenom stanu ili studentskom domu) pokazivati veću orijentaciju prema ciljevima autonomije i postignuća, dok će studenti koji žive s roditeljima više vrednovati ciljeve intimnosti i altruizma.

rich in purpose, personal growth, and quality interpersonal relationships contributes to better mental and physical health (16). Nevertheless, studies directly addressing the development and significance of life goals among healthcare students, as well as their association with sociodemographic factors, remain scarce, thus emphasizing the need for further research in this area.

The aim of this study was to examine the life goals of healthcare students and the influence of key sociodemographic factors (gender, age group, type of study, and living arrangements) on the importance they assign to various life goals, with a particular focus on goals related to their future professional lives and personal values. It was expected that healthcare students would value altruistic life goals such as helping others, preserving health and contributing to the community the most, while material goals such as wealth, fame and social status would be rated as less important. Furthermore, it was hypothesized that female and older students would place greater importance on values related to family, community and the well-being of others compared to male and younger students. It was also assumed that students living independently (in rented apartments or student dormitories) would show a stronger orientation toward goals related to autonomy and achievement, while those living with their parents would place higher value on intimacy and altruism goals.

METODOLOGIJA

Ispitanici

U istraživanju su dobrovoljno sudjelovala ukupno 203 studenta zdravstvenih profesija (n = 203) od 620 upisanih studenata na obje visokoškolske ustanove tijekom akademske godine 2022./2023. (prijediplomski studij sestrinstva i fizioterapije n = 432; diplomski studij sestrinstva n = 188). Sociodemografska struktura ispitanika prikazana je u tablici 1.

METHODOLOGY

Respondents

A total of 203 healthcare students (n = 203) voluntarily participated in the study, out of the 620 students enrolled in both higher education institutions during the academic year 2022/2023 (undergraduate nursing and physiotherapy programs, n = 432; graduate nursing program, n = 188). The sociodemographic structure of the respondents is shown in Table 1.

TABLICA 1. Sociodemografske karakteristike ispitanika
TABLE 1. Sociodemographic characteristics of respondents

Varijabla / Variable	Kategorija / Category	n (%)
Spol / Gender	Ž / Female	163 (85,7)
	M / Male	32 (16,5)
	Ukupno / Total	195 (100)
Dob / Age	18-24 god. / 18-24 years	148 (75,9)
	34-45 god. / 34-45 years	31 (15,9)
	25-34 god. / 25-34 years	16 (8,2)
	Ukupno / Total	195 (100)
Mjesto stanovanja / Place of residence	Roditeljska kuća/stan / Parents' house/apartment	128 (66,3)
	Studentski dom / Student dormitory	34 (17,43)
	Stan (iznajmljen za vrijeme studija) / Apartment (rented during the studies)	32 (16,6)
	Ukupno / Total	194 (100)
Razina studija / Level of study program	Prijediplomski studij sestrinstva / Undergraduate nursing study	136 (69,74)
	Prijediplomski studij fizioterapije / Undergraduate study in physiotherapy	35 (17,9)
	Diplomski studij fizioterapije / Graduate study in physiotherapy	17 (8,8)
	Prijediplomski studij / Undergraduate study	4 (2,1)
	Prijediplomski studij / Undergraduate study	2 (1,0)
	Diplomski studij / Graduate study	1 (0,5)
	Ukupno / Total	195 (100)

Legenda: n = broj ispitanika; % - udio u postotcima
/ Legend: n =number of respondents; % - percentage

Iako se radi o dobrovoljnom uzorku, njegova struktura prema razini studija i godini upisa pruža zadovoljavajući uvid u populaciju studenata zdravstvenih studija na promatranim ustanovama. Kriteriji za uključivanje u istraživanje bili su dob (najmanje 18 godina) te iskustvo prijave i polaganja u najmanje jednom redovnom ispitnom roku, kako bi se osigurao objektivan status studenta. Studenti s teškoćama, poput oštećenja vida ili specifičnih teškoća u učenju (npr. disleksija), nisu bili isključeni iz istraživanja. U skladu s načelima inkluzivne prakse svim je studentima bila ponuđena dodatna podrška u slučaju potrebe, kako bi mogli ravnopravno sudjelovati u ispunjavanju upitnika. Pomoć se pružala individualno, diskretno i na zahtjev, bez utjecaja na anonimnost ili sadržaj odgovora.

Although the sample was voluntary, its structure in terms of study level and year of enrollment provided a satisfactory overview of the population of healthcare students at the observed institutions. The inclusion criteria for the study included age (a minimum of 18 years of age) and experience in registering for and taking exams in at least one regular examination period, in order to ensure an objective student status. Students with disabilities such as visual impairments or specific learning difficulties (e.g. dyslexia) were not excluded from the study. In accordance with inclusive practice principles, all students were offered additional support if needed, in order to ensure equal participation in completing the questionnaire. Assistance was provided individually, discreetly and upon request, without affecting the anonymity or content of their responses.

Instrumenti

Prvi dio istraživačkog instrumenta obuhvaćao je nekoliko osnovnih sociodemografskih varijabli: dob (u godinama), spol (muški/ženski), mjesto stanovanja (s roditeljima, u unajmljenom stanu ili studentskom domu) te naziv i razina studija (prijediplomski/diplomski studij fizioterapije ili sestrinstva). Prikupljena je i varijabla godine studija (prva, druga ili treća) s ciljem omogućavanja dodatnih analiza u budućnosti. Međutim, ova varijabla nije uključena u trenutne analize zbog toga što nije bila dio specifičnih istraživačkih ciljeva ni hipoteza te zbog neravnomjerne raspodjele sudionika po godinama studija što bi potencijalno umanjilo analitičku vrijednost i interpretabilnost rezultata.

Drugi dio istraživačkog instrumenta sadržavao je standardizirani upitnik s kontinuiranim podatcima koji su prikazani u nastavku. Za njihovu primjenu u ovom istraživanju prethodno je dobivena pisana suglasnost autora koji su ih prilagodili hrvatskom jeziku.

Životni ciljevi ispitanika procjenjivani su pomoću upitnika važnosti životnih ciljeva koji se sastoji od ukupno 16 čestica. Upitnik uključuje četiri podljestvice koje obuhvaćaju četiri domene životnih ciljeva: intimnost, altruizam, postignuće i moć. Svaka podljestvica sastoji se od četiri čestice. Ispitanici procjenjuju važnost postizanja svakog od 16 ciljeva na Likertovoj ljestvici od pet stupnjeva, gdje 1 označava „uopće mi nije važno“, a 5 „vrlo mi je važno“.

Ciljevi usmjereni na moć i postignuće odnose se na pokretačke tendencije odnosno djelovanje, dok se ciljevi povezani s intimnošću i altruizmom odnose na sudioničke tendencije i zajedništvo. Ukupni rezultati izračunavaju se za svaku od četiri podljestvice kao prosjek ocjena na pripadajućim česticama. Mogu se izračunati i objedinjeni rezultati za dvije šire kategorije: ciljevi djelovanja (prosjek podljestvica moći i postignuća) i ciljevi zajedništva (prosjek podljestvica intimnosti i altruizma) (2).

Instruments

The first part of the research instrument included several basic sociodemographic variables: age (in years), gender (male/female), place of residence (with parents, in a rented apartment, or a student dormitory), and the name and level of study program (undergraduate/graduate studies in physiotherapy or nursing). Additionally, the variable of year of study (first, second, or third year) was collected to enable further analyses in the future. However, this variable was not included in the current analyses as it was not part of the specific research goals or hypotheses, and due to the uneven distribution of participants across study years, which could have potentially reduced the analytical value and interpretability of the results.

The second part of the research instrument included a standardized questionnaire with continuous data which are presented below. Written permission for their use in this study was obtained in advance from the authors who had adapted it to the Croatian language.

The respondents' life goals were assessed using the Life Goals Importance Questionnaire, which consisted of 16 items in total. The questionnaire included four subscales which encompassed four domains of life goals: intimacy, altruism, achievement and power. Each subscale consisted of four items. The respondents rated the importance of achieving each of the 16 goals on a five-point Likert scale, where 1 indicated "not important at all", and 5 indicated "very important".

Goals related to power and achievement referred to agentic tendencies, i.e. action-oriented goals, while goals relating to intimacy and altruism referred to communal tendencies and togetherness. The total scores were calculated for each of the four subscales by averaging the ratings of their respective items. Additionally, composite scores could be computed for two broader categories: agentic goals (average of power and achievement subscales) and communal goals (average of intimacy and altruism subscales) (2).

Radi provjere unutarnje konzistentnosti ljestvice životnih ciljeva izračunati su Cronbachov alfa i McDonaldov omegakoeficijenti (17). Cronbachov alfa iznosio je 0,867, što upućuje na vrlo dobru do izvrsnu pouzdanost instrumenta, dok je McDonaldova omega ukupno bila 0,788, potvrđujući zadovoljavajuću internu konzistentnost ljestvice. U tablici 2 prikazane su korelacije pojedinih čestica s ukupnim rezultatom ljestvice (*Item-Total* analiza) kao pokazatelj njihovog doprinosa mjerenju zajedničkog konstrukta. Većina čestica pokazuje srednje do visoke korelacije (> 0,40), dok čestice „visok socijalni status“ (0,290) i „dobiti javno priznanje“(0,389) imaju nešto niže vrijednosti i povećale bi alfa koeficijent kada bi bile uklonjene. To može upućivati na slabiji doprinos homogenosti ljestvice ili na djelomično zahvaćanje druge dimenzije (npr. potrebe za statusom). Iako faktorska analiza nije provedena, ovi nalazi ukazuju da instrument ima zadovoljavajuću internu

In order to assess the internal consistency of the life goals scale, both Cronbach's alpha and McDonald's omega coefficients were calculated (17). Cronbach's alpha amounted to 0.867, indicating very good to excellent reliability of the instrument, while McDonald's omega was 0.788, confirming satisfactory internal consistency of the scale. Table 2 presents the item–total analysis indicators of each item's contribution to the overall construct being measured. Most items showed moderate to high correlations (>0.40), while the items "high social status" (0.290) and "gain public recognition" (0.389) had somewhat lower values and would increase the alpha coefficient if removed. This could suggest a weaker contribution to the overall homogeneity of the scale or a partial encompassing of a different dimension (e.g. need for status). Although factor analysis was not conducted, these findings suggest that the instrument had satisfactory internal consistency,

TABLICA 2. Statistike po česticama:*Item-Total* analiza
TABLE 2. Statistics per item: item-total analysis

Čestica / Item	Korelacija s ukupnim rezultatom / Correlation with total score	Cronbachalpha ako se izbaci čestica / Cronbach's alpha if item is omitted
Imati mogućnost utjecaja / Have the opportunity to exert influence	0,415	0,865
Podupirati druge / Support others	0,619	0,855
Imati blisku vezu / Have a close relationship	0,471	0,861
Kontinuirano unaprjeđivati obrazovanje / Continuously improve one's education	0,619	0,855
Biti na prestižnoj poziciji / Be in a prestigious position	0,436	0,865
Ponašati se nesebično / Behave selflessly	0,409	0,864
Pružati naklonost i ljubav / Give affection and love	0,607	0,856
Širiti osobne horizonte / Broaden personal horizons	0,587	0,856
Dobiti javno priznanje / Gain public recognition	0,389	0,870
Činiti dobro / Do good	0,679	0,855
Imati odnose pune povjerenja s drugim ljudima / Have trusting relationships with other people	0,576	0,858
Kontinuirano se poboljšavati / Continuously improve oneself	0,638	0,856
Visok socijalni status / High social status	0,290	0,875
Pomagati ljudima kojima je potrebno / Help people in need	0,655	0,856
Primati naklonost i ljubav / Receive affection and love	0,623	0,855
Razvijati sposobnosti / Develop abilities	0,663	0,855

konzistentnost, a manja odstupanja pojedinih čestica mogu se tumačiti kao pokazatelji širine obuhvaćenog fenomena, a ne nužno kao prijetnja valjanosti.

Postupak

Ovo presječno, opservacijsko istraživanje provedeno je od srpnja do kraja rujna 2023. godine u okruženju dviju visokoškolskih institucija: Hrvatskog katoličkog sveučilišta u Zagrebu i Veleučilišta Ivanić-Grad. Istraživanje je prethodno odobrilo Etičko povjerenstvo Veleučilišta Ivanić-Grad (Klasa: 053-02/23-01/34; Urbroj: 238-10-169/23-04/02) i Etičko povjerenstvo Hrvatskog katoličkog sveučilišta u Zagrebu (Klass: 641-03/23-03/052; Urbroj: 498-15-06-23-03).

Tijekom ispitnih rokova, točnije nakon završetka pisanog dijela ispita, studenti su bili pozvani na sudjelovanje u istraživanju. Nastavnici uključeni u istraživanje, koji su ujedno i autori rada, objasnili su svrhu i metodologiju istraživanja te upoznali studente s kriterijima za sudjelovanje. Posebno je naglašeno da je sudjelovanje u potpunosti dobrovoljno te da odgovori neće biti povezani s konkretnim nastavnim sadržajem, predmetom ni pojedinim nastavnikom. Takav pristup bio je namjerno odabran kako bi se osigurao što reprezentativniji uzorak i potaknulo objektivno samoprocjenjivanje studenata u kontekstu koji nije povezan s ocjenjivanjem. Studenti koji su se odlučili uključiti ispunili su upitnike u neutralnim uvjetima te ih predali u za to predviđenu kutiju. Tijekom informiranja dodatno je naglašeno da su njihovi odgovori anonimni i da neće biti povezani s osobnim identifikacijskim podatcima.

Studenti su obaviješteni da ispunjavanje upitnika traje otprilike 10 do 15 minuta, uz mogućnost dodatnog vremena ili pomoći, a prema individualnoj potrebi. Također im je bilo jasno dano do znanja da ne postoje nikakvi rizici po-

and minor deviations in certain items may be interpreted as indicators of the breadth of the phenomenon measured, rather than necessarily being a threat to its validity.

Procedure

This cross-sectional, observational study was conducted from July to the end of September 2023, at two higher education institutions: the Catholic University of Croatia in Zagreb and the University of Applied Sciences Ivanić-Grad. The study was previously approved by the Ethics Committee of the University of Applied Sciences Ivanić-Grad (Class: 053-02/23-01/34; Reg. No.: 238-10-169/23-04/02) and the Ethics Committee of the Catholic University of Croatia (Class: 641-03/23-03/052; Reg. No.: 498-15-06-23-03).

