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KNJIGA SAŽETAKA
BOOK OF ABSTRACTS

PLENARNA PREDAVANJA

PLENARY LECTURES

Adrian Raine

University of Pennsylvania, USA

What Makes a Murderer? Dissecting the Biological Roots of Violence

The rapid developments taking place in neuroscience are creating an uncomfortable tension between our concepts of responsibility and retribution on the one hand and understanding and mercy on the other. Neurocriminology is a new field which is increasingly documenting brain impairments in violent offenders. This talk outlines implications of this new research for understanding homicide and our future conceptualization of moral responsibility, free will, and punishment. If the neural circuitry underlying morality is compromised in psychopaths, how moral is it of us to punish prisoners as much as we do? Should neurobiological risk factors be used to help us better predict future violence? And importantly, how can we change the brain to change violent and antisocial behavior?

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Nicholas Allan

Ohio University, Athens, OH, USA

Exploring the Dynamic Nature of Transdiagnostic Risk Factors

The costly and debilitating nature of emotional distress disorders highlights a need to focus on defining etiological and maintenance factors for these and related disorders. My primary program of research is focused on the role of risk factors in the etiology, maintenance, and treatment of emotional distress disorders (i.e., depressive and anxiety disorders) and related mental health issues including suicide and substance abuse. Specifically, I focus on risk factors that are implicated as vulnerabilities across multiple symptoms and signs of psychopathology (i.e., transdiagnostic risk factors). I conduct my research along the translational research spectrum, using my findings from basic studies to inform the development and refinement of applied preventative intervention studies. In this talk, I will give an overview of my recent work along this spectrum. In this talk, I will provide an overview of my work across this translational spectrum. First, I will discuss my ongoing National Institute of Mental Health-funded study designed to identify biological correlates of two transdiagnostic risk factors, anxiety sensitivity or fear of anxious arousal, and intolerance of uncertainty or the inability to tolerate uncertainty, particularly in the context of potentially unpleasant future events. Next, I will discuss a recent study using ecological momentary assessment to examine a

central tenet of anxiety sensitivity theories that anxiety exacerbates the experience of anxiety over time. Finally, I will present work on a brief five session cognitive-behavioral therapy group intervention developed during the COVID-19 pandemic targeting anxiety sensitivity, intolerance of uncertainty, and loneliness using telehealth and augmented with a mobile app. I will conclude with a discussion of future directions, highlighting my plans to incorporate findings across these studies to improve our understanding of and interventions for transdiagnostic risk factors.

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Jasna Martinović

University of Edinburgh, UK

Can Cognition Influence Perception? Insights from Colour Categorisation

In the long-lasting debate on whether cognition can directly influence perception, studies on colour categorisation in speakers of languages with different colour vocabularies have always played a key role. This is not surprising as colour is a unique perceptual domain in which a continuum of perceptual representation is divided into distinct categorically-labelled areas. If perceptual discrimination of colours that fall close to category boundaries (e.g. blue/green) is enhanced, this would show that a language-derived category can influence perception. The perception/cognition debate initially seemed to favour an explanation in which cognition can penetrate into basic colour perception and directly influence it. Three lines of evidence appeared to provide strong support for these claims: (1) the advantage for discriminating cross-boundary colours in the right visual field; (2) faster reaction times at the boundary of sinij and goluboj in Russian speakers compared to dark and light blue in Russian speakers; and (3) the account of category acquisition through perceptual learning which operates similarly for lightness and hue-based categories. However, some of the key findings in favour of cognition's overarching influence have been challenged in a few recent studies. I will present the evidence from these new studies and discuss how their emergence is shifting the ongoing debate to a more balanced view in which categories 'facilitate' perception, rather than directly penetrate it.

Maxim Storchevoy

National Research University in St. Petersburg, Russia

Ethical Tests and Training for Employees

The company wanting to provide a high level of ethical relationships with all its stakeholders faces a difficult task - it needs to be sure that it employees understand the ethical requirements and are willing to comply with them. However, this may be a very difficult task because the employees join the company having very diverse background, work experience, cultural and personal biases, etc. Therefore the company needs to be able to perform two important things: 1) ethical assessment of the candidates for employment which can reveal internal values and motivations and screen out those who represent high risk of unethical behavior, and 2) ethical training of the hired employees which will create awareness of existing ethical values and rules, as well as supporting mechanisms (compliance officer, hot line, monitoring, punishment and rewards, etc.).Both tasks represent a challenge for the company because it is very difficult to design accurate tests which will be not easy to cheat and which will be really connected with future ethical behavior, or it is very difficult to design a training system which will not only creates awareness (an easier task) but also will be influence the value system and motivation of the employees discouraging potential unethical behavior and encouraging ethical leadership. We will discuss how contemporary academic business ethics and practitioners deal with these issues and the perspectives for future development in this area.

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Vesna Vlahović-Štetić

Faculty of Philosophy, University of Zagreb, Croatia

Psychology Knows a lot About Learning and Teaching Mathematrics - Can it Help?

Psihologija puno zna o učenju i poučavanju matematike - može li to pomoći?

Psihologija i psiholozi su relativno rano pokazali interes za matematiku pa je tako E. L.Thorndike još 1922. godine izdao knjigu The psychology of arithmetic. Gotovo sto godina kasnije možemo zadovoljno konstatirati da smo puno naučili, pa tako kognitivna razvojna psihologija i psihologija obrazovanja jasno odgovaraju na pitanja: što djeca određene dobi mogu i znaju, kakve kognitivne strategije rabe pri rješavanju zadataka, koje su njihove najčešće greške i zašto se događaju, a znamo i

kako koristiti dječja predznanja u poučavanju. Istraživanja rodnih razlika dala su nam uvid u promjene koje se u zadnjim desetljećima događaju u usporedbama rezultata djevojčica i dječaka, a dobro su dokumentirani i uzroci pronađenih razlika. Istraživanja međukulturalnih razlika ukazala su na važnost faktora kao što su obitelj, školski sustav i jezik kojim govorimo. Danas dobro znamo da na učenički i studentski matematički uradak djeluju stavovi i uvjerenja o matematici, strah od matematike i prijetnja stereotipom. Strategije koje djeca koriste u matematičkim operacijama temeljno su istražene, ustanovljeni su modeli koji dobro objašnjavaju uradak u rješavanju problemskih zadataka, ostvareno je razumevanje razloga zbog kojih učenici griješe u nelinearnim zadacima. No, uz sva psihologijska istraživanja i prikupljena znanja i dalje u školama imamo probleme s poučavanjem matematike. Naime, često se susrećemo s zahtjevima koji nisu usklađeni s dječjim mogućnostima, sa snažnim vjerovanjima o urođenosti talenta za matematiku i neprimjerenim poučavanjem. Unatoč tome što znamo da zadaci u poučavanju trebaju biti realistični i usklađeni s učeničkim iskustvom (poznat kontekst), međusobno različiti i takvi da omogućuju razumijevanje i transfer na stvarne životne situacije (na novi kontekst), to se u obrazovanju ponekad ne poštuje. Djeca u školi usvajaju rutinsku ekspertizu – sposobnost brzog i točnog rješavanja školskih zadataka, bez puno razumijevanja, umjesto adaptivne ekspertize – sposobnosti fleksibilnog i kreativnog korištenja postupaka naučenih s razumijevanjem. Nakon gotovo trideset godina u području vjerujem da nismo napravili dovoljan iskorak u praksu – i dalje treba istraživati dječji uradak i strategije, ali treba i jasno upozoravati na ,,kritična" mjesta u programima, surađivati s matematičarima pri izradi programa i udžbenika, pomoći učiteljima i nastavnicima u osmišljavanju odgovarajućih strategija poučavanja, a posebno važnim mi se čini surađivati u edukaciji budućih učitelja i nastavnika matematike. Šteta je ne iskoristiti bogata znanja koja psihologija ima o učenju i poučavanju matematike jer to može pomoći i učenicima i učiteljima.