During the examination periods, specifically after the written portion of exams, students were invited to participate in the study. The teachers involved in the study, who are also the authors of this paper, explained the purpose and methodology of the study, and informed the students of the eligibility criteria. It was explicitly emphasized that participation was entirely voluntary and that responses would not be linked to any specific course content, subject or individual teacher. This approach was deliberately chosen to ensure the most representative sample, and to encourage objective self-assessment by students in a context detached from academic grading. The students who chose to participate completed the questionnaires under neutral conditions and submitted them in a designated collection box. It was additionally emphasized during the briefing that responses were anonymous and would not be linked to any personal identifiers.

The students were informed that completing the questionnaire would take approximately 10 to 15 minutes, with the option for extra time or assistance based on individual needs. They were also clearly told that there were no risks associated with participation in the study,

vezani sa sudjelovanjem u istraživanju te da ga mogu prekinuti u bilo kojem trenutku bez posljedica. Sudionicima je bilo omogućeno preskočiti bilo koje pitanje na koje ne žele odgovoriti.

Podatci sudionika i istraživački instrument prikupljeni su na licu mjesta, u pisanom obliku, u predavaonicama.Istraživanje je provedeno u skladu s etičkim načelima Helsinške deklaracije čime je osigurana zaštita dostojanstva, prava, sigurnosti i dobrobiti svih sudionika. Posebna pažnja posvećena je prikupljanju dobrovoljne i informirane suglasnosti svih sudionika, očuvanju povjerljivosti prikupljenih podataka te minimaliziranju svih mogućih rizika za sudionike tijekom istraživačkog procesa (18).

Statistička analiza

U statističkoj obradi podataka korišten je program IBM SPSS 25. U analizu su uključeni valjani odgovori 194 do 196 ispitanika, ovisno o pojedinoj varijabli, od ukupno 203 sudionika uključenih u istraživanje. Nedostajući podatci, koji su se pojavili u malom opsegu (manje od 5 %), promatrani su kao slučajni (*missing completely at random*) zbog čega nije bila potrebna imputacija. U skladu s prirodom uzorka i dizajnom studije, primijenjen je pristup potpune analize slučajeva (*listwise deletion*).

Radi provjere normalnosti distribucije rezultata za sve četiri ljestvice životnih ciljeva (moć, postignuće, intimnost, altruizam), primijenjen je *Kolmogorov-Smirnov* test. Rezultati su pokazali da neke ljestvice značajno odstupaju od normalne distribucije ($p < 0,001$) čime je opravdana primjena neparametrijskih metoda u daljnjim analizama. Svi su testovi provedeni na razini pouzdanosti od 95 % ($p < 0,05$).

Za ispitivanje razlika u važnosti životnih ciljeva prema spolu i vrsti studija (prijediplomski/diplomski) korišten je *Mann-Whitneyev U* test kao prikladna metoda za usporedbu dvije nezavisne skupine kada distribucija varijable

and that they could withdraw from the study at any time without any consequences. The participants were allowed to skip any question they did not wish to answer.

The participants' data and the research instrument were collected on-site, in written form, and in classroom settings. The study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki, thereby ensuring the protection of the dignity, rights, safety, and well-being of all participants. Special care was taken to obtain voluntary and informed consent from all participants, to maintain the confidentiality of the collected data, and to minimize any potential risks to the participants throughout the research process (18).

Statistical analysis

The data were analyzed using the IBM SPSS Statistics 25 program. Valid responses from 194 to 196 participants, depending on the specific variable, were included in the analysis, out of a total sample of 203 included participants. Missing data, which appeared in a small proportion (less than 5%), were considered missing completely at random (MCAR) and, therefore, no imputation was necessary. Following the study design and nature of the sample, a listwise deletion approach was applied.

In order to assess the normality of distribution of the results for all four life goals subscales (power, achievement, intimacy and altruism), the Kolmogorov-Smirnov test was used. The results indicated that some scales significantly deviated from normal distribution ($p < 0.001$), thereby justifying the use of non-parametric methods in subsequent analyses. All the tests were conducted at a 95% confidence level ($p < 0.05$).

For the purpose of examining the differences in the importance of life goals by gender and type of study program (undergraduate/graduate), the Mann-Whitney U test was applied as an appropriate method for comparing two inde-

odstupa od normalne. Za ispitivanje utjecaja dobne skupine i načina stanovanja na iste varijable korišten je medijan test, koji se koristi za usporedbu više od dvije skupine kada su varijable ordinalne ili ne zadovoljavaju uvjete normalnosti. Svi testovi provedeni su pri razini značajnosti od $p < 0,05$, a rezultati su prikazani u tablicama.

REZULTATI

Analiza deskriptivnih pokazatelja ljestvica životnih ciljeva (tablica 3) pokazuje razlike u važnosti koju ispitanici pridaju pojedinim dimenzijama. Ispitanici su kao najvažnije životne ciljeve ocijenili postignuće (M = 4,57), intimnost (M = 4,54) i altruizam (M = 4,54) pri čemu su ocjene bile visoke i ujednačene, što potvrđuju i medijani od 4,75. Raspodjela rezultata za ove ljestvice nije bila normalna, s izraženom negativnom asimetrijom koja ukazuje na nagomilavanje visokih ocjena. Ljestvica moći dobila je nešto nižu prosječnu ocjenu (M = 3,65) i medijan od 3,75, što ukazuje na umjerenu važnost toga cilja, uz veću varijabilnost odgovora. Deskriptivni pokazatelji upućuju na to da su ispitanici više vrednovali ciljeve vezane uz postignuće, intimnost i altruizam nego ciljeve vezane uz moć. Distribucije rezultata prema ljestvicama pokazuju izraženije naginjanje prema višim vrijednostima za prve tri ljestvice, dok su vrijednosti na ljestvici moći bile niže.

pendent groups when the variable distribution deviates from normality. The median test was used to assess the impact of age group and living arrangements on the same variables, which is suitable for comparing more than two groups when the variables are ordinal or do not meet normality assumptions. All tests were conducted at a significance level of $p < 0.05$, and the results are presented in the tables.

RESULTS

The analysis of descriptive indicators for the life goals scales (Table 3) revealed differences in the importance which the respondents attributed to specific life dimensions. The respondents rated achievement (M = 4.57), intimacy (M = 4.54), and altruism (M = 4.54) as the most important life goals, with consistently high scores confirmed by median values of 4.75. The distribution of scores on these scales was non-normal, with pronounced negative skewness, indicating a clustering of high ratings. The power scale received a somewhat lower average score (M = 3.65) and a median of 3.75, suggesting a moderate level of importance attributed to this goal, accompanied by greater response variability. These descriptive indicators point to the participants placing greater value on goals related to achievement, intimacy and altruism, compared to those related to power. The score distributions for the first three scales leaned more strongly toward higher values, while ratings on the power scale were lower.

TABLICA 3. Deskriptivni pokazatelji raspodjela ljestvica životnih ciljeva
TABLE 3. Descriptive indicators of distribution in life goal scales

Ljestvica / Scale	n	M	SD	C	K-S z	p	Asimetrija / Skewness	Zaobljenost / Kurtosis
Moć / Power	4	3,65	0,87	3,75	0,084	**0,002**	-0,36	-0,15
Postignuće / Achievement	4	4,57	0,56	4,75	0,231	**0,000**	-1,53	1,87
Intimnost / Intimacy	4	4,54	0,56	4,75	0,221	**0,000**	-1,30	1,31
Altruizam / Altruism	4	4,54	0,57	4,75	0,253	**0,000**	-1,20	0,44

Legenda: n – broj čestica; M – aritmetička sredina; SD – standardna devijacija; C – medijan; K-S z – Kolmogorov-Smirnov z; p – statistička značajnost K-S z (normalnost raspodjele); asimetrija – koeficijent asimetrije; zaobljenost – koeficijent zaobljenosti
/ Legend: n – item number; M – arithmetic mean; SD – standard deviation; C – median; K-S z – Kolmogorov-Smirnov z; p – statistical significance K-S z (normality of distribution); skewness – coefficient of skewness; kurtosis – coefficient of kurtosis

U tablici 4 prikazane su razlike u vrednovanju životnih ciljeva između različitih skupina prema spolu i vrsti studija. Na ljestvicama intimnosti (p = 0,004) i altruizma (p = 0,004) postoje statistički značajne razlike između muškaraca i žena. Žene su ove životne ciljeve ocijenile višim prosječnim rangovima (intimnost 101,89; altruizam 101,44) u odnosu na muškarce (intimnost 72,38; altruizam 71,78), što ukazuje da žene pridaju veću važnost tim dimenzijama. Za

The differences in the evaluation of life goals across groups based on gender and type of study program are presented in Table 4. Statistically significant differences were observed between men and women on the intimacy (p = 0.004) and altruism (p = 0.004) scales. Women on average rated these life goals higher (mean ranks: intimacy 101.89; altruism 101.44) than men (intimacy 72.38; altruism 71.78), indicating that women attached more importance to these dimensions.

TABLICA 4. Mann-Whitneyev test, razlika prema spolu i vrsti studija
TABLE 4. Mann-Whitney test, difference according to gender and type of study program

Ljestvica MOĆ / Scale of POWER					
Spol / Gender	**N**	**C**	**Prosječni rang / Average rank**	**z**	**p**
M / Male	32	3,75	94,98	-0,114	0,909
Ž / Female	159	3,75	96,20		
Vrsta studija / Type of study program	**N**	**C**	**Prosječni rang / Average rank**	**z**	**p**
Prijediplomski / Undergraduate	173	3,75	95,60	-0,313	0,754
Diplomski / Graduate	18	3,50	99,86		
Ljestvica POSTIGNUĆE / Scale of ACHIEVEMENT					
Spol / Gender	**N**	**C**	**Prosječni rang / Average rank**	**z**	**p**
M / Male	32	4,75	90,55	-0,643	0,520
Ž / Female	159	4,75	97,10		
Vrsta studija / Type of study program	**N**	**C**	**Prosječni rang / Average rank**	**z**	**p**
Prijediplomski / Undergraduate	174	4,75	93,35	-2,229	**0,026**
Diplomski / Graduate	17	5,00	123,12		
Ljestvica INTIMNOST / Scale of INTIMACY					
Spol / Gender	**N**	**C**	**Prosječni rang / Average rank**	**z**	**p**
M / Male	32	4,50	72,38	-2,849	**0,004**
Ž / Female	161	4,75	101,89		
Vrsta studija / Type of study program	**N**	**C**	**Prosječni rang / Average rank**	**z**	**p**
Prijediplomski / Undergraduate	175	4,75	96,46	-0,439	0,660
Diplomski / Graduate	18	4,88	102,28		
Ljestvica ALTRUIZAM / Scale of ALTRUISM					
Spol / Gender	**N**	**C**	**Prosječni rang / Average rank**	**z**	**p**
M / Male	32	4,50	71,78	-2,890	**0,004**
Ž / Female	160	4,75	101,44		
Vrsta studija / Type of study program	**N**	**C**	**Prosječni rang / Average rank**	**z**	**p**
Prijediplomski / Undergraduate	174	4,75	95,45	-0,850	0,395
Diplomski / Graduate	18	4,88	106,61		

Legenda: N – broj ispitanika; C – medijan; z – vrijednost z; p – statistička značajnost z vrijednosti
/ Legend: N – number of respondents; C – median; z – z-value; p – statistical significance of z-value

skale moći (p = 0,909) i postignuća (p = 0,520) nije pronađena značajna razlika između spolova. Na skali postignuća postoji značajna razlika između studenata prijediplomskih i diplomskih studija (p = 0,026). Studenti diplomskih studija daju znatno više ocjene važnosti postignuća (prosječni rang 123,12; medijan 5,00) u odnosu na studente prijediplomskih studija (prosječni rang 93,35; medijan 4,75). Na ostalim ljestvicama – moć (p = 0,754), intimnost (p = 0,660) i altruizam (p = 0,395) – nisu pronađene značajne razlike između vrsta studija.

Tablica 5 prikazuje analizu razlika u vrednovanju životnih ciljeva s obzirom na dobnu skupinu i način stanovanja ispitanika. Nisu pronađene statistički značajne razlike u vrednovanju životnih ciljeva (moć, postignuće, intimnost i altruizam) niti između različitih dobnih skupina (18–24, 25–34, 35–45 godina), niti između načina stanovanja (roditeljska kuća/stan, iznajmljeni stan, studentski dom). Vrijednosti medijana su vrlo slične unutar svake ljestvice za sve kategorije, a p-vrijednosti su veće od 0,05, što potvrđuje da dobna skupina i način stanovanja ne utječu značajno na važnost koju ispitanici pridaju navedenim životnim ciljevima.

RASPRAVA

Ovo istraživanje među rijetkima je u Hrvatskoj, a ujedno i jedno od rijetkih u međunarodnom kontekstu, koje se bavi ispitivanjem životnih ciljeva studenata zdravstvenih profesija te utjecajem sociodemografskih čimbenika poput spola, dobi, razine studija i načina stanovanja na percepciju važnosti različitih životnih ciljeva. Poseban naglasak stavljen je na ciljeve povezane s budućim profesionalnim životom i osobnim vrijednostima, što dodatno doprinosi razumijevanju motivacijskih obrazaca budućih zdravstvenih djelatnika.

Nalazi istraživanja potvrđuju da životni ciljevi u studentskoj fazi imaju važnu ulogu u oblikovanju

No significant gender differences were found for the power (p = 0.909) and achievement (p = 0.520) scales. A significant difference was observed on the achievement scale between undergraduate and graduate students (p = 0.026). Graduate students assigned higher importance to achievement (mean rank = 123.12; median = 5.00) compared to undergraduate students (mean rank = 93.35; median = 4.75). No significant differences were found between study levels for the power (p = 0.754), intimacy (p = 0.660), and altruism (p = 0.395) scales.

The analysis of differences in the valuation of life goals by age group and living arrangements is presented in Table 5. No statistically significant differences were found across age groups (18–24, 25–34, 35–45 years) or types of housing (living with parents, rented apartment, student dormitory) for any of the life goal scales (power, achievement, intimacy, altruism). Median values were very similar within each scale across all categories, and p-values exceeded 0.05, confirming that age group and living situation did not significantly influence the importance placed by the participants on the assessed life goals.

DISCUSSION

This study is among the few in Croatia, and is also one of the few in the international context, when it comes to examining the life goals of healthcare students, and exploring how sociodemographic factors such as gender, age, study level, and living arrangements influence the perceived importance of various life goals. Special emphasis was placed on goals related to the future professional life and personal values, thus additionally contributing to our understanding of the motivational patterns among aspiring healthcare professionals.

The findings confirmed that the students' life goals during their academic years play an important role in shaping their professional iden-

TABLICA 5. Medijan test, razlika prema dobnoj skupini i načinu stanovanja
TABLE 5. Median test, difference according to age group and type of housing

Ljestvica MOĆ / Scale of POWER					
Dobna skupina / Age group	**N**	**C**	**Hi-kvadrat / Chi-squared test**	**df**	**p**
18 – 24	144	3,75	0,463	2	0,793
25 – 34	16	3,50			
35 – 45	31	3,50			
Način stanovanja / Type of housing	**N**	**C**	**Hi-kvadrat / Chi-squared test**	**df**	**p**
Roditeljska kuća/stan / Parents' house/apartment	125	3,75	1,685	2	0,431
Iznajmljeni stan / Rented apartment	32	3,88			
Studentski dom / Student dormitory	33	3,50			
Ljestvica POSTIGNUĆE / Scale of ACHIEVEMENT					
Dobna skupina / Age group	**N**	**C**	**Hi-kvadrat / Chi-squared test**	**df**	**p**
18 – 24	146	4,75	1,436	2	0,488
25 – 34	16	4,75			
35 – 45	29	4,75			
Način stanovanja / Type of housing	**N**	**C**	**Hi-kvadrat / Chi-squared test**	**df**	**p**
Roditeljska kuća/stan / Parents' house/apartment	125	4,75	2,063	2	0,356
Iznajmljeni stan / Rented apartment	32	5,00			
Studentski dom / Student dormitory	33	4,75			
Ljestvica INTIMNOST / Scale of INTIMACY					
Dobna skupina / Age group	**N**	**C**	**Hi-kvadrat / Chi-squared test**	**df**	**p**
18 – 24	147	4,75	2,337	2	0,311
25 – 34	16	4,88			
35 – 45	30	4,50			
Način stanovanja / Type of housing	**N**	**C**	**Hi-kvadrat / Chi-squared test**	**df**	**p**
Roditeljska kuća/stan / Parents' house/apartment	127	4,75	1,359	2	0,507
Iznajmljeni stan / Rented apartment	32	4,88			
Studentski dom / Student dormitory	33	4,75			
Ljestvica ALTRUIZAM / Scale of ALTRUISM					
Dobna skupina / Age group	**N**	**C**	**Hi-kvadrat / Chi-squared test**	**df**	**p**
18 – 24	147	4,75	2,521	2	0,284
25 – 34	16	4,75			
35 – 45	29	4,75			
Način stanovanja / Type of housing	**N**	**C**	**Hi-kvadrat / Chi-squared test**	**df**	**p**
Roditeljska kuća/stan / Parents' house/apartment	127	4,75	0,359	2	0,836
Iznajmljeni stan / Rented apartment	31	4,75			
Studentski dom / Student dormitory	33	4,75			

Legenda: N – broj ispitanika; C – medijan; df – stupnjevi slobode između/unutar skupina; p – statistička značajnost hi-kvadrata
/ Legend: N – number of respondents; C – median; df – degree of freedom between/within the groups; p – statistical significance of chi-squared test

vanju profesionalnog identiteta i motivacije, osobito kod budućih zdravstvenih djelatnika (13,14). Dominantne vrijednosti poput postignuća, intimnosti i altruizma odražavaju usmjerenost studenata na osobni razvoj, bliske odnose i brigu za druge – dimenzije koje su usklađene s etikom i zahtjevima zdravstvenih profesija. Visoke i ujednačene ocjene te negativna asimetrija na ovim ljestvicama upućuju na snažnu orijentaciju većine studenata prema tim vrijednostima, što može biti pokazatelj njihove unutarnje motivacije za pomaganje ljudima i njegovanje kvalitetnih međuljudskih odnosa, ključnih za buduću karijeru. Slični obrasci vrijednosti potvrđeni suuranijim domaćim i međunarodnim istraživanjima (13,14,19,20), što dodatno podupire interpretaciju da se prosocijalne vrijednosti oblikuju rano u obrazovanju i mogu biti poticaj za razvoj kurikula koji će ih dalje jačati.

S druge strane, relativno niža važnost moći kao životnog cilja, uz veću varijabilnost u odgovorima, uklapa se u očekivanje da će materijalni i statusni ciljevi (bogatstvo, slava, društveni status) biti manje važni od altruističkih. Ovakav obrazac može odražavati profesionalnu sklonost studenata zdravstvenih profesija prema suradnji, skromnosti i služenju zajednici, a ne prema dominaciji ili kontroli. Takvi nalazi dodatno potvrđuju da studenti vrednuju ciljeve koji su u skladu s humanističkim i etičkim principima zdravstvenih struka, što pruža važan uvid u njihovu profesionalnu orijentaciju i temeljne osobne motive. Sličan zaključak donosi i istraživanje provedeno među studentima sestrinstva, primaljstva i fizioterapije u Albaniji, koje je pokazalo da je upravo osjećaj altruizma bio glavni razlog odabira profesije, dok u obrazovnim programima nije bilo sustavnog sadržaja usmjerenog na njegovanje te vrijednosti, budući da razine altruizma nisu varirale tijekom godina studija (13). Struktura profesionalne motivacije pritom ima šire značenje za razvoj zdravstvenih

tity and motivation, especially among future healthcare professionals (13, 14). Dominant values such as achievement, intimacy and altruism reflect the students' orientation toward personal development, close relationships, and caring for others – dimensions that align with the ethical standards and demands of healthcare professions. High and uniform ratings, together with negatively skewed distributions on these scales, indicate a robust orientation of most students toward these values, which can be an indicator of their intrinsic motivation to help others and maintain high-quality interpersonal relationships, which are key to their future careers. Similar value patterns were observed in earlier domestic and international studies (13, 14, 19, 20), further supporting the interpretation that prosocial values are formed early in education, and can be an incentive for the development of curricula that will continue to nurture these values.

On the other hand, the relatively lower importance of power as a life goal and the greater variability in responses align with expectations that materialistic or status-oriented goals (such as wealth, fame and social prestige) will be less prioritized compared to altruistic goals. This pattern may reflect a professional inclination of healthcare students toward cooperation, modesty and serving the community, rather than dominance or control. Such findings further confirm that students value goals consistent with the humanistic and ethical tenets of healthcare professions, offering important insight into their professional orientation and underlying personal motives. A similar conclusion was formed in a study conducted among nursing, midwifery and physiotherapy students in Albania, revealing that altruism was the primary motivation for choosing their profession, despite the fact that the educational programs lacked a systematic curriculum aimed at nurturing this value, since the levels of altruism did not vary across the years of study (13). In this respect, the structure of professional motivation had a wider meaning

profesija – altruizam, koji se često ističe kao ključna motivacija, posebice kod studentica medicine i srodnih područja, mogao bi s njihovim sve većim ulaskom u profesiju dodatno učvrstiti tradicionalne vrijednosti i djelovati kao protuteža trendovima deprofesionalizacije (14).

Dodatno tome, očekivano, uočen je i rodni obrazac u strukturiranju vrijednosti, gdje žene u većoj mjeri nego muškarci vrednuju ciljeve povezane s intimnošću i altruizmom. Ovo je u skladu s brojnim prethodnim nalazima koji sugeriraju da žene u zdravstvenim profesijama pokazuju izraženiju orijentaciju prema brizi, suosjećanju i međuljudskim odnosima (14, 19,20). Ovo potvrđuju i nalazi Gino i suradnika (21), koji ukazuju da žene profesionalni napredak doživljavaju kao manje poželjan cilj, često zbog konflikta s društvenim normama koje favoriziraju skromnost i brigu o drugima. Slično tomu, istraživanje Kusurkara i suradnika (22) pokazalo je da su studentice medicine u većoj mjeri bile motivirane unutarnjim razlozima za učenje, što uključuje dublje razumijevanje i osobnu važnost studija, dok su studenti češće bili vođeni vanjskim pritiscima i formalnim ciljevima. U istom smjeru idu i nalazi novijih istraživanja koja navode da je altruistična motivacija najznačajniji čimbenik pri odabiru karijere, dok su vanjski motivi poput stjecanja diplome, pronalaska posla i pristupa karijernim prilikama sekundarni (14). Nedostatak altruizma pritom se pokazao kao važan rizični čimbenik za razvoj cinizma i smanjene akademske učinkovitosti, a potvrđen je i utjecaj rodnih razlika na motivaciju za odabir karijere i sklonost burnout. Navedeno potvrđuje postojanje rodnih obrazaca u strukturiranju vrijednosti i motivacije pri čemu žene izraženije naglašavaju humanističke i intrinzične ciljeve koji su u skladu s etikom zdravstvenih profesija.

Studenti diplomskih studija značajno više naglašavaju važnost postignuća u odnosu na stu-

in the development of healthcare professions – altruism, which frequently emerges as a key motivation, particularly among female students in medicine and related disciplines could, with increasing female participation in these professions, further reinforce the traditional values and serve as a counterweight against deprofessionalization trends (14).

Unsurprisingly, a clear gender pattern emerged in the structuring of values, where women valued goals related to intimacy and altruism more highly than men. This aligns with numerous prior findings suggesting that women in healthcare professions display stronger orientations toward caring, empathy and interpersonal relationships (14, 19, 20). The findings obtained by Gino et al. (21) supported this as well, indicating that women view professional advancement as less desirable, often due to conflicting societal expectations which favor modesty and caregiving roles. Similarly, the study conducted by Kusurkar et al. (22) found that female medical students were more internally motivated, driven by a deeper understanding and personal significance of their studies, while male students were more often guided by external pressures and formal goals. These trends align with the more recent studies which assert that altruistic motivation is the most influential factor in career choice, while extrinsic motives such as earning a degree, securing employment, or pursuing career prospects, tend to be secondary (14). In that sense, a lack of altruism has also proved to be a risk factor for developing cynicism and decreased academic performance, and gender differences were proved to have an effect on the motivation for choosing a career and susceptibility to burnout. These findings confirmed the existence of gender patterns in the structuring of values and motivation, whereby women more explicitly emphasize humanistic and intrinsic goals that correspond to the ethics of healthcare professions.

Graduate students placed a lot more importance on achievement compared to undergrad-

dente preddiplomskih studija, što može biti povezano s njihovom većom profesionalnom zrelošću i bližim susretom s radnim okruženjem. Iako suprotno našim očekivanjima, nalazi su u skladu s prethodnim istraživanjima koja pokazuju da studenti viših godina studija iskazuju izraženiju profesionalnu orijentaciju i snažniju usmjerenost na ciljeve karijere (23,24). Ovaj obrazac može se povezati s većom profesionalnom zrelošću i bližim susretom s radnim okruženjem, koje pojačava orijentaciju prema konkretnoj karijeri. Istraživanja pokazuju da promjene u orijentaciji na postignuće među studentima zdravstvenih profesija ne odvijaju se linearno, nego se tijekom studija javljaju fluktuacije povezane s osjećajem samoefikasnosti i akademskim uspjehom (25,26) Iako osnovni obrasci ciljeva (usmjerenost na ovladavanje gradivom naspram performativne orijentacije) ostaju relativno stabilni, studenti viših godina studija više naglašavaju profesionalno postignuće, što može biti rezultat rasta njihove samoefikasnosti i sve bližeg ulaska u profesionalno okruženje. Ostale dimenzije životnih ciljeva nisu pokazale značajne razlike ni prema spolu ni prema vrsti studija, što ukazuje na određeni stupanj stabilnosti vrijednosnih prioriteta unutar ove populacije.

Stabilni prioriteti poput altruizma, intimnosti i postignuća studenata kao intrinzične vrijednosti podržavajuće su i mogu smanjiti rizik od izgaranja, međutim, povećani fokus na postignuće može povećati pritisak i rizik od mentalnih problema uključujući emocionalnu iscrpljenost i stres u akademskom i kasnijem razdoblju profesionalne karijere (3,27-31). Prekomjerni stres djeluje na psihološko stanje studenata dovodeći do anksioznosti i depresije. S obzirom da anksioznost privlači manje pozornosti od depresije, ona vrlo često ostane neprepoznata i neliječena (32). Stoga je važno integrirati strategije koje promiču emocionalnu otpornost, empatiju i društvenu podršku u obrazovne programe kako bi se očuvalo mentalno zdravlje studenata, po-

uates, which could potentially be tied to their greater professional maturity and closer proximity to the working environments. Although contrary to our expectations, the findings aligned with previous studies which showed that students in advanced years of study exhibit more pronounced professional orientation and stronger focus on career goals (23, 24). This pattern could be tied to greater professional maturity and a closer encounter with the working environment, which reinforces the orientation towards a specific career. Studies have also shown that shifts in achievement orientation among healthcare students are not linear, but fluctuate during studies in connection with the sense of self-efficacy and academic success (25, 26). Although the foundational goal patterns (such as mastery orientation versus performance orientation) remain relatively stable, students in advanced years of study increasingly emphasized professional achievement, potentially due to rising self-efficacy and closer exposure to professional environments. No significant differences were observed in other life goal dimensions in terms of gender or study type, suggesting a certain degree of stability when it comes to the priorities in values within this population.

Consistency in priorities such as altruism, intimacy, and achievement as intrinsic values can support students and may reduce the risk of burnout. However, an increased focus on achievement can increase the pressure and mental health risks, including emotional exhaustion and stress, throughout academic life and later during the professional career (3, 27–31). Excessive stress can deteriorate students' psychological well-being, leading to anxiety and depression. Since anxiety attracts less attention than depression, it frequently remains overlooked and untreated (32). Therefore, integrating the strategies that enhance emotional resilience, empathy, and social support into educational programs is crucial for preserving the mental

sebice budućih zdravstvenih djelatnika (33) s naglaskom na podršku održivosti zdravstvenog sustava.