PSIHOLOŠKI ASPEKTI FUNKCIONISANJA SPORTISTA TOKOM PANDEMIJE COVID-19

PSYCHOLOGICAL ASPECTS OF THE ATHLETES' FUNCTIONING DURING THE COVID-19 PANDEMIC

Moderator: Mikloš Biro

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Indikatori mentalnog zdravlja kod profesionalnih i rekreativnih sportista za vreme COVID-19 pandemije

Pojava novog koronavirusa (COVID-19), kao i mere koje su preduzete kako bi se sprečilo njegovo širenje, prouzokovali su značajne promene u redovnom režimu života za većinu ljudi širom sveta. U ove mere bilo je uključeno i zatvaranje objekata za sportske treninge, a kretanje van kuće je bilo ograničeno tokom vanrednog stanja. Sportska takmičenja su odložena sa neizvesnim rokom. Naše istraživačko pitanje se odnosi na to kako su mere preduzete za sprečavanje koronavirusa uticale na mentalno zdravlje ljudi koji se profesionalno i rekreativno bave sportom. Kako bismo odgovorili na ovo pitanje sproveli smo istraživanje na uzorku ove populacije tokom prvog i drugog talasa COVID-19 pandemije u Srbiji. Cilj istraživanja je bio da uporedimo nivo stresa, anksioznosti i depresivnosti sa normativnim uzorkom za ove mere u našoj sredini, kao i da uporedimo ima li razlike između profesionalnih i rekreativnih sportista u ovim merama u prvom i drugom talasu COVID-19 pandemije.

Uzorak u prvom talasu je činilo 538 ispitanika (62% žene), prosečnog uzrasta M=35.83 (SD=12.51), od kojih je 20% profesionalnih sportista, a 80 % rekreativaca. U drugom talasu je uzorak činilo 107 ispitanika (33 % žena), prosečnog uzrasta M=32.74 (SD=11.27), od kojih je 63% profesionalnih sportista i 37% rekreativaca. Za prikupljanje podataka o indikatorima mentalnog zdravlja korišćen je upitnik DASS-21. Podaci su u oba slučaja prikupljani online.

Rezultati ukazuju da nema značajnih razlika između fizički aktivnih ispitanika u prvom i drugom talasu u odnosu na normativni uzorak za Srbiju, osim za varijablu stresa. Naime, u drugom talasu je značajno niži nivo stresa kod fizčki aktivnih isptanika u odnosu na normativni uzorak opšte populacije (t(389)=2.91, p<.003, d=.32). Takođe, razlike u indikatorima mentalnog zdravlja između dva talasa značajne su jedino u nivou stresa (t(643)=2.27, p<.02, d=.23), dok u nivou anksioznosti i depresivnosti nema značajnih razlika. Nivo stresa kod fizički aktivnih ispitanika bio je značajno niži u drugom talasu pandemije. Rezultati su tumačeni u skladu sa aktuelnim međunarodnim istraživanjima.

Ključne reči: profesionalni i rekreativni sport, COVID-19, mentalno zdravlje

Mental health indicators in professional and recreational athletes during the COVID-19 pandemic

The emergence of the new coronavirus (COVID-19) and the measures taken to prevent its spread have caused significant changes in the regular lifestyle for most people worldwide. These measures included the closure of sports training facilities, and movement outside the home was restricted during the state of emergency. Sports competitions have been postponed with an uncertain deadline. Our research question relates to how measures taken to prevent coronavirus have affected the mental health of people who practice sports professionally and recreationally. To answer this question, we researched a sample of this population during the first and second waves of the COVID-19 pandemic in Serbia. The study aimed to compare the level of stress, anxiety, and depression with the normative sample in our environment and compare whether there are differences between professional and recreational athletes in these measures in the first and second wave of the COVID-19 pandemic.

The sample in the first wave consisted of 538 respondents (62% women), average age M = 35.83 (SD = 12.51), of which 20% were professional athletes and 80% recreational. In the second wave, the sample consisted of 107 respondents (33% women), average age M = 32.74 (SD = 11.27), 63% were professional athletes and 37% recreational. The DASS-21 questionnaire was used to collect data on mental health indicators. Data were collected online in both cases.

The results indicate no significant differences between physically active respondents in the first and second waves concerning the normative sample for Serbia, except for the stress variable. Namely, in the second wave, the level of stress was significantly lower in physically active respondents concerning the normative sample of the general population (t (389) = 2.91, p <.003, d = .32). Also, the differences in mental health indicators between the two waves are significant only in the level of stress (t (643) = 2.27, p <.02, d = .23), while there are no significant differences in the level of anxiety and depression. The level of stress in physically active subjects was significantly lower in the second wave of the pandemic. The results were interpreted following current international research.

Keywords: professional and recreational sports, COVID-19, mental health

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Sklonost rizičnim ponašanjima kod sportista kao rezultat pandemije Covid-19

Studije objavljene posle pojave pandemije Covid-19, pokazuju rast distresa u opštoj populaciji, koji je očita posledica restrikcije kretanja, ali i uobičajenih životnih aktivnosti. Sportisti su bili posebno pogođeni pomanjkanjem takmičenja i poremećajem uobičajenog ritma treninga, ali i otkazivanjem sportskih događaja od svetskog značaja. Dosadašnja istraživanja ukazuju na mogućnost pojave po zdravlje rizičnih ponašanja kod sportista kao posledice nemogućnosti da se sportska forma iskaže u takmičenju ili kao rezultat anksioznosti zbog neizvesnosti kada će se i da li će se takmičenje održati. Cilj našeg istraživanja bio je da uporedi profesionalne i rekreativne sportiste tokom pandemije u pogledu sklonosti rizičnim ponašanjima (prekomernom konzumiranju alkohola, poremećaju uobičajenog načina ishrane, poremećaju ritma sna ili pretreniranju) i da povežemo ta ponašanja sa njihovim mogućim psihološkim uzročnikom (proveravali smo: depresivne tendencije, anksioznost i prisustvo stresa).

Uzorak se sastojao od 61 profesionalnog sportiste i 40 rekreativaca koji su ispitani tokom januara i februara 2021. primenom online upitnika. Primenjen je upitnik koji je sadržao pitanja o rizičnim ponašanjima i DASS-21 kojim je mereno prisustvo depresivnosti, anksioznosti i stresa.

Rezultati su pokazali visoko prisustvo poremećaja uobičajenog načina ishrane (kod 50,5% profesionalaca i 51% rekreativaca), poremećaja ritma sna (kod 46% profesionalaca i 45% rekreativaca) i pretreniranja (kod 36% profesionalaca i 37,5% rekreativaca, s tim što je kod 5% profesionalaca to rezultovalo i povredom). Jedina razlika između grupa uočena je u slučaju konzumacije alkohola (kod 18% profesionalaca i 5% rekreativaca), na granici značajnosti – ANOVA $F_{(1,99)}=3,72$; p=0,056.

Regresionom analizom pokazalo se da je depresivnost prediktor konzumacije alkohola na granici značajnosti (β=0,19; p=0,064). Depresivnost ima tendenciju predikcije pojave poremećaja uobičajenog načina ishrane (β=0,16; p=0,097), kao i poremećaja ritma sna (β=0,17; p=0,094), a značajan je prediktor pretreniranja (β=0,27; p=0,006). Drugi značajan prediktor pretreniranja je stres (β=0,24; p=0,017)

koji je takođe značajan prediktor i poremećaja ritma sna (β=0,24; p=0,016). Anksioznost, međutim, ne predviđa nijedan od registrovanih rizičnih ponašanja.

Naši rezultati ukazuju na značajno prisustvo rizičnih ponašanja kod obe grupe, kao i na činjenicu da su najverovatniji pokretači tih ponašanja prisustvo depresivnosti i stresa koji su prouzrokovani odsustvom sportskih takmičenja i opštom pasivizacijom. Činjenica da su sportisti iz obe grupe skloni da zanemare uobičajene režime ishrane i spavanja (ili, u slučaju profesionalaca, da konzumiraju alkohol) ili, pak, da počnu sa grčevitim preteranim treninzima koji se ponekad završavaju povredama, ukazuje na potrebu za dodatnom edukacijom sportista o ponašanjima koja su rizična za njihovo zdravlje.