Suprotno početnoj pretpostavci, način stanovanja nije pokazao značajan utjecaj na vrednovanje životnih ciljeva. Ovaj nalaz može se objasniti sociokulturnim kontekstom u kojemu se naši studenti nalaze, sličnim mnogim srednjoeuropskim i jugoistočnoeuropskim društvima, gdje kasniji izlazak iz roditeljskog doma nije povezan s manjom autonomijom ili drugačijim životnim vrijednostima, već se često smatra normom i pokazateljem međugeneracijske međuzavisnosti (engl. *interdependence*) (34). To je u skladu s nalazima iz istraživanja koja ističu da osjećaj neovisnosti, odnosno autonomije, nije samo opći koncept, već mora biti izražen na kulturološki prihvatljiv način kako bi imao pozitivan učinak na samopoštovanje i životno zadovoljstvo (35). Slične zaključke donosi i sustavni pregled literature (36), koji pokazuje da profesionalne i etičke vrijednosti studenata zdravstvenih profesija – poput altruizma, postignuća i intimnosti – primarno nastaju unutar akademskog i profesionalnog okruženja, a ne osobnim okolnostima poput načina stanovanja.

Istraživanja usmjerena na prijelaz iz adolescencije u odraslost ukazuju na promjene u važnosti motivacijskih ciljeva tijekom tog razdoblja. Primjerice, studija provedena na srednjoškolcima u Australiji pokazala je da mlađi pridaju veću važnost postignućima i socijalnim ciljevima nego stariji, dok su određeni ciljevi poput statusa i odgovornosti bili podjednako važni u obje skupine (37). Nasuprot tome, naše istraživanje provedeno na studentima zdravstvenih profesija pokazalo je da dobna skupina nije imala značajan utjecaj na važnost koju ispitanici pridaju različitim životnim ciljevima. Naš nalaz usklađuje se s rezultatima austrijskog istraživanja među odraslima, koje je pokazalo da kronološka dob nema značajan utjecaj na orijentacije prema

health of students, especially future healthcare professionals (33), with emphasis on supporting the sustainability of the healthcare system.

Contrary to initial assumptions, living arrangements did not significantly influence the valuation of life goals. This finding could be explained by the sociocultural context which our students find themselves in, similar to many Central and Southeastern European societies, where delayed departure from the parental home is not associated with reduced autonomy or different life values, but is often seen as the norm and an indicator of intergenerational interdependence (34). This aligns with study findings suggesting that the sense independence, i.e. autonomy, is not only a general concept, but must also be expressed in culturally appropriate ways so as to have a positive impact on self-esteem and life satisfaction (35). Similar conclusions were reached upon a systematic literature review as well (36), indicating that the professional and ethical values of healthcare students – such as altruism, achievement and intimacy – primarily develop within the academic and professional settings, rather than through personal circumstances, such as living arrangements.

Studies on the transition from adolescence to adulthood pointed to changes in the importance of motivational goals during this period. For example, an Australian study among high school students found that younger individuals placed more value on achievement and social goals than the older ones, while certain goals such as status and responsibility held similar importance across both age groups (37). In contrast, our study among healthcare students showed no meaningful effect of age groups on the importance attached to various life goals. Our findings align with the results obtained in an Austrian study in the adult population, where chronological age did not have a significant influence on achievement-oriented goals, whereas internal motivational factors, such as orientation towards improvement, strongly

ciljevima postignuća, dok unutarnji motivacijski faktori, poput orijentacije prema usavršavanju, snažno utječu na učenje i zapošljivost (38). Iz toga proizlazi da u razdoblju prelaska u odraslost, osobito u visokoobrazovnim i profesionalnim kontekstima, individualni motivacijski profili i osobne karakteristike vjerojatno imaju veću ulogu u oblikovanju životnih ciljeva nego sama dob. Ova spoznaja važna je za daljnji razvoj obrazovnih i profesionalnih programa usmjerenih na poticanje motivacije i kontinuiranog učenja u različitim fazama razvoja.

Ovo istraživanje je vrijedan doprinos razumijevanju motivacijskih i vrijednosnih orijentacija studenata zdravstvenih profesija u hrvatskom kontekstu. Time se obogaćuje znanstvena literatura o ulozi intrinzičnih vrijednosti u profesionalnom razvoju zdravstvenih djelatnika, uz isticanje važnosti spolnih i obrazovnih razlika. Nalazi mogu poslužiti kao temelj za oblikovanje ciljanih obrazovnih i psihosocijalnih intervencija koje podupiru razvoj altruizma, otpornosti i profesionalne motivacije. U konačnici, time se doprinosi ne samo dobrobiti studenata, već i održivosti zdravstvenog sustava formiranjem etički utemeljenih i psihološki otpornih budućih zdravstvenih djelatnika.

Ograničenja ovog istraživanja proizlaze pojanprije iz njegova probnog dizajna i metodologije. Korištenje samoprocjenskih instrumenata podložno je pristranosti društveno poželjnih odgovora, osobito kada je riječ o prosocijalnim vrijednostima koje se u kulturnom i profesionalnom kontekstu percipiraju kao normativno prihvatljive. Uzorak je bio dobrovoljan i ograničen na dvije visokoškolske ustanove, što ograničava mogućnost generalizacije rezultata na širu populaciju studenata zdravstvenih profesija u Hrvatskoj. Budući da je riječ o presječnom istraživanju, nisu bile moguće procjene razvojnih promjena tijekom vremena niti donošenje uzročno-posljedičnih zaključaka. Dodatno ograničenje je

impacted learning and employability (38). As a result, during the transition to adulthood, especially within higher education and professional contexts, individual motivational profiles and personal characteristics likely play a more significant role in shaping life goals than age alone. This insight carries important implications for the further development of educational and professional programs designed to foster motivation and lifelong learning throughout different stages of development.

In conclusion, this study represents a valuable contribution to the understanding of motivational and value orientations of healthcare students in the Croatian context. It enriches the scientific literature addressing the roles of intrinsic values in the professional development of healthcare professionals, along with highlighting the importance of differences in terms of gender and education. The findings can serve as the basis for designing targeted educational and psychosocial interventions that support the cultivation of altruism, resilience, and professional motivation. Finally, this will benefit not only the wellbeing of students, but also the sustainability of the healthcare system, through the nurturing of ethically grounded and psychologically resilient healthcare professionals.

Limitations of this study primarily stem from its pilot design and methodology. The use of self-report instruments is susceptible to social desirability bias, especially when dealing with prosocial values that are often normatively accepted in cultural and professional contexts. The sample was voluntary and limited to two higher education institutions, restricting the generalizability of the results to the broader population of healthcare students in Croatia. Since the study was of cross-sectional nature, it did not allow for assessing developmental changes over time or inferring causal relationships. Another limitation was in the pronounced gender imbalance, as most participants were female. Although this ratio

izražena rodna neravnoteža – većina sudionika bile su žene. Iako je takav omjer očekivan s obzirom na strukturni profil zdravstvenih studija, može utjecati na ukupne rezultate, osobito u interpretaciji rodno specifičnih obrazaca. S obzirom na to da su upravo ciljevi poput altruizma i intimnosti pokazali statistički značajne razlike prema spolu, visoka zastupljenost ženskih ispitanica može djelomično objasniti izraženu intrinzičnu orijentaciju ukupnog uzorka. Naposljetku, iako je varijabla godine studija inicijalno prikupljena, nije uključena u analizu zbog izražene neravnomjerne raspodjele sudionika po godinama, čime bi se narušila statistička ravnoteža. Unatoč tome, ta varijabla može biti relevantan čimbenik u budućim analizama promjena vrijednosnih prioriteta tijekom akademskog obrazovanja.

Buduća istraživanja trebala bi uključiti longitudinalni dizajn kako bi se pratilo oblikovanje i promjene životnih ciljeva tijekom različitih faza studija čime bi se omogućilo bolje razumijevanje razvojne dinamike vrijednosnih orijentacija. Takav pristup pružio bi uvid u to kako obrazovno i profesionalno okruženje utječu na intrinzičnu motivaciju i profesionalni identitet studenata tijekom vremena. Posebno je važno razmotriti uključivanje varijable godine studija kao analitičkog faktora, uz uravnoteženiji uzorak po spolu i razini studija. Dodatno, preporučuje se kombiniranje kvantitativnih i kvalitativnih metoda. Kvantitativni instrumenti omogućuju analizu većih uzoraka i statističku generalizaciju, dok bi kvalitativni pristupi (npr. polustrukturirani intervjui ili fokusne grupe) pružili dublji uvid u značenja koja studenti pridaju vlastitim ciljevima, razloge njihove stabilnosti ili promjene te kontekstualne utjecaje (npr. osobna iskustva, stres, obrazovni sadržaji). Također bi bilo korisno proširiti istraživanja na različite zdravstvene studije i regije, uključujući više institucija i različite razine obrazovanja, čime bi se povećala

was expected considering the structural profile of health studies, it may influence overall results, particularly in the interpretation of gender-specific patterns. Since statistically significant differences between genders were observed precisely in goals such as altruism and intimacy, the high representation of women could partially explain the pronounced intrinsic orientation in the overall sample. Finally, although the year of study variable was initially collected, it was not included in the analysis due to an expressed imbalance in respondent distribution across study years, which could undermine the statistical balance. Nevertheless, this variable could be a relevant factor in future analyses of changes in value priorities during academic education.

Future studies should adopt longitudinal designs in order to monitor the designs and changes in life goals over the course of different phases of study, which would enable a better understanding of the developmental dynamics of value orientations. Such an approach would provide insight into the manner in which the educational and professional environments affect the intrinsic motivation and professional identities of students over time. It is imperative to consider including the variable of the year of study as an analytical factor, along with a more balanced sample in terms of gender and level of study. Furthermore, combining quantitative and qualitative methods is recommended. Quantitative instruments enable an analysis of bigger samples and statistical generalization, while qualitative approaches (e.g. semi-structured interviews or focus groups) would provide better insight into how students interpret their goals, the reasons for their stability or evolution, and contextual influences (e.g. personal experiences, stress, educational content). Moreover, it would be useful to expand the research across various health disciplines and regions, while encompassing more institutions and different levels of education, which would

vanjska valjanost i obuhvatile moguće kulturološke razlike. U konačnici, integracija nalaza u obrazovne politike i kurikule može doprinijeti razvoju učinkovitijih, personaliziranih i mentalno zdravlju podržavajućih obrazovnih praksi.

ZAKLJUČAK

Rezultati ovog istraživanja ističu važnost razumijevanja životnih ciljeva studenata zdravstvenih profesija kao ključnog aspekta njihovog profesionalnog razvoja, motivacije i mentalnog zdravlja. Dominantne intrinzične vrijednosti poput postignuća, altruizma i intimnosti ukazuju na snažnu usmjerenost studenata prema osobnom rastu i prosocijalnim ciljevima u skladu s etikom zdravstvenih profesija. Istovremeno, identificirane razlike s obzirom na spol i razinu studija ukazuju na potrebu za individualiziranim pristupom u obrazovnim politikama i programima podrške. Uzimajući u obzir rizik od izgaranja i mentalnih teškoća, posebice kod studenata s naglašenim usmjerenjem na postignuće, nalazi pozivaju na integraciju psihološke podrške, promicanje emocionalne otpornosti te razvoj obrazovnih okruženja koja njeguju empatiju, ravnotežu i osobnu dobrobit. Time se ne doprinosi samo kvaliteti obrazovanja, već i održivosti zdravstvenog sustava formiranjem otpornijih i vrijednosno utemeljenih budućih zdravstvenih djelatnika.

ZAHVALA

Zahvaljujemo svim studenticama i studentima koji su sudjelovali u ovom istraživanju te svojim vremenom i iskrenim odgovorima doprinijeli boljem razumijevanju vrijednosnih orijentacija budućih zdravstvenih djelatnika. Njihov doprinos iznimno je važan jer omogućava uvid u motivacijske obrasce i osobne ciljeve koji obli-

improve external validity and account for possible cultural variations. Ultimately, integrating these findings into educational policies and curricula could contribute to the development of more effective and personalized educational practices which would support mental health.

CONCLUSION

The results of this study underscore the significance of understanding the life goals of healthcare students as a crucial aspect of their professional development, motivation, and mental health. The dominant intrinsic values such as achievement, altruism and intimacy suggest a strong orientation among students toward personal growth and prosocial goals, which aligns with the ethics of the healthcare professions. At the same time, the identified differences based on gender and study program levels point to the need for an individualized approach to education policies and support programs. Taking into account the risk of burnout and mental difficulties, especially among students with a strong focus on achievement, the findings call for integrating psychological support, promoting emotional resilience, and developing educational settings that nurture empathy, balance and personal well-being. This would not only contribute to a better quality of education, but also to the sustainability of the healthcare system by forming more resilient and value-based future healthcare professionals.

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kuju profesionalni identitet i spremnost za suočavanje s izazovima u zdravstvenom sustavu. Ovi podatci ne samo da obogaćuju znanstvenu zajednicu, već mogu poslužiti i kao temelj za unaprjeđenje obrazovnih sadržaja i podrške studentima tijekom studija.

and personal goals which shape one's professional identity and readiness to face challenges within the healthcare system. These data not only enrich the scientific community, but can also serve as the basis for improving the educational syllabus and supporting students during their studies.

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Uloga bolesti i samoprocjene zdravlja pri subjektivnom uspješnom starenju

/ The Role of Diseases and Self-Assessed Health in Subjective Successful Ageing

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Ranija istraživanja potvrđuju važnost objektivnog zdravstvenog statusa u kontekstu uspješnog starenja kao sastavnice tog multidimenzionalnog konstrukta ili kao njegovog prediktora ili ishoda. Međutim, nedostaje istraživačkih nalaza o potencijalnoj ulozi subjektivnog zdravstvenog statusa kao medijatora u odnosu objektivnog zdravstvenog stanja i procjene uspješnog starenja. Ovaj se rad bavi ispitivanjem uloge subjektivnog zdravlja i objektivno prisutnih kroničnih bolesti u objašnjenju samoprocjene uspješnog starenja sagledanog kao procesa i kao ishoda. Uzorak uključuje 1006 osoba starije dobi (*M* = 73,7; *SD* = 6,59) iz urbanih i ruralnih sredina u Hrvatskoj. Dobiveni rezultati pokazali su da veći broj bolesti smanjuje vjerojatnost uspješnog starenja, dok je manji broj bolesti povezan s pozitivnijom procjenom vlastitog zdravlja te povoljnijom procjenom uspješnog starenja. Samoprocjena zdravlja djelomično posreduje odnos između kroničnih bolesti i uspješnog starenja, budući da se pokazalo kako kronične bolesti imaju i izravnu i neizravnu vezu sa subjektivnim doživljajem uspješnog starenja putem subjektivnog zdravstvenog statusa. Rezultati potvrđuju da bolji objektivni zdravstveni status doprinosi povoljnijoj samoprocjeni vlastitog procesa starenja, ali je taj učinak puno jači kada se ostvaruje posredstvom subjektivne procjene zdravlja. Ovakvi nalazi ukazuju na ključnu ulogu subjektivnog zdravstvenog statusa u kontekstu utjecaja zdravlja na subjektivno uspješno starenje. Intervencije usmjerene na povoljniju percepciju vlastitog zdravlja mogle bi pridonijeti uspješnijoj percepciji vlastitog procesa starenja čak i pri postojanju objektivnih zdravstvenih problema.

/ Previous studies have confirmed the importance of objective health status in the context of successful ageing (SA), either as a component of this multidimensional construct or as its predictor or outcome. However, there is a lack of research on the potential role of subjective health status as a mediator in the relationship between objective health status and the assessment of successful ageing. This paper examines the role of subjective health and objectively present chronic diseases in explaining the self-assessment of successful ageing, viewed both as a process and as an outcome. The sample included 1006 elderly individuals (M = 73.7; SD = 6.59) from urban and rural areas in Croatia. The obtained results showed that a higher number of diseases reduces the likelihood of successful ageing, while a lower number of diseases is associated with a more positive assessment of one's own health, and a more favorable assessment of successful ageing. Self-assessed health partially mediates the relationship between chronic diseases and successful aging, as chronic diseases have both a direct and indirect connection with the subjective experience of successful ageing through subjective health status. The

results confirmed that better objective health status contributes to a more favorable self-assessment of one's own ageing process, but this effect is also much stronger when achieved through subjective health assessment. These findings indicate a key role of subjective health status in the context of health impacting subjective successful ageing. Interventions aimed at fostering a more favorable perception of one's own health could contribute to a more successful perception of one's own ageing process, even in the presence of objective health problems.

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UVOD

Uspješno starenje (US) multidimenzionalni je konstrukt koji je intenzivno proučavan u posljednja četiri desetljeća kako bi se odgovorilo na pitanje kako osobe mogu uspješno starjeti. US je prvo konceptualiziran kao iskustvo zadovoljstva životom (1), no zatim je dugo taj koncept kao kriterij za US napušten i zamijenjen biomedicinskim. U istraživačkom je smislu upravo biomedicinski model US Rowe i Kahna (2) postao jedan od najutjecajnijih, a prema tom modelu čak su dvije od tri komponente koje ga čine povezane s bolestima odnosno zdravljem. Prva komponenta odnosi se na odsutnost bolesti ili malu vjerojatnost obolijevanja i nastanka funkcionalnog ograničenja, dok druga uključuje održavanje tjelesnog funkcioniranja na visokoj razini. Važnost biomedicinskog modela u povijesti istraživanja uspješnog starenja zorno nam pokazuju podatci dviju provedenih meta-analiza koje su uključivale radove o US objavljene u razdoblju između 1978. i 2005. (3) te između 1979. i 2011. (4), a koje su pokazale da je 90 % radova u prvom razdoblju i 92 %

INTRODUCTION

Successful ageing (SA) is a multidimensional construct that has been intensively studied over the past four decades in order to address the question of how people can age successfully. SA was initially conceptualized as an experience of life satisfaction (1), however for a long time this concept was abandoned as a criterion for SA, and was replaced by a biomedical perspective. In research, the biomedical model of SA by Rowe and Kahn (2) became one of the most influential models, and according to this model, as many as two of its three components are related to diseases, i.e. health. The first component refers to the absence of disease, or a low probability of disease and of developing functional limitations, while the second involves maintaining physical functioning at a high level. The importance of the biomedical model in the history of successful ageing research is clearly demonstrated by data from two meta-analyses, which included papers on SA published between 1978 and 2005 (3), and between 1979 and 2011 (4). These showed that 90% of the papers published in the first period

istraživanja u drugom analiziranom razdoblju koristilo upravo taj model. Takvi podatci ukazuju da se gotovo sva dosadašnja znanja o US temelje na biomedicinskom modelu prema kojem je izostanak bolesti temeljni preduvjet uspješnog starenja.

Ovaj je model utjecao na značajan broj istraživanja ali i doživio kritike jer je ukazivao da US nije moguć u prisutnosti kroničnih bolesti (4,5). Unatoč takvim kritikama i u drugim, kasnije razvijenim modelima neki su se autori usmjeravali samo na bolest kao na jednu od dimenzija US, a drugi na funkcionalnu sposobnost. Tako primjerice u modelu Younga i sur. (6) fiziološka komponenta uključuje samoprocjenu kroničnih bolesti i funkcionalnih ograničenja, dok model Pruchna i sur. (7) sadrži dimenziju tjelesne bolesti i tjelesnog funkcioniranja kao objektivne komponente uspješnosti u procesu starenja. Vahia i sur. (8) razvili su dimenzionalni model US koji uključuje tjelesno/opće funkcioniranje kao jednu od pet postojećih dimenzija.

Značajno drugačiji, ali također vrlo utjecajan model US, koji su razvili Baltes i Baltes (9), ne uključuje bolesti jer su autori naglašavali tezu da su tjelesne promjene i gubitci neizbježni u procesu starenja te da osobe biraju i koriste strategije (selekcije, kompenzacije i optimizacije) kako bi se prilagodile tim promjenama. Uz to, dobro tjelesno funkcioniranje samo po sebi ne isključuje nužno postojanje bolesti s obzirom na činjenicu da neke osobe mogu dobro funkcionirati čak i uz kronične bolesti. Iako je glavni fokus istraživanja u području uspješnog starenja bio kako sačuvati zdravlje i funkcionalnu sposobnost u kasnijem životu, istraživanja konzistentno pokazuju da broj kroničnih bolesti raste u funkciji dobi i da mnoge starije osobe imaju jednu ili više bolesti. Primjerice, istraživanje koje su proveli Boersma i sur. (10) pokazuje da u populaciji starijoj od 65 godina većina osoba (63 %) ima jednu ili dvije kronične bolesti, dok pre-

and 92% of the studies conducted in the second analyzed period used this model. Such data indicate that almost all previous knowledge about SA was based on the biomedical model, according to which the absence of disease is the fundamental prerequisite for successful ageing.

This model influenced a significant number of studies, but was also criticized for suggesting that SA was not possible in the presence of chronic diseases (4, 5). Despite such criticisms, and in other models that were developed later, some authors focused only on disease as one of the dimensions of SA, while others focused on functional ability. For example, in the model of Young et al. (6) the physiological component included the self-assessment of chronic diseases and functional limitations, while the model presented by Pruchno et al. (7) contained the dimensions of physical illness and physical functioning as objective components of success in the ageing process. Vahia et al. (8) developed a dimensional model of SA that included physical/general functioning as one of five existing dimensions.

A significantly different, but also very influential model of SA, was developed by Baltes and Baltes (9), and did not include disease, since the authors emphasized that physical changes and losses were inevitable in the ageing process, and that individuals choose and use strategies (selection, compensation and optimization) to adapt to these changes. In addition, good physical functioning does not necessarily exclude the presence of disease, given that some individuals can function well even with chronic diseases. Although the main focus of research in the field of successful ageing has been on how to preserve health and functional ability in later life, studies have consistently shown that the number of chronic diseases increases with age and that many elderly people suffer from one or more diseases. For example, the study conducted by Boersma et al. (10) showed that in the population of people over the age of 65, the majority (63%) have one or two chronic

ma istraživanju koje je proveo *The National Council on Aging* (NCOA) čak 94,9 % starijih od 60 ima najmanje jednu kroničnu bolest, a 78,7 % dvije ili više (11). Iako su kronične bolesti učestale u starijoj dobi, istraživanja pokazuju da je moguće uspješno starjeti i uz bolesti. Young i sur. (6) smatraju da US može koegzistirati s kroničnim bolestima i stanjima koja proizlaze iz funkcionalnog ograničenja. Takvu tezu podržavaju i istraživanja koja se bave specifičnim bolestima te primjerice pokazuju da kronična osteoartroza ne sprječava starije osobe da uspješno stare (12), kao niti dijabetes (13). Među strategijama koje osobe s dijabetesom koriste nalazi se usporedba sebe s prijateljima i članovima obitelji koji imaju neku kroničnu bolest, kao i skrb o drugima, a sve ih to motivira da ostanu uključeni u život i doprinosi njihovom osjećaju dobrobiti. Stare osobe s kroničnim plućnim bolestima koriste se strategijama selekcije, optimizacije i kompenzacije kako bi se suočile s funkcionalnim padom vlastitih sposobnosti (14). Ako većina osoba starije dobi, kao što to konzistentno pokazuju podatci istraživanja, ima neku bolest, a mnogi od njih uz to uspješno stare, zanimljivo je pitanje može li zdravlje uopće biti dimenzija uspješnog starenja?

Djelomičan odgovor na ovo pitanje daju nam rezultati međunarodnog istraživanja (15) u kojem su autori provjeravali doprinos tjelesnog zdravlja objektivnom i subjektivnom uspješnom starenju te utvrdili da je US povezan s manje kroničnih bolesti i manje problema s dnevnim aktivnostima. Zanimljivo je da nije utvrđena povezanost s tjelesnim disfunkcijama (kao objektivnim mjerama zdravlja) što bi moglo ukazivati na to da je instrument koji je u ovom istraživanju korišten za mjerenje objektivnog US previše restriktivan, odnosno veza US i bolesti ovisi i o upotrijebljenim parametrima zdravlja.

Osim postojanja samog oboljenja, važan je i način na koji osobe percipiraju i procjenjuju

diseases, while according to a study conducted by the National Council on Aging (NCOA), as many as 94.9% of people above 60 have at least one chronic disease, and 78.7% have two or more (11). Although chronic diseases are common in older age, research shows that it is possible to age successfully even in the presence of disease. Young et al. (6) observed that SA could coexist with chronic diseases and conditions resulting from functional limitations. This view was also supported by studies focusing on specific diseases, for example, showing that chronic osteoarthritis does not prevent elderly people from ageing successfully (12), and neither does diabetes (13). Strategies used by individuals with diabetes include comparing themselves with friends and family members who have a chronic disease, as well as caring for others, all of which motivates them to stay involved in life and contributes to their sense of well-being. Elderly people with chronic lung diseases use strategies of selection, optimization and compensation to face the functional decline of their own abilities (14). If the majority of elderly people, as research data consistently show, have some type of disease, and many of them also age successfully, the interesting question arises as to whether health can even be a dimension of successful ageing.

A partial answer to this question was provided by the results of an international study (15) in which the authors examined the contribution of physical health to objective and subjective successful ageing, and found that SA is associated with fewer chronic diseases and fewer problems with daily activities. Interestingly, no connection with physical dysfunctions (as objective measures of health) was established, which could indicate that the instrument used in this study to measure objective SA was too restrictive, i.e. that the connection between SA and disease depends on the health parameters used.

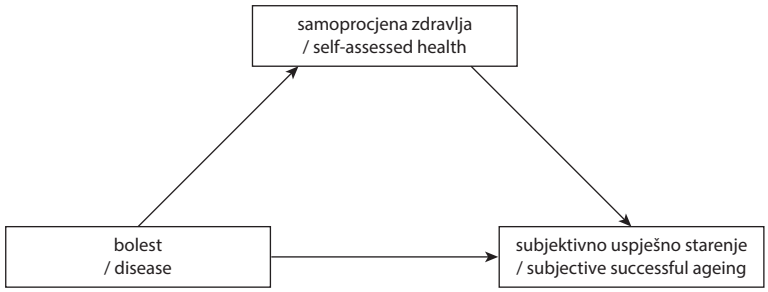
In addition to the presence of a disease itself, the way people perceive and evaluate their

svoje zdravlje koje se mijenja tijekom vremena. Percepcija boljeg zdravlja ima pozitivne učinke na US (16). U ponovljenom križno-sekvencijalnom istraživanju na kohorti starijih ljudi provedenom od 1989. do 2019. (17) utvrđena je pozitivna povezanost između percipiranog zdravlja i uspješnog starenja. Ovaj odnos je zabilježen i u drugim istraživanjima (18,19). Flood (20) smatra da pozitivna percepcija vlastitog zdravlja dovodi do toga da se ljudi osjećaju ugodnije u procesu suočavanja s tjelesnim promjenama koje se javljaju tijekom starenja. Čini se da je dobra percepcija zdravlja kod starijih osoba jedan od čimbenika koji smanjuju rizik od smrtnosti i/ili invaliditeta (16). Percipirano zdravstveno stanje nije samo povezano s uspješnim starenjem, već je i jedan od čimbenika koji nam može pomoći da razumijemo kako ljudi upravljaju svojom bolešću i postižu pozitivne rezultate. Kako bi se zdravlje preoblikovalo kao sastavnica uspješnog starenja Carver i Buchanan (21) sugeriraju da bi budući modeli istraživanja morali uključivati ne-biomedicinske konstrukte poput uključenosti, optimizma, samopoštovanja, otpornosti, duhovnosti.

Iako postoje dokazi o uspješnom starenju kod starijih osoba koje imaju neke kronične bolesti ili invaliditete, nije istražena specifična uloga ili mehanizam kojim bolest utječe na uspješno starenje. Na temelju dosadašnjih spoznaja čini se da uspješno starenje ne ovisi samo o objektivnom zdravstvenom stanju, već i o načinu na koji pojedinci doživljavaju i procjenjuju vlastito zdravlje. Stoga je cilj ovog istraživanja ispitati mogućnost da odnos između bolesti i uspješnog starenja bude djelomično ili u potpunosti određen procjenom subjektivnog zdravstvenog stanja. Pretpostavlja se da veći broj bolesti (slika 1) pridonosi nižoj razini uspješnog starenja, dok pozitivnija samoprocjena zdravlja može ublažiti taj odnos djelujući kao posrednički čimbenik između objektivnog i subjektivnog uspješnog starenja.

health, which changes over time, is also important. The perception of better health has positive effects on successful ageing (16). In a repeated cross-sectional study on a cohort of elderly people, which was conducted from 1989 to 2019 (17), a positive correlation was found between perceived health and successful ageing. This relation has also been observed in other studies (18, 19). Flood (20) believed that a positive perception of one's own health enables people to feel more comfortable in the process of coping with the physical changes that occur during ageing. Good health perceptions in elderly people appear to be among the factors which reduce the risk of mortality and/or disability (16). Perceived health status is not only associated with successful ageing, but is also one of the factors that can help us understand how people manage their disease and achieve positive outcomes. In order to reframe health as a component of successful ageing, Carver and Buchanan (21) suggested that future research models should include non-biomedical constructs such as involvement, optimism, self-esteem, resilience, and spirituality.