Ključne reči: Ključne reči: Covid-19, profesionalni sportisti, rekreativci, rizična ponašanja, DASS-21

The tendency of risky behavior among athletes as a result of the pandemic Covide-19

Studies published after the outbreak of the Covid-19 pandemic show an increase in distress in the general population, which is an obvious consequence of restriction of movement, but also of normal life activities. Athletes were particularly affected by the lack of competition and disruption of the usual rhythm of training, but also by the cancellation of sporting events of world importance. Previous research indicates the possibility of health-threatening behaviors in athletes as a consequence of the inability to express their peak form in competition or as a result of anxiety due to uncertainty about when and whether the competition will take place. The aim of our study was to compare professional and recreational athletes during a pandemic in terms of the tendency for risky behaviors (excessive alcohol consumption, disturbance of eating habits, sleep disorders, or overtraining) and to link these behaviors to their possible psychological cause (we checked: depressive tendencies, anxiety and the presence of stress).

The sample consisted of 61 professional athletes and 40 recreational athletes who were surveyed during January and February 2021 using an online questionnaire. A questionnaire contains questions on risky behaviors, as well as the DASS-21 scale, used to measure the presence of depression, anxiety and stress.

The results showed a high presence of disturbance of eating habits (in 50.5% of professionals and 51% of recreational), sleep rhythm disorders (in 46% of professionals and 45% of recreational) and overtraining (in 36% of professionals and 37.5% of recreational, which in 5% of cases among professionals it resulted in injury).

The only difference between the groups was observed in the case of alcohol consumption (in 18% of professionals and 5% of recreationists), at the edge of significance - ANOVA $F(1,99) = 3.72$; $p = 0.056$. Regression analysis showed that depression was a predictor of alcohol consumption with the marginal significance ($\beta = 0.19$; $p = 0.064$). Depression tends to predict the disturbance of eating habits ($\beta = 0.16$; $p = 0.097$), as well as sleep rhythm disorders ($\beta = 0.17$; $p = 0.094$), and is a significant predictor of overtraining ($\beta = 0.27$; $p = 0.006$). Another significant predictor of overtraining is stress ($\beta = 0.24$; $p = 0.017$), which is also a significant predictor of sleep rhythm disorders ($\beta = 0.24$; $p = 0.016$). Anxiety, however, does not predict any of the registered risky behaviors.

Our results indicate a significant presence of risky behaviors in both groups, as well as the fact that the most likely drivers of these behaviors are the presence of depression and stress caused by the absence of sports competitions and general passivation. Our results indicates the need for additional education of athletes about behaviors that are risky to their health.

Keywords: Key words: Covid-19, professional athletes, recreational athletes, risky behaviors, DASS-21

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Odnos strategija prevladavanja i nivoa anksioznosti, depresivnosti i stresa kod sportista tokom COVID-19 pandemije

Početak COVID-19 pandemije dramatično je promenio dotadašnje funkcionisanje ljudi širom sveta. Uvođenje restriktivnih mera za sportiste je značio prekid treniranja i otkazivanje takmičenja. Tokom drugog talasa, kada je i sprovedeno ovo istraživanje (decembar - januar) – sportisti su se već vratili treningu i neka od takmičenja su bila nastavljena. Ipak, i dalje je vladala velika neizvesnost oko održavanja većih takmičenja poput Olimpijskih igara, Svetskih prvenstava i sl.

Cilj ovog istraživanja bio je da uporedimo psihološko funkcionisanje sportista različitog statusa (profesionalni nasuprot rekreativni). Dodatno, cilj nam je bio da utvrdimo odnos korišćenih strategija prevladavanja i nivoa depresivnosti, anksioznosti i stresa kod profesionalnih i rekreativnih sportista. Ukupno 117 sportista

(77 profesionalnih i 40 rekreativaca) učestvovalo je u ovom istraživanju. Upitnik je distribuiran online. Za merenje strategija prevladavanja korišćen je upitnik Brief-COPE dok je za procenu nivoa depresivnosti, anksioznosti i stresa korišćen DASS-21.

Poređenjem skorova na skali DASS-21 dobijene su statistički značajne razlike samo na skali anksioznost (t=-2.096 p<0.05), pri čemu profesionalni sportisti izveštavaju o višem nivou anksioznosti. Zanimljivo je primetiti da je isti trend i na skalama stres i depresivnost, iako razlike ne dostižu nivo statističke značajnosti.

Kako bismo testirali odnos između strategija prevladavanja i anksioznosti, depresivnosti i stresa sproveli smo 3 zasebne regresione analize. Prediktori su bili: status sportiste (profesionalni ili rekreativni) i 14 subskala upitnika Brief-COPE (samoometanje, aktivno prevladavanje, poricanje, upotreba supstanci, emocionalna podrška, instrumentalna podrška, odustajanje, ventiliranje, pozitivno redefinisanje, planiranje, humor, prihvatanje, religija, samookrivljavanje). Značajni prediktori depresivnosti bili su: samoometanje (β = 0.20 p < .05), upotreba supstanci (β = 0.22 p < .05) i odustajanje (β = 0.24 p < .05). Anksioznost predviđaju: status sportiste (β = 0.25 p < .05), upotreba supstanci (β = 0.20 p < .05) i odustajanje (β = 0.23 p < .05). Konačno, stres značajno predviđaju sledeći pojedinačni prediktori: upotreba supstanci (β = 0.22 p < .05) i ventiliranje (β = 0.40 p < .001).

Na kraju, zanimalo nas je da li se profesionalni i rekreativni sportisti međusobno razlikuju po upotrebi različitih koping strategija. Dobijeni rezultati pokazuju da rekreativci značajno više koriste sledeće strategije: upotreba supstanci ali i planiranje i humor. S druge strane, profesionalni sportisti su se više oslanjali na: emocionalnu podršku, religiju i samookrivljavanje. Dobijeni podaci sugerišu da se rekreativci oslanjaju više na ,,zdravije" strategije prevladavanja (izuzetak je upotreba supstanci) što bi moglo biti objašnjenje za njihovo bolje psihološko funkcionisanje tokom pandemije.

Ključne reči: COVID-19, Brief-COPE, DASS-21, sportisti

The relationship between coping strategies and anxiety, depression, and stress among athletes during COVID-19 pandemic

The beginning of the COVID-19 pandemic and the introduction of various restrictive measures (especially lockdown) for athletes meant the cancellation of competition but also training. During the second wave, when this research was conducted (December-January) - the athletes had already returned to training and some of the

competitions were continued. However, there was still great uncertainty about holding larger competitions such as the Olympic Games, World Championships etc.

This study aimed to compare the psychological functioning of athletes of different statuses (professional versus recreational). Additionally, our goal was to determine the relationship between coping strategies and levels of depression, anxiety, and stress in professional and recreational athletes. A total of 117 athletes (77 professionals, 40 recreational) participated in this study. The questionnaire was distributed online. For assessment of coping strategies, we used Brief-COPE while the level of depression, anxiety and stress were measured with DASS-21.

By comparing the scores on the DASS-21 scale, statistically significant differences were obtained only on the anxiety scale (t = -2.096 p <0.05), with professional athletes reporting a higher level of anxiety. Interestingly, the same trend is on the scales of stress and depression, although the differences do not reach the level of statistical significance.

To test the relationship between coping strategies and anxiety, depression, and stress, we conducted 3 separate regression analyzes. Predictors were: athlete status (professional or recreational) and 14 subscales of the Brief-COPE questionnaire (self-distraction, active coping, denial, substance use, emotional support, instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, self - blame). Significant predictors of depression were: self-distraction (β = 0.20 p <.05), substance use (β = 0.22 p <.05) and behavioral disengagement (β = 0.24 p <.05). Furthermore, significant predictors of anxiety were: athlete status (β = 0.25 p <.05), substance use (β = 0.20 p <.05) and behavioral disengagement (β = 0.23 p <.05) Finally, stress was significantly predicted by the following predictors: substance use (β = 0.22 p <.05) and venting (β = 0.40 p <.001).