Although there is evidence of successful ageing in elderly people suffering from some chronic diseases or disabilities, the specific role or mechanism by which diseases influence successful ageing has not yet been investigated. Based on the current knowledge, it appears that successful ageing depends not only on the objective health status, but also on how individuals experience and assess their own health. Therefore, the aim of this study was to examine the possibility that the relationship between disease and successful ageing is partially or completely determined by the assessment of subjective health status. It is assumed that a higher number of diseases (Figure 1) contributes to a lower level of successful ageing, while a more positive self-assessment of health could moderate this relationship, acting as a mediating factor between objective and subjective successful ageing.



SLIKA 1. Medijacijski model uloge samoprocjene zdravlja u odnosu između bolesti i uspješnog starenja
FIGURE 1. The mediation model of the role of self-assessed health in the correlation between diseases and successful ageing

METODA

Sudionici

Uzorak istraživanja čini 1006 starijih osoba (59,1 % žena i 40,9 % muškaraca) koji su izabrani uz pomoć autora rada, studenata i vanjskih stručnjaka anketara. Prosječna dob uzorka iznosila je *M* = 73,7 (*SD* = 6,59) godina, dok se njihova dob kretala od 65 do 98 godina. Oko dvije trećine ispitanika (62,2 %) bili su u braku i živjeli su u vlastitom domu sa supružnikom (42,6 %), djetetom (21,5 %) ili supružnikom i djetetom (10,8 %), dok je jedna četvrtina u vrijeme provedbe istraživanja živjela sama. Među sudionicima mnogi su bili obrazovani na razini srednje (44,4 %), više ili visoke škole (23 %) i uglavnom su živjeli u gradu (60,9 %).

Instrumenti

Demografskim upitnikom prikupljene su informacije o dobi, spolu, obrazovanju, bračnom statusu, mjestu življenja i uvjetima stanovanja.

Subjektivno uspješno starenje (SUS) mjereno je pomoću dviju grafičkih ljestvica (7) po modelu koji su predložili autori. Od sudionika je traženo da procijene: koliko uspješno su ostarjeli (mjera US kao ishoda) te koliko dobro stare (mjera US kao procesa) pomoću dviju ljestvica samoprocjene od 11 stupnjeva od 0 (*nimalo uspješno / vrlo loše*) do 10 (*izuzetno uspješno / izvrsno*). Ukupan rezultat za samoprocjenu

METHOD

Participants

The research sample comprised a total of 1006 elderly people (59.1% women, 40.9% men) who were recruited with the assistance of the authors, students and external expert interviewers. The mean age of the sample was *M* = 73.7 years (*SD* = 6.59), with ages ranging from 65 to 98 years. Approximately two thirds of the respondents (62.2%) were married and lived in their own home with a spouse (42.6%), child (21.5%), or spouse and child (10.8%), while one quarter lived alone at the time of the study. Many participants had completed secondary school education (44.4%), or college or university (23%), and most of them lived in a city (60.9%).

Instruments

A demographic questionnaire was used to collect the information on age, gender, education, marital status, place of residence, and housing conditions.

Subjective successful aging (SSA) was measured using two graphical scales (7), following the model proposed by the authors. The participants were asked to rate how successfully they had aged (measure of SA as an outcome), and how well they were ageing (measure of SA as a process) using two 11-point self-rating scales ranging from 0 (*not at all successfully/very poorly*) to 10 (*very successfully/excellent*). The total

TABLICA 1. Sociodemografske osobine sudionika (N = 1006)
TABLE 1. Sociodemographic characteristics of the participants (N = 1006)

Varijable / Variables		M (SD)
Dob / Age		73,7 (6,59)
	Kategorija / Category	*N (%)*
Spol / Gender	Muški / Male	411 (40,9)
	Ženski / Female	595 (59,1)
Obrazovanje / Education	Nedovršena osnovna škola / Incomplete elementary school	108 (10,7)
	Završena osnovna škola / Completed elementary school	220 (21,9)
	Srednja škola / High school	446 (44,4)
	Viša ili visoka škola / College or university	231 (23)
Bračni status / Marital status	Samci / Single	22 (2,2)
	U braku / Married	626 (62,2)
	Suživot / Cohabitation	12 (1,2)
	Razvedeni / Divorced	52 (5,2)
	Udovci/udovice / Widowers/widows	294 (29,2)
Mjesto prebivanja / Place of residence	Grad / City	612 (60,9)
	Manji grad ili mjesto / Smaller town or settlement	187 (18,6)
	Selo / Village	206 (20,5)
Uvjeti stanovanja / Housing conditions	Živi sam / Living alone	235 (23,4)
	Živi s bračnim drugom / Living with a spouse	429 (42,6)
	S djecom / With children	216 (21,5)
	S bračnim drugom i djecom / With spouse and children	109 (10,8)
	U široj obitelji / With extended family	17 (1,7)

US izračunat je kao zbroj odgovora na ova dva pitanja.

Samoprocjena zdravlja (SZ) – sudionici su procjenjivali svoje opće zdravlje na jednoj čestici pomoću ljestvice od pet stupnjeva od 1 (*loše*) do 5 (*izvrsno*).

Kronične bolesti – podatci o bolestima prikupljani su tako što smo pitali sudionike: „Da li vam je liječnik ikada rekao da imate: artritis, visoki tlak, bolest srca, rak, dijabetes, osteoporozu, moždani udar i bolest pluća?“. U analizama je korišten ukupan broj bolesti za koje su sudionici potvrdili da od njih boluju.

Postupak

Podatci prikazani u ovom radu prikupljeni su u sklopu dva istraživačka projekta o uspješnom starenju (*Uspješno starenje: Razvoj i validacija integriranog multidimenzionalnog modela*

score for self-rated SA was calculated as the sum of the responses to these two questions.

Self-assessment of health (SAH) – the participants rated their general health on a single item using a five-point scale ranging from 1 (*poor*) to 5 (*excellent*).

Chronic diseases – the data on diseases were collected by asking participants the following questions: “Has your doctor ever told you that you have: arthritis, high blood pressure, heart disease, cancer, diabetes, osteoporosis, stroke, or a lung disease?”. The total number of diseases that the participants confirmed they were suffering from was used in the analyses.

Procedure

The data presented in this paper were collected as part of two research projects on successful ageing: “Successful Ageing: Development and

(IP.01.2021.21, financiranog sredstvima Sveučilišta u Zadru) i *Medijacijski i moderatorski modeli uspješnog starenja* (ffpu-1-2023-3, Sveučilišta Juraj Dobrila u Puli). Svi su podatci prikupljeni putem izravnih intervjua s osobama u njihovim domovima nakon dobivanja usmenog pristanka za sudjelovanje u istraživanju. Pitanja koja su se odnosila na ključne konstrukte u ovome radu bila su ista u oba projekta, a uzorak se širio metodom snježne grude. Postupak prikupljanja podataka odvijao se u razdoblju od studenog 2021. do veljače 2022. na prvom, te od veljače do lipnja 2023. na drugom projektu. Sudionici su kontaktirani individualno i nakon usmenog pristanka dogovaran je termin ispunjavanja upitnika u njihovim domovima. Podatke su prikupljali istraživači na projektu te educirane studentice i studenti. U prvom koraku uključili su svoje djedove i bake, te susjede starije dobi, a zatim su zamolili da ih upute na svoje prijatelje i poznanike koji bi se mogli uključiti u istraživanje. Pri istraživanju sudionicima je osigurana anonimnost i nisu bilježeni osobni podatci o imenu i prezimenu ili bilo koji drugi podatak koji bi omogućio identifikaciju. Svi su upitnici kodirani i pristup tim podatcima imali su isključivo istraživači projektnih timova. Istraživanjem su obuhvaćene starije osobe iz 19 hrvatskih županija, većinom dalmatinskih, Grada Zagreba te Istarske županije. Provedba istraživanja u okviru dvaju projekata odobrena je od nadležnih etičkih povjerenstava dvaju sveučilišta pri kojima su projekti realizirani (Br. Odluka: 114-06/21-01/22 i 2023_29).

Validation of an Integrated Multidimensional Model" (IP.01.2021.21, funded by the University of Zadar) and "Mediation and Moderator Models of Successful Ageing" (ffpu-1-2023-3, Juraj Dobrila University of Pula). All data were collected through direct interviews with individuals in their homes, after obtaining verbal consent to participate in the study. The questions related to the key constructs in this paper were the same in both projects, and the sample was expanded using snowball sampling. The data were collected in the period from November 2021 to February 2022 in the first project, and from February to June 2023 in the second project. The participants were contacted individually and, after providing verbal consent, an appointment was arranged for them to complete the questionnaire in their homes. The data were collected by the project researchers and trained students. In the first step, they included their grandparents and elderly neighbors, after which they asked them to refer their friends and acquaintances who could participate in the study. In the course of the study, the participants were assured anonymity, and no personal information such as name, surname, or any other identifying detail was recorded. All the questionnaires were coded, and only project team researchers had access to these data. The study included elderly people from 19 Croatian counties, mostly Dalmatian counties, the City of Zagreb, and Istria County. The implementation of the study within the framework of the two projects was approved by the relevant Ethics Committees of the two universities where the projects were conducted (Decision numbers: 114-06/21-01/22 and 2023_29).

REZULTATI

Frekvencije osam pojedinih skupina bolesti za cijeli uzorak te posebno za muškarce i žene prikazane su u tablici 2., dok je ukupan broj bolesti prikazan u tablici 3. Hi-kvadrat test pokazao je postojanje značajnih spolnih razlika samo za dvije skupine bolesti i to artritis i osteoporozu

RESULTS

The frequencies of the eight individual groups of diseases for the entire sample, as well as separately for men and women, are presented in Table 2, while the total number of diseases is presented in Table 3. The chi-square test indicated significant gender differences for two disease

TABLICA 2. Učestalost kroničnih bolesti osoba u starijoj životnoj dobi
TABLE 2. The incidence of chronic diseases in elderly people

	M N (%)	Ž / F N (%)	Ukupno / Total %	χ^2 df = 1	p
Hipertenzija / Hypertension	228 (55,5)	365 (61,3)	58,9	3,46	0,06
Kronične bolesti srca / Chronic heart disease	125 (30,4)	165 (27,7)	28,8	0,85	0,36
Osteoporoza / Osteoporosis	21 (5,1)	166 (27,9)	18,6	83,43	0,001
Artritis / Arthritis	47 (11,4)	133 (22,4)	18	20,53	0,001
Dijabetes / Diabetes	69 (18,6)	104 (17,5)	17,2	0,08	0,80
Rak / Cancer	38 (9,2)	44 (7,4)	8,2	1,11	0,29
Kronične plućne bolesti / Chronic lung disease	26 (6,3)	35 (5,9)	6,1	0,08	0,77
Moždani udar / Stroke	22 (5,4)	25 (4,2)	4,7	0,72	0,45

Napomena. M = muški spol; Ž = ženski spol
/ *Note*. M = male; F = female

TABLICA 3. Ukupan broj kroničnih bolesti kod osoba u starijoj životnoj dobi (N = 1006)
TABLE 3. Total number of chronic diseases among the elderly (N = 1006)

Broj kroničnih bolesti / Number of chronic diseases	M %	Ž / F %	Ukupno %
0	22,1	14,6	17,7
1	37,7	33,9	35,5
2	24,1	26,1	25,2
3	11,4	16,3	14,3
4	3,6	6,6	5,4
5	0,5	1,7	1,2
6	0,5	0,7	0,6
7	-	0,2	0,1

Napomena. M = muški spol; Ž = ženski spol
/ *Note*. M = male; F = female

koje su češće kod žena nego muškaraca. Oko jedne trećine osoba starije dobi ima jednu kroničnu bolest, a jedna četvrtina ima dvije. Zanimljivo je da 17,7 % starih osoba nema niti jedno kronično oboljenje, a 21,6 % ima od tri do sedam.

Kako bi se provjerila medijacijska uloga samoprocjene zdravlja u odnosu broja bolesti i uspješnog starenja provedena je medijacijska analiza koristeći dodatak PROCESS macro u programu SPSS IBM (verzija 22; 22). Za provjeru značajnost izravnog učinka, korišten je 95% intervali pouzdanosti (*LLCI* = donja granica intervala; *ULCI* = gornja granica intervala) dobiven na temelju metode samoiz-

groups only, namely arthritis and osteoporosis, which appear more commonly in women than in men. Approximately one third of the elderly had one chronic disease, and one quarter had two. Notably, 17.7% of the elderly had no chronic diseases, while 21.6% had between three and seven.

In order to test the mediating role of the self-assessment of health between the number of diseases and successful ageing, a mediation analysis was conducted using the PROCESS macro plugin in the IBM SPSS program (version 22; 22). In order to assess the significance of the direct effect, a 95% confidence interval was used (LLCI = lower bound of the interval; ULCI = upper bound of the interval), obtained based

vlačenja (engl. *bootsrapping*) s 5000 uzoraka. Preliminarne analize su pokazale da u bazi nedostaje samo 1 podatak sudionika na varijabli obrazovanja. Detektirana je 21 odstupajuća vrijednost ($z < |3{,}29|$): pet vrijednosti na varijabli dob, sedam vrijednosti na varijabli broj bolesti i devet vrijednosti na varijabli uspješno starenje. S obzirom da su sve vrijednosti bile u očekivanom rasponu korištenih varijabli uključene su u daljnju analizu. Deskriptivna statistika korištenih varijabli prikazana je u tablici 4.

Povezanost korištenih varijabli prikazana je u tablici 5. iz koje se može vidjeti da su s kriterijskom varijablom uspješnog starenja (koja je izražena pomoću kompozita US kao procesa i kao ishoda) statistički značajno povezane varijable obrazovanje, broj bolesti i samoprocjena zdravlja, odnosno, više obrazovanje, manji broj bolesti i veća samoprocjena zdravlja povezani su s višom percepcijom uspješ-

on the bootstrapping method with 5000 samples. Preliminary analyses showed that only one participant's data on the education variable was missing in the database. Twenty-one outliers ($z < |3.29|$) were identified: five values in the age variable, seven values in the number of diseases variable, and nine values in the successful ageing variable. Since all values were within the expected range of the variables used, they were included in further analysis. Descriptive statistics for the variables used are presented in Table 4.