At the end, we were interested in whether professional and recreational athletes differ in the use of different coping strategies. The obtained results show that recreational athletes use the following strategies significantly more: substance use, but also planning and humor. On the other hand, professional athletes relied more on: emotional support, religion, and self-blame. It seems that recreational athletes rely more on "healthy" coping strategies (with exception of substance use) that perhaps explain their better psychological functioning during pandemic.

Keywords: COVID-19, Brief-COPE, DASS-21, professional athletes

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Netolerancija na neizvesnost i fizička aktivnost kao prediktori psihološkog distresa tokom COVID-19 pandemije

Studije objavljene nakon prvog talasa COVID-19 pandemije, pokazale su da je socijalna izolacija kao restriktivna mera značajno uticala na mentalno i fizičko zdravlje ljudi širom sveta. Studije koje su se bavile uticajem fizičke aktivnosti na redukciju psihološkog distresa tokom ovih restriktivnih mera, potvrdile su da se umerena fizička aktivnost može smatrati blagotvornom strategijom prevladavanja stresa. U ovakvim okolnostima, kao značajan faktor psihološkog distresa pokazala se netolerancija na neizvesnost koja predstavlja kognitivnu pristrasnost koja utiče na to kako individua opaža, interpretira i reaguje na specifične neizvesne situacije, na kognitivnom, emotivnom i bihejvioralnom planu. Netolerancija na neizvesnost se sastoji od dve komponenete: Inhibitorne anksioznosti koja dovodi do različitih izbegavajućih ponašanja i Prospektivne anksioznosti koja se manifestuje u aktivnom, ali neproduktivnom traganju za informacijama koje bi redukovale neizvesnost. Cilj ovog istraživanja bio je da se ispita značaj fizičke aktivnosti i tolerancije na neizvesnost u predikciji indikatora mentalnog zdravlja (nespecifičnog stresa, anksioznosti i depresivnosti) tokom vanrednog stanja u Srbiji, uvedenog usled COVID-19 pandemije.

Uzorak se sastojao od 680 ispitanika opšte populacije (66 % ženskog pola), starosti 18-78 godina (M=35.91, SD = 12.45). Prema samoproceni intenziteta fizičke aktivnosti pre pandemije 20 % uzorka čine fizički neaktivne osobe, 64% čine rekreativci, dok 15 % uzorka čine aktivni sportisti. Za prikupljanje podataka koristili smo socio-demografski upitnik konstruisan za potrebe ovog istraživanja, Srpsku adaptaciju Upitnika netolerancije na neizvesnost, Srpsku adaptaciju Godinovog upitnika o fizičkoj aktivnosti u slobodno vreme, kao i kratku verziju Skale depresivnosti, anksioznosti i stresa. Prikupljanje podataka se vršilo online. Rezultati su pokazali da fizička aktivnost u negativnom smeru predviđa anksioznost (β= -.08, p<.01), depresivnost (β= -.07, p<.05) i stres (β= -.06, p<.05). Inhibitorna anksioznostu pozitivnom smeru predviđa doživljenu anksioznost (β= .56, p<.001), depresivnost (β= .68, p<.001) i stres (β= .44, p<.001). U slučaju anksioznosti kao kriterijske varijable, značajna je interakcija između prospektivne anksioznosti i fizičke aktivnosti (β= .23, p<.05).

Inhibitorna anksioznost kao kognitivna forma vulnerabilnosti najznačajniji je prediktor sve tri forme psihološkog distresa. Na drugom mestu je fizička aktivnost koja pored nezavisnog doprinosa predikciji predstavlja i moderator između prospektivne anksioznosti i doživljene anksioznosti. Više fizičke aktivnosti uz izraženu prospektivnu kognitivnu vulnerabilnost za anksioznost, doprinosi nižem stepenu doživljene anksioznosti. Fizička aktivnost se stoga može smatrati adaptivnom strategijom prevladavanja, jer predviđa bolje ishode u kontekstu mentalnog zdravlja tokom vanrednog stanja izazvanog COVID-19 pandemijom.

Ključne reči: netolerancija na neizvesnost, fizička aktivnost, COVID-19, distres

Intolerance of uncertainty and physical activity as predictors of psychological distress during the COVID-19 pandemic

Studies published after the first wave of the COVID-19 pandemic have shown that social isolation as a restrictive measure has significantly affected people's mental and physical health around the world. Studies that have addressed the impact of physical activity on reducing psychological distress during these restrictive measures have confirmed that moderate physical activity can be considered a beneficial strategy for overcoming stress. In such circumstances, intolerance to uncertainty, a cognitive bias that affects how an individual perceives, interprets and reacts to specific uncertain situations on the cognitive, emotional and behavioural level, has proven to be a significant factor of psychological distress. Intolerance of uncertainty consists of two components: Inhibitory anxiety that leads to various avoidant behaviours, and Prospective anxiety manifests itself in an active but unproductive search for information that would reduce uncertainty. This study aimed to examine the importance of physical activity and tolerance for uncertainty in predicting mental health indicators (non-specific stress, anxiety and depression) during the state of emergency in Serbia, introduced due to the COVID-19 pandemic.

The sample consisted of 680 respondents of the general population (66% female), aged 18-78 years (M = 35.91, SD = 12.45). According to the self-assessment of the intensity of physical activity before the pandemic, 20% of the sample are physically inactive, 64% are recreational, while 15% of the sample are active athletes. For data collection, we used a socio-demographic questionnaire constructed for this research, the Serbian adaptation of the Uncertainty Intolerance Questionnaire, the Serbian adaptation of Godin's questionnaire on physical activity in leisure time, and a short version of the Depression, Anxiety and Stress Scale. Data collection was done online. The results showed that physical activity in the negative direction predicts anxiety (β = -.08, p <.01), depression (β = -.07, p <.05) and stress (β = -.06, p <.05).

Inhibitory anxiety in a positive direction predicts experienced anxiety (β = .56, p <.001), depression (β = .68, p <.001) and stress (β = .44, p <.001). In anxiety as a criterion variable, the interaction between prospective anxiety and physical activity is significant (β = .23, p <.05).

Inhibitory anxiety as a cognitive form of vulnerability is the most significant predictor of all three forms of psychological distress. In second place is physical activity, which also represents a moderator between prospective anxiety and perceived anxiety in addition to the independent contribution to prediction. More physical activity with pronounced prospective cognitive vulnerability to anxiety contributes to a lower level of perceived anxiety. Therefore, physical activity can be considered an adaptive coping strategy, as it predicts better outcomes in the context of mental health during a COVID-19 pandemic emergency.

Keywords: intolerance of uncertainty, physical activity, COVID-19, distress

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Posttraumatski rast i mentalno zdravlje kod sportista sa invaliditetom tokom pandemije COVID-19

Pandemija korona virusa izazvala je zabrinutost, strah i doživljaj neizvesnosti širom sveta, ali je poznato da se kod ljudi u vremenima kriza pored negativnih, mogu javiti i pozitivni psihološki efekti. Jedan od takvih fenomena je posttraumatski rast – konstrukt koji se odnosi na pozitivne psihološke promene koje mogu nastati kao rezultat različitih nedaća i izazova. Dosadašnja literatura ukazuje na to da bi parasport mogao biti jedan od efikasnih načina promovisanja posttraumatskog rasta kod osoba sa invaliditetom. Sa druge strane, postavlja se pitanje da li sportisti sa invaliditetom mogu biti izloženi dodatnom psihološkom riziku u doba pandemije. Stoga je cilj ovog istraživanja bio da se proveri postoje li razlike između sportista sa invaliditetom i sportista bez invaliditeta u pozitivnim i negativnim efektima pandemije COVID-19 na njihovo mentalno zdravlje.

Istraživanje je sprovedeno na uzorku od 117 sportista (62.4% muškog pola), od čega je 25 bilo sa invaliditetom, a 92 bez invaliditeta. Prosečna starost ispitanika bila je 29.95 godina (SD=11.61). Simptomi depresije, anksioznosti i stresa procenjeni su

pomoću Skale depresivnosti, anksioznosti i stresa (DASS-21), a posttraumatski rast meren je putem Inventara posttraumatskog rasta – kratka forma (PTGI-SF) koji se sastoji od pet subskala: Relacije sa drugima, Nove mogućnosti, Lične snage, Duhovna promena i Uvažavanje života.

Nisu detektovane statistički značajne razlike između sportista sa invaliditetom i sportista bez invaliditeta u odnosu na prisustvo simptoma depresije, anksioznosti i stresa, $F(3,113)=.77$, $p=.51$, Wilk's $\Lambda=.98$, $\eta p2=.02$, ali je MANOVA pokazala prisustvo marginalno značajne razlike između grupa u izraženosti posttraumatskog rasta, $F(5,111)=2.13$, $p=.07$, Wilk's $\Lambda=.91$, $\eta p2=.09$. Sportisti sa invaliditetom manifestuju niži nivo percepcije novih mogućnosti, $F(1,115)=5.46$, $p=.02$, $\eta p2=.04$, i ličnih snaga, $F(1,115) = 4.58$, $p=.03$, $\eta p2 = .04$, u poređenju sa sportistima bez invaliditeta. Registrovan je pozitivan direktan efekat promena na planu duhovnosti na prisustvo simptoma anksioznosti $F(3,113)=3.58$, $p=.02$, $R2=.09$, $b=.23$, $t=2.56$, $p=.01$, dok značajan moderirajući efekat invaliditeta na odnos između faceta posttraumatskog rasta i simptoma depresije, anksioznosti i stresa nije pronađen.

Rezultati istraživanja pokazali su da tokom pandemije COVID-19 sportisti sa invaliditetom ne manifestuju povišen nivo psihopatoloških simptoma u odnosu na sportiste bez invaliditeta, ali ostvaruju niže skorove na planu pozitivnih psiholoških promena za vreme krize. Sa druge strane, naši rezultati takođe ukazuju na to da određeni aspekti posttraumatskog rasta mogu da koegzistiraju sa simptomima poput anksioznosti. Ovaj nalaz je u skladu sa rezultatima novijih studija i ukazuje na kompleksnost psiholoških posledica kriznih situacija po mentalno zdravlje sportista, koje je neophodno pažljivo uzeti u obzir prilikom planiranja i implementacije intervencija za psihološko osnaživanje nakon krize.

Ključne reči: COVID-19, sport, invaliditet, posttraumatski rast, kriza

Posttraumatic growth and mental health in athletes with disabilities during the COVID-19 pandemic

The coronavirus pandemic has caused concern, fear, and uncertainty all around the world. However, it is known that in times of crisis, people can experience positive psychological changes as well. One such phenomenon is posttraumatic growth – a construct that refers to positive psychological transformation that can occur as a result of various adversities. Previous literature suggests that parasport could be one of the effective ways to promote posttraumatic growth in people with disabilities. On the other hand, the question arises as to whether athletes with disabilities may be exposed to additional psychological risk during the pandemic.

Therefore, the aim of this study was to examine if there are differences between athletes with and without disabilities regarding the positive and negative effects of the COVID-19 pandemic on their mental health.

The research was conducted on a sample of 117 athletes (62.4% males), 25 of which were para-athletes. The mean age of the participants was 29.95 years (SD=11.61). Symptoms of depression, anxiety, and stress were assessed with the Depression, Anxiety and Stress Scale (DASS-21), while posttraumatic growth was measured using the Posttraumatic Growth Inventory – Short Form (PTGI-SF) consisting of five subscales: Relating to others, New possibilities, Personal strength, Spiritual change and Appreciation of life.

There was no significant difference between athletes with and without disabilities regarding the symptoms of depression, anxiety, and stress, $F_{(3,113)}=.77$, p=.51, Wilk's Λ=.98, $\eta p2$=.02. However, MANOVA did show the presence of a marginally significant difference between the groups regarding the posttraumatic growth, $F_{(5,111)}=2.13$, p=.07, Wilk's Λ=.91, $\eta p2$=.09. Athletes with disabilities manifest a lower level of perception of new possibilities, $F_{(1,115)}=5.46$, p=.02, $\eta p2$=.04, and personal strength, $F_{(1,115)} = 4.58$, p=.03, $\eta p2$=.04, compared to those without disabilities. A positive direct effect of spiritual change on the presence of anxiety symptoms was detected, $F_{(3,113)}=3.58$, p=.02, $R2$=.09, b=.23, t=2.56, p=.01, while the moderating effect of disability on a relationship between the facets of posttraumatic growth and symptoms of depression, anxiety, and stress was not found.

The results of our research showed that during the COVID-19 pandemic, athletes with disabilities did not show increased levels of psychopathological symptoms, but did manifest lower levels of positive psychological changes during the crisis, compared to athletes without disabilities. On the other hand, our results also suggest that certain aspects of posttraumatic growth may coexist with symptoms such as anxiety. This finding is in line with the results of recent studies and indicates the complexity of psychological consequences of crisis on the athletes' mental health, which must be carefully considered when planning and implementing interventions for psychological support after adversity.

Keywords: COVID-19, sports, disability, posttraumatic growth, crisis

(MAL)ADAPTIVNI ISHODI CRTA MRAČNE TETRADE

(MAL)ADAPTIVE OUTCOMES OF DARK TETRAD TRAITS

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Do murderers have darker personalities than other offenders? Not necessarily

Dark personality traits describe amoral and antisocial behavioral dispositions and often are described by psychopathy (i.e., interpersonal, affective, lifestyle and antisocial characteristics), narcissism, Machiavellianism, and sadism. These traits are related to various socially detrimental behavioral outcomes, including criminal behavior and delinquency. Furthermore, psychopathy is frequently related to homicide, both in scientific and in popular literature; however, the data is somewhat ambiguous - there are findings that psychopathy is more expressed in murderers, but there are the opposite results as well. The empirical data on other dark traits in homicide offenders is very scarce. We examined psychopathy, Machiavellianism, and sadism, and the indicators of criminal recidivism (number of offences, number of lawful sentences, and penal recidivism) in a sample of male homicide offenders (N=46), other violent offenders (N=82) and non-violent offenders (N=119). The mean age of participants was 36.25 (SD=8.13) while mean education was 10.56 (SD=1.93). The three subgroups of offenders did not differ in the main levels of education ($F_{(2, 245)}=1.43$; $p>.05$) and average age ($F_{(2, 245)}=2.74$; $p>.05$), but they did differ in the average length of prison sentence ($F_{(2, 245)}=46.99$; $p<.01$); therefore, we controlled this variable in the subsequent analyses. Psychopathy was measured by the Self-Report Psychopathy scale, Machiavellianism and sadism were assessed by AMORAL 9 inventory.

The results showed that Lifestyle and Antisocial psychopathy traits, together with sadism, showed systemic positive correlations with criminal relapse indicators. Between-group comparisons (ANCOVA) showed that homicide offenders had lower scores on Interpersonal ($F_{(2, 245)}=2.87$; $p=.06$) and Affective ($F_{(2, 245)}=2.54$; $p=.08$) psychopathy traits than violent non-homicide offenders. Furthermore, homicide offenders had lower scores than participants from both other groups on Lifestyle ($F_{(2, 245)}=5.00$; $p<.01$) and Antisocial ($F_{(2, 245)}=8.20$; $p<.01$) psychopathy traits, and all measures of criminal recidivism ($F_{(2, 245)}=9.64$; $p<.01$ for number of offences, $F_{(2, 245)}=13.17$; $p<.01$ for the number of lawful convictions, and $F_{(2, 245)}=4.71$; $p=.01$ for penal recidivism).

Our data cast a doubt on widely acknowledged link between psychopathy (and presumably other dark traits) and murder. Psychopathy and sadism were less

pronounced in homicide offenders, especially compared to other violent offenders. The findings can be explained by the fact that homicide is a heterogeneous criminal offence; while it is possible that psychopathy and other dark traits may be linked with some types of homicide, this link cannot be established for homicide in general. The dark traits are reliable and valid predictors of criminal recidivism; however, murderers can have low recidivism rates - hence, they are not necessarily characterized by the increased levels of dark personality traits.