The correlation between the variables used is presented in Table 5, showing that the variables of education, number of diseases and self-assessment of health are all statistically significantly correlated with the criterion variable of successful ageing (expressed using the SA composite as a process and as an outcome). Specifically, higher education, fewer diseases, and a higher self-assessment of health are associated with a higher perception of successful ageing.

TABLICA 4. Deskriptivna statistika dobi, broja bolesti, samoprocjene zdravlja i percepcije uspješnog starenja (N = 1006)
TABLE 4. Descriptive statistics of age, number of diseases, self-assessed health, and perception of successful ageing (N = 1006)

Varijabla / Variable	M	SD	min	max
Dob / Age	73,72	6,59	65	98
Broj bolesti / Number of diseases	1,61	1,22	0	7
Samoprocjena zdravlja / Self-assessed health	3,30	0,80	1	5
Uspješno starenje / Successful ageing	14,60	3,61	0	20

TABLICA 5. Povezanost između sociodemografskih i zdravstvenih obilježja, samoprocjene zdravlja i uspješnog starenja (N = 1006)
TABLE 5. Correlation between sociodemographic and health-related characteristics, self-assessed health, and successful ageing (N=1006)

	Spol / Gender	Obrazovanje / Education	Dob / Age	Broj bolesti / Number of diseases	Samoprocjena zdravlja / Self-assessed health	Uspješno starenje / Successful ageing
Spol / Gender	1					
Obrazovanje / Education	-0,25**	1				
Dob / Age	0,01	-0,15**	1			
Broj bolesti / Number of diseases	0,14	-0,20**	0,17**	1		
Samoprocjena zdravlja / Self-assessed health	-0,06	0,21**	-0,17**	-0,42**	1	
Uspješno starenje / Successful ageing	-0,03	0,11**	0,04	-0,25**	0,51**	1

Napomena. **p < 0,01. Za varijable spol i obrazovanje korišten je Spearmanov koeficijent korelacije
/ *Note.* **p < 0.01. Spearman's correlation coefficient was used for the variables of gender and education

nog starenja. Samoprocjena zdravlja također je povezana s brojem bolesti i obrazovanjem, ali i s dobi. Više obrazovanje, mlađa životna dob i manji broj bolesti povezani su s višom samoprocjenom zdravlja. Na kraju, broj bolesti pokazao se povezanim s obrazovanjem i dobi. Niže obrazovanje i viša životna dob povezani su s većim brojem bolesti. S obzirom na značajnu povezanost demografskih varijabli spola, dobi i obrazovanja s nekim od ključnih konstrukata, utjecaj ovih demografskih varijabli je u kasnijoj medijacijskoj analizi kontroliran.

Rezultati analize modela medijacije prikazani su u tablici 6. i na slici 2. Ukupni učinak bro-

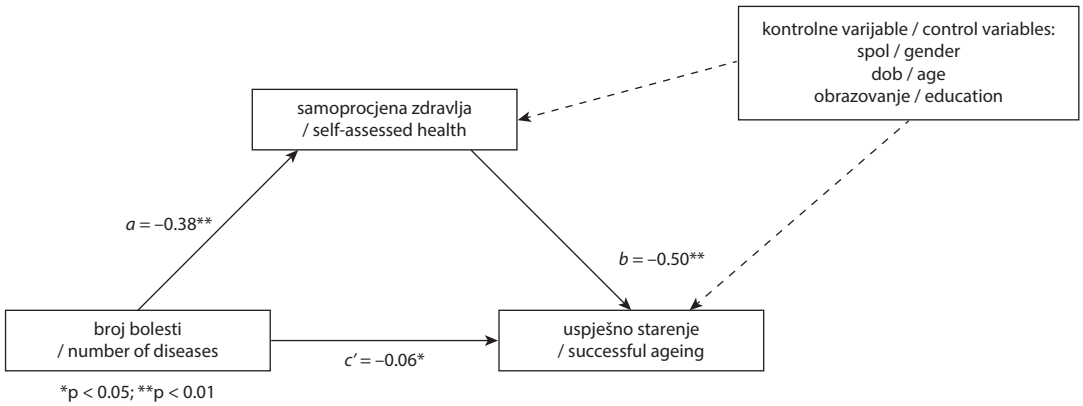
The self-assessment of health is also associated with the number of diseases, education and age. Higher education, younger age, and fewer diseases are associated with a higher self-assessment of health. Finally, the number of diseases was proved to be associated with education and age. Lower education and older age are associated with a higher number of diseases. Given the significant correlation between the demographic variables of gender, age and education with some of the key constructs, the influence of these demographic variables was controlled for in the subsequent mediation analysis.

The results of the mediation model analysis are presented in Table 6 and Figure 2. The overall

TABLICA 6. Testirani medijacijski model odnosa između broja bolesti i percepcije uspješnog starenja (N = 1005)
TABLE 6. Tested mediation model of the association between the number of diseases and the perception of successful ageing (N = 1005)

Prediktori / Predictors	Samoprocjena zdravlja / Self-assessed health			Uspješno starenje / Successful ageing		
	b	*SE*	*p*	*b*	*SE*	*p*
Broj bolesti / Number of diseases	-0,25	0,02	<0,001	- 0,18	0,09	0,04
Samoprocjena zdravlja / Self-assessed health	-	-	-	2,27	0,14	<0,001
Spol / Gender	0,04	0,05	0,43	0,06	0,20	0,76
Dob / Age	-0,01	0,004	0,004	0,07	0,02	<0,001
Obrazovanje / Education	0,11	0,03	<0,001	0,04	0,11	0,70
Konstanta / Constant	4,08	0,30	<0,001	1,81	1,38	0,19
	R^2 = 0,20 F (4, 1000) = 61,19; p <0,01			R^2 = 0,28 F (5, 999) = 76,72; p <0,01		

Napomena. Konstanta = očekivana vrijednost kriterija kada prediktor iznosi nula
/ *Note.* Constant = expected value of the criterion when the predictor is zero



SLIKA 2. Prikaz standardiziranih koeficijenata medijacijskog modela između broja bolesti, samoprocjene zdravlja i uspješnog starenja uz kontrolu spola, dobi i obrazovanja (N = 1005)
FIGURE 2. Presentation of the mediation model standardized coefficients between the number of diseases, self-assessed health and successful ageing while controlling for gender, age and education (N = 1005)

ja bolesti na percepciju uspješnog starenja je značajan (c = –0,75, SE = 0,09; p < 0,01, $LLCI$ = -0,93, $ULCI$ = -0,57), kao i njegovi izravni (c' = –0,18, SE = 0,09; p = 0,04, $LLCI$ = -0,36, $ULCI$ = -0,01) i neizravni učinci (c = –0,56, SE = 0,06, $LLCI$ = -0,68, $ULCI$ = -0,46). Osobe koje su imale veći broj bolesti imale su nižu percepciju uspješnog starenja. Također, osobe s većim brojem bolesti ujedno su slabije procjenjivale svoje zdravlje. Niža samoprocjena zdravlja predviđala je i nižu percepciju uspješnog starenja. Pokazalo se da je neizravni učinak broja bolesti, putem samoprocjene zdravlja, na samoprocjenu uspješnog starenja jači u odnosu na njegov izravni učinak na US.

RASPRAVA

Ovo je istraživanje provedeno na velikom uzorku osoba starije životne dobi koje žive u Hrvatskoj kako bi se ispitao odnos između objektivnog zdravstvenog statusa operacionaliziranog putem broja kroničnih bolesti, subjektivne procjene zdravlja i samoprocjene uspješnog starenja. S obzirom na važnost zdravlja za kvalitetu života jasno je zbog čega se ono pojavljuje kao dimenzija u mnogim modelima uspješnog starenja od onih ranijih (2) do nove generacije multidimenzionalnih i holističkih modela (6,8,23,24,26). U skladu s preporukom (27) da je u istraživanjima potrebno uključiti kako objektivne tako i subjektivne mjere US, odlučili smo u ovom radu operacionalizirati zdravlje na oba načina. Kao objektivnu mjeru zdravlja koristili smo popis osam skupina kroničnih bolesti koje je utvrdio liječnik, dok je kao subjektivna mjera korištena samoprocjena zdravlja. Iako su te dvije mjere značajno povezane, pretpostavlja se da njihova uloga u kontekstu US može biti različita. Narušeno objektivno zdravlje tretira se često kao pokazatelj manje uspješnog starenja unutar multidimenzionalnih modela US (6,8,23-25) ili kao negativni prediktor ili korelat uspješnog starenja. Međutim, pokazalo se

effect of the number of diseases on the perception of successful ageing is significant (c = –0.75, SE = 0.09; p < 0.01, $LLCI$ = -0.93, $ULCI$ = -0.57), as are its direct (c' = –0.18, SE = 0.09; p = 0.04, $LLCI$ = -0.36, $ULCI$ = -0.01) and indirect effects (c = –0.56, SE = 0.06, $LLCI$ = -0.68, $ULCI$ = -0.46). In individuals with a higher number of diseases the perception of successful ageing was lower. In addition, people with a higher number of diseases also rated their health more poorly. Lower self-assessed health predicted lower perceptions of successful ageing. The indirect effect of the number of diseases, via self-assessed health, on self-assessed successful ageing was shown to be stronger than its direct effect on successful ageing.

DISCUSSION

This study was conducted on a large sample of elderly people living in Croatia in order to examine the correlation between objective health status operationalized by the number of chronic diseases, subjective health assessment, and self-assessment of successful ageing. Given the importance of health for the quality of life, it is clear why it appears as a dimension in many models of successful ageing, from the earlier ones (2) to the new generation of multidimensional and holistic models (6, 8, 23, 24, 26). In line with the recommendation (27) that both objective and subjective measures of SA should be included in studies, we chose to operationalize health in both ways in this paper. As an objective measure of health, we used a list of eight groups of chronic conditions, as determined by a physician, while self-assessed health was used as a subjective measure. Although these two measures are significantly correlated, it was assumed that their roles in the context of SA may differ. Impaired objective health is often treated as an indicator of less successful ageing within the multidimensional models of SA (6, 8, 23-25), or as a negative predictor or correlate

kako je i subjektivni zdravstveni status značajno povezan s US (16-19). Dok objektivni zdravstveni status može izravno utjecati na proces uspješnog starenja, veza subjektivnog zdravstvenog statusa s uspješnim starenjem je potencijalno složenija. Samoprocjena zdravlja može određivati način na koji se osoba suočava s tjelesnim promjenama u procesu starenja (20), ali i s bolestima te pristupom liječenju, što se može odraziti na ishode bolesti i na uspješno starenje u širem smislu.

Prethodna istraživanja pokazuju da 63 % populacije u dobi od 65 i stariji ima dvije ili više kroničnih bolesti, dok između 6,8 % i 16,1 % (ovisno o odabranom uzorku) nema niti jedno kronično oboljenje (10). Rezultati ovog istraživanja su vrlo slični s obzirom da se kreću u tom rasponu te je 74,8 % sudionika u ovom istraživanju imalo dvije ili više kroničnih bolesti, a 17,7 % niti jednu.

Značajan problem u većini modela i istraživanja u ovom području vezan je uz fizičko funkcioniranje i/ili odsutnost bolesti koja se smatra jednom od dimenzija US pri čemu je istovremeno tretiranje iste varijable (bolesti) kao dijela skupine prediktora (ili determinanti) i dijela kriterija (u vezi s ishodom) logička pogreška. Pokušavajući premostiti ovaj problem odlučili smo koristiti subjektivne mjere odnosno samoprocjenu zdravlja kao medijatora, te objektivne mjere zdravlja poput broja bolesti koje su potvrdili liječnici kao prediktora. Smatrali smo uz to nužnim koristiti i samoprocjenu uspješnog starenja kao kriterija kako bismo uklonili prethodno navedeni problem dvostrukog tretiranja bolesti kao prediktora i kriterija. S obzirom da se do danas niti jedan model US nije nametnuo kao standard koristili smo dio dvofaktorskog modela (7) koji uključuje subjektivnu i objektivnu komponentu, ali mjerili smo samo subjektivnu komponentu US pri čemu smo je izrazili kompozitom US kao procesa i ishoda. Zahvaćanje subjektivne percepcije starijih osoba smatramo ključnim,

of successful ageing. However, subjective health status has also been shown to be significantly associated with SA (16-19). While objective health status can directly influence the process of successful ageing, the correlation of subjective health status with successful ageing is potentially more complex. Self-assessed health can determine how a person copes with physical changes in the ageing process (20), but also with diseases and the approach to their treatment, which can affect both the disease outcomes and successful ageing in a broader context.

Previous studies have shown that 63% of the population aged 65 and above suffers from two or more chronic diseases, while between 6.8% and 16.1% (depending on the sample) have no chronic conditions (10). The results of this study are very similar given that they fall within this range, with 74.8% of the study participants having two or more chronic diseases, and 17.7% having none.

A significant problem in most models and studies in this field relates to physical functioning and/or the absence of disease as one of the dimensions of SA, whereby simultaneously treating the same variable (disease) as both a predictor (or determinant) and a criterion (related to the outcome) represents a logical error. In an attempt to overcome this issue, we decided to use subjective measures, i.e. self-assessed health, as mediators, and objective measures of health, such as the number of diseases confirmed by doctors, as predictors. We also considered it necessary to use self-assessment of successful ageing as a criterion to eliminate the aforementioned problem of dual treatment of disease as both a predictor and a criterion. Since no model of SA has been established as a standard to date, we used a part of the two-factor model (7) which includes subjective and objective components, but measured only the subjective component of SA, where we expressed it as a composite of SA as a process and an outcome. We consider capturing the subjective percep-

bez obzira na tzv. objektivne pokazatelje US kao što su fizičko zdravlje ili funkcionalni status. Način na koji sama osoba procjenjuje svoj proces starenja ili njegov ishod u određenoj vremenskoj točki izuzetno je važan jer može utjecati na ego integritet, odnosno doživljaj smisla cjelokupnog života te na prihvaćanje prošlosti sa svim njenim pozitivnim i negativnim stranama, te na mentalno zdravlje i dobrobit starijih osoba. Ranija istraživanja potvrđuju ovu povezanost uspješnog starenja i ego integriteta i dobrobiti starijih osoba (29-31).