Keywords: psychopathy, Machiavellianism, sadism, homicide, violent offending, criminal recidivism

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Dark Tetrad profiles in violent offenders and non-offenders

Socially aversive constellation of four traits, i.e., Dark Tetrad traits (Machiavellianism, narcissism, psychopathy, and sadism) is one of the main predictors of different types of antisocial behavior. Previous research from a typological approach showed that both qualitative and quantitative types/profiles could be extracted based on these traits. However, the question is which types could be extracted in a population with higher tendency towards antisocial behavior (violent offenders) compared to the general population – is there unique profile with high all dark traits or there is a specific combination of these traits? The aim of this study was to explore a typology of violent offenders and non-offenders based on the Dark Tetrad traits. Furthermore, in order to check criterion validity of the isolated types, we examined whether these types differ in psychological distress domains. Previous research showed that Dark Tetrad traits are related to interpersonal disfunctions, as well as to maladjustment and poor mental health indicators. The sample included 142 male offenders (convicted of murder and rape) and 573 males from the general population. The used instruments were Serbian adaptations of the Short Dark Triad, Comprehensive Assessment of Sadistic Tendencies, and Clinical Outcomes in Routine Evaluation - Outcome Measure. The results of a latent profile analysis showed that two quantitatively distinct profiles could be isolated from both samples (average and high Dark Tetrad), but that there were qualitative differences in dark traits between paired profiles from the two

samples. Both profiles in offenders showed higher psychopathy, while the high Dark Tetrad profile in offenders also showed high sadism and lower narcissism compared to a high Dark Tetrad profile in non-offenders. High Dark Tetrad profiles were not mutually different in terms of psychological distress and both showed a higher risk of harm-to-others compared to average Dark Tetrad profiles. However, the average Dark Tetrad profile in offenders showed higher functioning problems compared to the average Dark Tetrad profile in non-offenders, which could be explained by the specific prison environment. The differences observed between the identified profile have both theoretical and practical implications. They could deepen our understanding about functioning of violent offenders and how they differ compared to general population, but also the constellation of these traits specific to the violent offenders implies the possibility of specific combination of these traits representing specific risk factor for these crimes.

Keywords: offenders; Dark Triad; Dark Tetrad; psychological distress; person-centered approach; variable-centered approach

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Psychopathy and sadism in relation to emotional responses and emotion perception

As dark traits, psychopathy and sadism share certain maladaptive features, such as aggressive or antisocial behavior. Simultaneously, they differ in certain aspects of emotional ability and experience. Psychopathy is characterized by diminished (negative) emotional responses, including in violent contexts, while the core sadistic characteristic is experiencing pleasure from others' distress. The first objective of our study was to examine this relationship; second objective was to investigate the relation of these traits with emotion perception ability. In this regard we made an additional assumption - that they relate differently to the ability of emotion perception. Whereas difficulty in identifying and recognizing negative emotions was already detected in psychopathy, it was not thoroughly studied in relation with sadism. As sadistic nature is tightly associated with obtaining pleasure from pain or

distress of others, we hypothesized it would be positively related to ability to perceive negative emotions.

The sample comprised 235 university students, who filled out self-report measures of psychopathy (Psychopathic Personality Traits Scale, PPTS) and sadism (Varieties of Sadistic Tendencies, VAST; Short Sadistic Impulse Scale, SSIS; Sadism from Amorality scale, AMORAL). They also participated in task measuring explicit emotional responses to violent and peaceful stimuli, and emotion perception task.

Our results showed that psychopathic cognitive responsiveness predicts unusual emotional profile: diminished positive responses to peaceful, $\beta = -.21$, $t(224) = -2.68$, $p < .01$, and negative emotions to violent stimuli, $\beta = -.16$, $t(224) = -1.99$, $p < .05$. On the other hand, sadism predicts increased positive emotions to violence, $\beta = .19$, $t(224) = 1.93$, $p < .05$.

Additionally, psychopathic affective responsiveness predicts diminished emotion perception of negative emotions, $\beta = -.21$, $t(226) = -2.04$, $p < .05$, while sadism predicts greater success in this ability, $\beta = .18$, $t(226) = 2.34$, $p < .05$.

The findings generally support and build on current literature on psychopathy and sadism. Whereas psychopathy features absence of usual emotional responses in combination with difficulty in perceiving negative emotional expressions, sadism is primarily characterized by atypical (positive) response to violence, coupled with better identification of negative emotions.

Keywords: psychopathy, sadism, emotional processes

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Effects of the Dark Tetrad on Emotional Intelligence

Machiavellianism, narcissism, and psychopathy are subclinical socially aversive traits. Sadism refers to the cruel, demeaning or aggressive behaviours behaviour towards others in an effort to humiliate and dominate them and may play an important role in emotional intelligence, in addition to the Dark Triad traits. The aim of this study was to examine the contribution of the Dark Tetrad (psychopathy, Machiavellianism, narcissism, and sadism) in explanation of four dimensions of emotional intelligence – self-emotion appraisal, others' emotion appraisal, use of

emotion, and regulation of emotion. The Short Dark Triad, Assessment of Sadistic Personality , and Wong and Law Emotional Intelligence Scale were administered on a sample of 322 participants from the general population (63% female). The age of the participants ranged from 20 to 68 years (M = 37.45, SD = 11.07). As expected, Machiavellianism and narcissism were positively related (r = .28, p < .001). Consistent with our hypotheses, psychopathy negatively predicted self-emotion appraisal (β = -.23, p < .05), others' emotion appraisal (β = -.25, p < .001), use of emotion (β = -.16, p < .05) and regulation of emotion (β = -.28, p < .01). Machiavellianism positively predicted regulation of emotion (β = .19, p < .01), while narcissism significantly predicted use of emotion (β = .43, p < .001), and regulation of emotion (β = .16, p < .01). As expected, sadism negatively predicted self-emotion appraisal (β = -.23, p < .05), others' emotion appraisal (β = -.22, p < .01), and use of emotion (β = -.17, p < .05). Contrary to prediction, sadism was unrelated to regulation of emotion (β = -.10, p = .22). Psychopathy, Machiavellianism and narcissism together accounted for 6% of the variance in self-emotion appraisal [$F_{(5,317)}$ = 2.76, p < .05], 5% of the variance in others' emotion appraisal [$F_{(5,317)}$ = 4.70, p < .001], 17% of the variance in use of emotion [$F_{(5,317)}$ = 11.10, p < .001], and 9% of the variance in regulation of emotion [$F_{(5,317)}$ = 5.65, p < .001]. Furthermore, the results showed that sadism did add incrementally to psychopathy, Machiavellianism and narcissism in accounting for variance in self-emotion appraisal (ΔR^2 = .03, $F[6, 316]$ = 3.19, p <.01), others' emotion appraisal (ΔR^2 = .02, $F[6, 316]$ = 5.22, p <.01), and use of emotion (ΔR^2 = .02, $F[6, 316]$ = 10.95, p <.001).

The results highlighted the importance of the Dark Tetrad traits in the explanation of emotional intelligence and showed that the Dark Tetrad is differently associated with dimensions of emotional intelligence.

Keywords: Psychopathy, Machiavellianism, Narcissism, Dark Tetrad, Emotional Intelligence

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Fear and loathing: The Dark Triad and substance use

Substance use is frequently perceived as a problematic behavior associated with negative social, psychological and physiological consequences, and the Dark Triad traits (i.e., Machiavellianism, narcissism and psychopathy) have consistently been

linked to problematic and risky behavior. The aim of this research was to investigate the relationship between the Dark Triad and risky health behaviors – tobacco, alcohol and illicit substance use among general population. Data were collected within a larger project on a representative sample of Croatian citizens (N = 4994, 58% female), aged 15 to 64 years (Mage = 40.75, SDage = 14.59). The Dark Triad was assessed with selected items from the Short Dark Triad questionnaire, while problematic behavior was assessed through questions regarding prevalence and frequency of substance use. Significant differences in the Dark Triad traits among substance users and non-users emerged: individuals reporting current smoking, more frequent alcohol use and using marijuana, ecstasy, amphetamines and cocaine at least once in a lifetime were higher on all three Dark Triad traits, while, compared to non-users, individuals reporting using LDS at least once in a lifetime were higher on narcissism and psychopathy, and individuals reporting using heroin at least once in a lifetime were higher only on narcissism. Moreover, hierarchical regression analyses showed that, after controlling for gender and age, the Dark Triad traits had a significant contribution to the explanation of binge drinking and frequency of drinking alcohol (specifically, narcissism and psychopathy), and a number of cigarettes smoked per day (specifically psychopathy). These results highlight the importance of considering the Dark Triad traits in the understanding of factors associated with the abuse of different types of substances, as well as taking them into account in planning prevention programs.

Keywords: Dark Triad, risky behavior, tobacco, alcohol, illicit substance use

PONAŠANJE I MENTALNO ZDRAVLJE TOKOM PANDEMIJE COVID-19 U CENTRALNOJ EVROPI

BEHAVIOR AND MENTAL HEALTH DURING THE COVID-19 PANDEMIC IN CENTRAL EUROPE

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The role of personality, conspiracy mentality, REBT irrational beliefs, and attachment in COVID-19 health behaviors

Evidence suggests that low adherence to recommended health behaviors (RHB) and the use of pseudo-scientific practices (PSP) during the COVID-19 pandemic is predicted by various types of irrational thinking and beliefs. This study investigates the role of different irrational beliefs and attitudes (i.e., REBT irrational beliefs and attachment anxiety and avoidance), as mediators of the relationship between seven personality traits (HEXACO and Disintegration) and COVID-19 health behaviors. We included a third mediator - conspiracy mentality, as an already established predictor of both non-adherence to RHB and PSP. We expected mediators to correlate with non-adherence to RHB, and Disintegration to be related to all mediator variables. An online survey was conducted during the third wave of the COVID-19 pandemic in Serbia - between December 2020 and March 2021. The final sample consisted of 287 participants (80.1% female, M (age) = 31.86, SD = 13.79). Used measures: the Brief HEXACO Inventory (BHI), DELTA 9 (Disintegration trait), the short form of Experience in Close Relationships (ECR-RD12) (attachment anxiety and avoidance), The shortened General Attitude and Belief Scale (REBT irrational beliefs), and Conspiracy Mentality Questionnaire. We created questionnaires assessing adherence to RHB (11 items referring to mask-wearing and social distancing), and PSP (8 items referring to alternative and traditional medicine). With two items we measured the behaviors regarding vaccination, i.e., whether the respondent already got the COVID-19 vaccine or is intended to take it, and whether the respondent would recommend the vaccine to a close person. To investigate the relationship between variables we used structural equation modeling. Sociodemographic variables (age, gender, and education) were included in the model. The tested mediation model showed very good fit indices: χ^2 (61) =107.23, RMSEA [CI90%]=.051 [.035-.067], CFI=.951, TLI=.919, SRMR=.045. The only independent variable that did not show significant effects on mediator and outcome variables was Conscientiousness. In line with our expectations, our findings show Disintegration is the only personality trait related to all mediating variables, corroborating our

previous results on the importance of Disintegration in the emergence of irrational beliefs. As expected, results show that conspiracy mentality mediates the role of Disintegration in low adherence to RHB, negative vaccination behavior, and greater use of PSP. Additionally, attachment anxiety mediates the relationship between personality traits (high Disintegration, high Emotionality, and low Honesty) and lower adherence to RHB. Higher adherence to RHB predicted positive vaccination behavior, whilst there was no relationship between PSP use and vaccination behavior. REBT irrational beliefs and attachment avoidance were not found to be significant mediators of the relationship between personality traits and COVID-19 health behaviors.

Keywords: SEVEN PERSONALITY TRAITS (HEXACO + Disintegration), conspiracy mentality, adult attachment, REBT irrational beliefs, COVID-19 health behaviors

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Person-oriented analyses of Depression, Anxiety and Stress through COVID-19 Pandemic in Hungary

The aim of our study was to analyze how different personality clusters can be linked to different Depression, Anxiety and Stress patterns in COVID-19 pandemic in Hungary. Moreover, we aimed to analyze how time spent in nature, nature connectedness and nature home can provide a protective factor against mental problems of different personalities.

Although many previous researches have outlined the negative impact of pandemic and positive impact of nature on mental health, less focus has been given on analyzing these impacts on different personality types.

In our study, based on gender-age-education representative quotas, 865 males (mean age = 42.11, SD = 18.37) and 1334 females (mean age = 43.09, SD = 18.35) have filled out our online survey in three consecutive time periods (spring, summer and winter of 2020). Our questionnaire battery included 10-item version of Big Five

Inventory, Depression, Anxiety and Stress Scale along with questions on time spent in nature, connectedness to nature and nature at home.

Our results have identified four personality clusters (calm, resilient, impulsive and neurotic), two of which (neurotic and impulsive) turned to have higher levels of depression ($F_{(df = 3, 2146)}$ = 59.75, p < 001; eta-square= 7.7%), anxiety ($F_{(df = 3,2145)}$ = 40.80, p < 0.001; eta-square= 5.4%) and stress ($F_{(df = 3,2146)}$ = 87.93, p < .001; eta-square= 10.9%) throughout the whole pandemic than individuals of the calm and resilient clusters. Impulsive individuals showed elevated nature connectedness level ($F_{(df= 3,2133)}$ = 4.36, p = .005, eta-square= .6%), whereas neurotic individuals were found to spend less time in nature ($F_{(df(3,2129)}$ = 3.98, p = .03; eta-square= .3%).

Regressional analyses ($F_{(df = 5,939)}$ = 69.91, p .001; r-square= 27%) showed that depression score was positively linked to Neuroticism and Openness and negatively linked to Conscientiousness, Nature time and Extraversion.

Our results highlight the importance of individual differences of personality and nature activities on the impact of mental health problems caused by the epidemics. Advantages of person-oriented approach and therapeutic implications will be discussed.

Keywords: depression, anxiety, stress, COVID-19, nature connectedness, personality, person-oriented approach

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Childhood Adversity, Reward Processing and Health during the COVID-19 Outbreak. The Mediating Role of Reward Learning

Childhood adversity (CA) is associated with various health issues, such as depression, anxiety and physical health problems, and recent data suggest reward processing (RP) may mediate these associations. However, different RP dimensions could have distinct roles in these associations that may be sensible to the psychological impact of recent stressful events. Building on these, we examined associations between both CA and psychological impact of recent stressful events and health issues. Moreover, we examined the role of RP dimensions in the associations between CA and health issues in the COVID-19 pandemic context. A community sample of 419 respondents (m age=27.32, SD=8.98) completed an online survey comprising self-report measures of CA, psychological impact of COVID-19 (i.e., recent stress), RP dimensions, depression, anxiety and physical health. Data collection began on March 16 2020, the release date of the Decree declaring a state of emergency in Romania and ended on May 5 2020. Thus, the state of emergency remained active throughout the data collection process. Findings indicated that CA was significantly associated (p <.05) with depression (r=.20), anxiety (r=.19), physical health (r=-.16), reward learning (r=-.11) and responsiveness (r=-.16), but not reward valuation. Likewise, psychological impact of COVID-19, was significantly associated (p <.05) with depression (r=.72), anxiety (r=.69), physical health (r=-.25), reward learning (r=-.11), but not reward responsiveness, nor reward valuation. Reward learning mediated the association between CA and depression (95% CI [.001; .034]), anxiety (95% CI [.001; .037]), and physical health (95% CI [-.034; -.001]). The psychological impact of COVID-19 did not moderate the mediation role of RP in the associations between CA and health. These findings indicate that both CA and psychological impact of COVID-19 are associated with depression, anxiety, and physical health. Moreover, they suggest that reward learning, but not responsiveness and valuation, is a potential transdiagnostic mechanism linking CA with depression, anxiety, and physical health problems that may be targeted through specific interventions.