Sudionici ovog istraživanja svoje zdravlje doživljavali su kao prosječno ili dobro (tablica 4.) pri čemu moramo još jednom napomenuti da je većina imala jednu ili više kroničnih bolesti, a viša je samoprocjena zdravlja povezana s mlađom dobi, višim obrazovanjem, s manje bolesti i uspješnijim starenjem. U prethodnim istraživanjima subjektivni zdravstveni status također se pojavljuje kao varijabla povezana s uspješnim starenjem te kao jedan od čimbenika koji pojašnjavaju kako ljudi upravljaju svojom bolešću i postižu dobre ishode (32,33). Moguće je da se osobe koje svoje zdravlje percipiraju na pozitivan način lakše nose s bolestima i terapijskim postupcima, optimističnije pristupaju procesu liječenja pa su vjerojatno stoga kod njih i sami ishodi liječenja pozitivniji. Pri jačanju percepcije vlastitog zdravlja, koja je ključna za motivaciju i dobrobit osoba starije dobi, mogu pomoći ciljane intervencije koje poboljšavaju objektivne ishode, poput kognitivnog treninga, digitalne pismenosti, jačanja socijalnih mreža te rada na pozitivnim uvjerenjima o starenju.

Provjera ispitanog medijacijskog modela pokazuje da bolesti imaju i izravan i neizravan učinak, putem samoprocjene zdravlja, na samopercepciju uspješnog starenja. Međutim, neizravni efekt putem subjektivnog zdravstvenog statusa pokazao se značajno jačim. Dakle, iako bolje objektivno zdravlje, tj. ma-

tion of elderly people to be crucial, regardless of the so-called objective indicators of SA such as physical health or functional status. The manner in which an individual evaluates their ageing process or its outcome at a certain point in time is extremely important because it can affect ego integrity, i.e. the overall experience of meaning in life, the acceptance of the past with all its positive and negative aspects, as well as the mental health and well-being of elderly people. Previous studies have confirmed this connection between successful ageing, ego integrity, and well-being in elderly people (29-31).

The participants in this study perceived their health as average or good (Table 4), and it should be noted again that the majority suffered from one or more chronic diseases. Higher self-assessed health was associated with younger age, higher education, fewer diseases, and more successful ageing. In previous studies, subjective health status also emerged as a variable associated with successful ageing, as well as one of the factors explaining how people manage their disease and achieve good outcomes (32, 33). It is possible that individuals who perceive their health positively cope more easily with diseases and therapeutic procedures, approach the treatment process more optimistically, and consequently probably have more positive treatment outcomes. When it comes to strengthening the perception of one's own health, which is crucial for the motivation and well-being of elderly people, targeted interventions that improve objective outcomes can be helpful, such as cognitive training, digital literacy, strengthening of social networks, and fostering positive beliefs about ageing.

The validation of the mediation model examined indicates that, through self-assessed health, diseases exert both direct and indirect effects on the self-perception of successful ageing. However, the indirect effect through subjective health status was proved to be significantly stronger. Therefore, while better objective health, i.e. having fewer chronic diseases, directly con-

nji broj kroničnih bolesti, i izravno doprinosi povoljnijoj samoprocjeni US, čini se da veću važnost za procjenu osobnog procesa starenja ima procjena vlastitog zdravstvenog stanja nego objektivno zdravstveno stanje samo po sebi. Razumije se da je ta procjena povoljnija ako je i objektivno zdravstveno stanje povoljnije. No postoji i mogućnost da će povoljnija percepcija vlastitog zdravlja, čak i pri postojanju ozbiljnih kroničnih stanja pridonijeti povoljnoj samoprocjeni vlastitog starenja. Pozitivnija samoprocjena vlastitog zdravlja može osobama pomoći pri suočavanju s bolestima i poticati pozitivan ishod. Rezultati našeg istraživanja svoju primjenjivost nalaze u radu zdravstvenih djelatnika sa starijim osobama koji u osobnoj interakciji savjetima i komentarima mogu podržati i utjecati na pozitivnu procjenu zdravlja te na taj način maksimizirati terapijske efekte kod starijih osoba s kroničnim bolestima.

Jedno od ograničenja ovog istraživanja svakako se nalazi u činjenici da nije populacijsko istraživanje, pa rezultati nisu reprezentativni za opću populaciju osoba starije životne dobi u Republici Hrvatskoj. S obzirom da je uzorkovanje provedeno metodom snježne grude, moguće je da su neki sudionici upućivali istraživače na one poznanike svoje dobi za koje su pretpostavljali da mogu biti dobar primjer uspješnog starenja, što je moglo dovesti do sustavnog iskrivljavanja rezultata o US u pozitivnom smjeru. Iako smo svjesni činjenice da prvi sudionici mogu imati utjecaja na one kasnije selektirane (34), ova je metoda izabrana jer omogućuje provođenje istraživanja koje bi inače zbog nedostatka sudionika bilo nemoguće provesti, a upravo su starije osobe pripadnici populacije koja je teže dostupna, nevidljiva ili anonimna. Nadalje, transverzalna priroda našeg istraživanja ne dopušta nam zaključivanje o uzročno-posljedičnim vezama među ispitanim varijablama. Također smo svjesni i toga da su korištene mjere jednostavne samoprocjene

tributes to a more favorable self-assessment of successful ageing, it appears that the evaluation of one's own health status is more important for assessing the personal ageing process than the objective health status itself. Naturally, this assessment is more positive if the objective health status is better as well. However, it is also possible that a more positive perception of one's own health, even in the presence of serious chronic conditions, contributes to a favorable self-assessment of ageing. A more positive self-assessment of health can help individuals cope with their diseases and promote positive outcomes. The results of our study are applicable to the work of healthcare professionals taking care of elderly people, who through personal interaction, advice and comments, can support and influence a positive health assessment and thus maximize the therapeutic effects in elderly people with chronic diseases.

One of the limitations of this study certainly lies in the fact that it is not a population-based study, therefore the results are not representative of the general population of elderly people in the Republic of Croatia. Considering that sampling was conducted using the snowball method, it is possible that some participants referred the researchers to acquaintances of their own age whom they considered good examples of successful ageing, which could have systematically biased the results on SA in a positive direction. Although we are aware that the initial participants may have influenced those selected later (34), this method was chosen because it enables research that would otherwise be impossible due to a lack of participants, particularly as elderly people are a population that is harder to reach, invisible, or anonymous. Furthermore, the cross-sectional nature of our study did not allow us to draw conclusions about cause-and-effect relationships between the variables examined. We are also aware that the measures used were simple self-assessments (often with only one item), which should be replaced in future

(često samo s jednom česticom) koje bi u budućim istraživanjima trebalo zamijeniti pouzdanijim ljestvicama i opetovanim mjerenjima. Pri tome smatramo važnim napomenuti kako su Cosco i sur. (4) zamijetili da je niži rezultat na mjerama US prisutan u onim istraživanjima koja su koristila složene koncepte, pa u tom kontekstu valja sagledati i rezultate ovoga istraživanja u kojem je korištena jednostavna mjera samoprocjene. Prisutnost kroničnih bolesti ili njihov broj u starijoj životnoj dobi samo je jedna od objektivnih mjera bolesti koju smo koristili za potrebe naših projekata. Iako je ta mjera često korištena u istraživanjima na ovom području, možemo ju uvrstiti u metodološki nedostatak, te bi u budućim istraživanjima bilo korisno takve podatke temeljiti na liječničkoj dokumentaciji. Uz to, trebalo bi razmotriti i korištenje mjera kao što su: ograničenja u obavljanju nekih tjelesnih radnji (stajanje, penjanje uz stepenice, saginjanje, hodanje...); kronični problemi povezani s bolešću (poput boli i nesanice); funkcionalnu sposobnost koja uključuju sposobnost obavljanja svakodnevnih aktivnosti (primjerice odijevanja, kupanja...), a sve one čine različite aspekte tjelesnog funkcioniranja koje bi trebalo u nastavku uzeti u obzir. No, uz navedena ograničenja, ovo istraživanje ima i nekoliko jakih strana. Koristili smo veliki uzorak osoba starijih od 65 godina i to velikog dobnog raspona pri čemu je prosječna dob našeg uzorka 74 godine, što ga razlikuje od nekih prethodnih istraživanja (3,7,18,33) uspješnog starenja. Naime, uočeno je da je u tim istraživanjima donja granica dobnog raspona 45, 50, 60 godina te se na taj način o uspješnom starenju zaključuje na dijelovima uzorka koji nisu stari.

Za praćenje promjena u objektivnom zdravstvenom statusu, subjektivnoj procjeni zdravlja i doživljaju uspješnog starenja tijekom vremena neophodne su longitudinalne studije koje omogućavaju identifikaciju onoga što je ključno za uspostavljanje vremenskog slijeda i razlikova-

research with more reliable scales and repeated measurements. It is important to note that Cosco et al. (4) observed that lower scores on SA measures were found in studies that used complex concepts, therefore the results of this study which used a simple self-assessment measure should be interpreted in this context as well. The presence of chronic diseases or their number in older age is only one of the objective measures of disease that we used for our projects. Although this measure has been frequently used in research in this field, it can be considered a methodological shortcoming, and in future studies it would be useful to base such data on medical documentation. In addition, the use of measures such as limitations in performing certain physical activities (standing, climbing stairs, bending, walking, etc.); chronic disease-related issues (such as pain and insomnia); and functional ability, which includes the ability to perform daily activities (e.g. dressing, bathing, etc.) should be considered, since they all constitute different aspects of physical functioning that should be taken into account in future studies. Nevertheless, despite the listed limitations, this study also has several strengths. We used a large sample of individuals over 65 years of age and of a wide age range, wherein the average age of our sample was 74 years, distinguishing it from some previous studies (3, 7, 18, 33) on successful ageing. It has been observed that in those studies the lower limit of the age range was 45, 50 or 60 years, and thus conclusions about successful ageing were drawn from parts of the sample that were not aged.

Longitudinal studies are necessary to monitor the changes in objective health status, subjective health assessment, and the perception of successful ageing over time, since they would allow for the identification of what is crucial for establishing a time sequence and distinguishing direct from indirect effects. In further studies, it would be advisable to separately analyze the groups of diseases that differ

nje izravnih od neizravnih efekata. U nastavku istraživanja bilo bi uputno analizirati zasebno skupine bolesti koje se razlikuju prema svojoj patofiziologiji i implikacijama na svakodnevni život poput primjerice kardiovaskularnih i reumatskih bolesti.

ZAKLJUČAK

Utvrdili smo da je samoprocjena zdravlja medijator povezanosti između bolesti i US iz čega slijede barem dvije praktične implikacije. Prvo, to znači da postoji potreba za povećanjem informiranosti o karakteristikama (simptomi, posljedice, liječenje) pojedinih kroničnih bolesti kako bi se one što prije prepoznale i adekvatno liječile, pratile i održavale funkcioniranje osobe na zadovoljavajućoj razini. Drugo, ovakvi nalazi upućuju na potrebu osvještavanja vlastite uloge u ponašanju koje omogućuje dobro funkcioniranje unatoč bolesti kao i potrebu za mijenjanjem uvriježenih stavova da je svaka bolest sinonim za nemoć i ovisnost o drugima te da su za proces liječenja odgovorni isključivo liječnici. Ovaj odnos sugerira da je od zdravstvenih djelatnika poželjno poticati pozitivan pristup vlastitom zdravlju (ali ne nerealno optimističan), čak i u slučaju nepovoljnog objektivnog zdravstvenog stanja, jer će takva pozitivna percepcija pridonijeti povoljnijoj procjeni vlastitog starenja. S druge strane, potrebno je uzeti u obzir i mogućnost da samoprocjena zdravlja može postati problem u onim slučajevima kada je nerealno pozitivna i potencijalno dovodi do minimiziranja i zanemarivanja znakova neke bolesti ili njenih simptoma. U rasvjetljavanju moguće dvostruke uloge samoprocjene zdravlja u njegovom objektivnom očuvanju bilo bi važno istražiti specifičnosti zdravstvenog ponašanja osoba s određenim vrstama kroničnih bolesti. Kada govorimo o dvostrukoj ulozi, mislimo na to da pozitivna samoprocjena može pozitivno utjecati na US, ali negativno na ishod bolesti ako se lažno pozitivno percipira i/ili dovodi do

in their pathophysiology and implications for daily life, such as cardiovascular and rheumatic diseases.

CONCLUSION

It was determined in this study that self-assessed health mediates the association between diseases and SA, which has yielded at least two practical implications. First, there is a need to increase awareness about the characteristics (symptoms, consequences, treatment) of certain chronic diseases so as to enable their early recognition and appropriate treatment, monitoring, and maintenance of a person's functioning at a satisfactory level. Second, these findings indicate the need to raise awareness of one's own role in behaviors that support good functioning despite disease, and to dispel the widespread attitudes that every disease is synonymous with helplessness and dependence on others, as well as the belief that only doctors are responsible for the treatment process. Furthermore, this correlation suggests that healthcare professionals should encourage a positive approach to one's own health (though not an unrealistically optimistic one), even in case of an unfavorable objective health status, because such a positive perception will contribute to a more favorable assessment of one's own ageing. On the other hand, it is necessary to consider the possibility that the self-assessment of health can become problematic when it is unrealistically positive and potentially leads to minimizing and neglecting the signs or symptoms of a disease. In clarifying the possible dual role of the self-assessment of health in its objective preservation, it would be important to investigate the specifics of health-related behavior in people with certain types of chronic diseases. When referring to the dual role, we refer to the fact that a positive self-assessment can have a beneficial effect on SA, but a negative effect on disease outcomes if it is falsely positively

zanemarivanja simptoma bolesti i nepoduzimanja potrebnih koraka u liječenju. U budućim bi istraživanjima trebalo detaljnije ispitati ovu moguću dvostruku ulogu subjektivnog zdravlja u odnosu između pojedinih bolesti i specifičnih zdravstvenih ponašanja te percepcije vlastitog procesa starenja.

perceived and/or leads to neglecting the symptoms and not taking the necessary steps in treatment. In future studies, this possible dual role of subjective health in relation to individual diseases, specific health-related behaviors, and the perception of one's own ageing process should be examined in more detail.

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Upute autorima

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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.

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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/).

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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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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.).

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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 podatci. 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.

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