Keywords: Childhood adversity; reward processing; depression; anxiety; health; COVID-19

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Psychological Distress and Life satisfaction During the Coronavirus Pandemic: The Effects of cyberchondria, psychological inflexibility, COVID specific anxiety and resilience

Infectious diseases have always caused fear and concern, but the COVID-19 pandemic is a unique phenomenon due to global connectivity through digital technologies. Specific aspects of a pandemic, such as the perception of the threat of an unknown disease or the difficulty of finding credible information due to the ever-changing health recommendations, may contribute to the emergence of cyberchondria, i.e., excessive health searches on the Internet accompanied by anxiety. According to the model of cyberchondria in the time of the pandemic, this search increases anxiety. Psychological inflexibility has been established as an additional risk factor for psychological distress.

The present research investigated the effect of cyberchondria, psychological inflexibility via COVID-19 specific anxiety on distress and satisfaction with life during the COVID-19 pandemic with the level of resilience as moderator.

A sample of 966 participants, aged 19–77 (M = 40.0; SD = 11.94)., 75.8% of whom were female, participated in an online survey. The data were collected during the first week of lockdown in Croatia (March 2020). Participants completed an online questionnaire regarding various COVID-19 concerns (COVID related anxiety scale, CAS), a measure of psychological inflexibility (The Acceptance and Action Questionnaire, AAQ-II), cyberchondria (Short Cyberchondria Scale, SCS). Core-YP was used as a measure of psychological distress and life satisfaction was assess with single-item.

To answer the research question, we tested a mediation model in three groups of different levels of the moderator with multigroup path analysis.

Results show that higher levels of cyberchondria, psychological inflexibility and COVID-19 related anxiety directly predicted higher psychological distress, while gender, age, and chronic illness had a small indirect effect via these variables, respectively. Satisfaction with life was explained to a lesser extent. Lower inflexibility predicted higher quality of life, while COVID-19 related anxiety led to decreased quality of life only in the high resilience group. Cyberchondria, chronic

illness, and gender had only small indirect effects on it via COVID-19 related anxiety and age via inflexibility. Both of the criteria were most strongly predicted by inflexibility. Interestingly, the two criteria, psychological distress and quality of life, were significantly related only in the low resilience group.

Therefore, both cyberchondria and psychological inflexibility predict mental health, but only the effect of cyberchondria is mediated by COVID-19 related anxiety. It is also interesting to note that although cyberchondria has a direct effect on psychological distress, it predicts quality of life only via COVID-19 related anxiety and only in the high resilience group.

Keywords: Cyberchondria, Psychological infelxibility, Psychological distress, Satisfaction with life

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Covid stress syndrome in a large, online sample from Serbia-Latent class analysis

COVID-related distress was described as a multidimensional construct represented by a coherent set of symptoms termed the "COVID stress syndrome". The aim of this study was to identify if there were subgroups of individuals characterized by various level of COVID-related distress, and to explore the differences in cognitive vulnerability, such as intolerance of uncertainty, general distress, and other psycho-social variables among the classes.

A cross- sectional study, that included 3594 adults, was conducted in January 2021, as an online survey (66% females; Mage = 26.9, SDage = 8.1 years). Current levels of anxiety and depression (the Patient Health Questionnaire-4), intolerance of uncertainty (the IUS-Short), worries related to the COVID-19 pandemic (the Covid Stress Scale-CSS),exposure to the virus, vaccination acceptance, and socio-demographic information were registered. A latent class analysis (LCA) using the total CSS score was run to determine the number of classes, followed by tests of

differences on variables such as intolerance of uncertainty, current distress, and perception of COVID-19 exposure between the classes.

The average score on CSS scale was 31.95±19.00. Female gender, older age, and higher educational level were associated with greater CSS scores. LCA identified three distinct groups: Class 1(50%), Class 2 (18%), and Class 3 (32%). Class 3 had the greatest CSS score, followed by Class 1, then Class 2 (F (1, 2813) = 1077.01, p < .000, η2= .28). Class 3 consisted mainly from individuals who had pre-existing cognitive vulnerability (80%), whereas in Classes 1 and 2 these percentages were 44% and 17%, respectively. In Class 3, 55% had moderate-severe general distress, while 33% participants in Class 1 and only 14% in Class 2 reported moderate-severe distress. There was a relation between the classes and mental health problems before the pandemic (χ2 (2) = 51.09, p < .000), and between the classes and vaccination acceptance (Cramer's V = 0.19, p < .000). The classes did not differ in terms of perception of work-related COVID-19 exposure and the percentage of people who had been infected.

Mild level of COVID-related distress was registered among Serbian internet users 10 months after the beginning of the pandemic, probably reflecting adaptation to the life changes. However, not all people were efficient in adapting to the demands of the pandemic (Class 3), needing probably some psychosocial support. The focus of psychosocial interventions should be on amelioration of their pre-existing mental health issues and moderate-sever general distress, while boosting their capacity to deal with uncertainty. Our results also support the idea that a certain level of worry is conducive to health-related behavior such as vaccination.

Keywords: the covid stress scale; online sample; latent class analysis; COVID-19

ULOGA INTERPRETATIVNIH PRISTRASNOSTI U PSIHOPATOLOGIJI

THE ROLE OF INTERPRETIVE BIASES IN PSYCHOPATHOLOGY

Moderator: Ljiljana Mihić

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Asocijativni test reč-rečenica: Procena interpretativne pristrasnosti kod anksioznih i depresivnih

Interpretativna pristrasnost (IP) predstavlja sklonost ljudi da nejasne situacije interpretiraju kao npr. negativne ili preteće. U istraživanjima koja se bave IP depresivnih i anksioznih, termini negativna i preteća IP se često koriste kao sinonimi. Takođe, prema našem saznanju, nijedna studija nije direktno poredila negativne (na sebe usmerene) i preteće IP sa ciljem da se ustanovi njihova specifičnost. Zbog toga nije sasvim jasno da li su negativne IP specifične za depresivnost, dok su preteće IP specifične za anksioznost, ili su pak i negativne i preteće IP prisutne kod anksioznosti. Prema kognitivnoj hipotezi o specifičnosti sadržaja, veza između IP i anksioznosti je jača kada je sadržaj dvosmislene situacije kongruentan anksioznoj pretnji. U skladu sa ovom hipotezom, cilj ovog istraživanja je da se proveri da li preteće IP imaju specifičan doprinos u predviđanju simptoma anksioznosti, povrh negativnih IP. Takođe pretpostavljamo da su negativne IP jedini značajan prediktor simptoma depresivnosti.

Uzorak je činilo 148 studenata (80% ženski pol) sa Univerziteta u Novom Sadu. Ispitanici su rešavali računarski podržan zadatak pod nazivom Asocijativni test reč-rečenica (WSAP) konstruisan na srpskom jeziku kao mera negativnih i pretećih automatskih IP. Ispitanici su popunili i skalu Depresivnosti, anksioznosti i stresa (DASS-21).

Sprovedene su dve hijerarhijske regresije koristeći skorove na Depresivnosti (model 1) i Anksioznosti (model 2) kao kriterijume. U 1. koraku modela 1 uvedena je anksioznost kao kontrolna varijabla kojom se objašnjava 42% varijanse kriterijuma, $F\Delta(1,146) = 106.61$, $p < .000$. U 2. koraku, negativne IP objasnile su dodatna 2% varijanse depresivnosti, $F\Delta(1,145) = 12.61$, $p = .001$, $\beta = .24$, dok u 3. koraku nije zabeležen značajan doprinos preteće IP u predviđanju simptoma depresivnosti. U 1. koraku modela 2 uvedena je depresivnost kao kontrolna varijabla. U 2. koraku dobijeno je da negativna IP objašnjava dodatna 2% varijanse anksioznosti, $F\Delta(1,145) = 5.58$, $p = .019$, $\beta = .17$. U 3. koraku preteća IP nije dala značajan doprinost predviđanju modela.

Dobijeni rezultati sugerišu da su negativne, prema sebi usmerene automatske IP prisutne i kod anksioznih i kod depresivnih. Dodatno, rezultatima nije podržana

hipoteza o specifičnosti sadržaja kada je reč o simptomima anksioznosti. Međutim, dok je baza pretećih stimulusa heterogena i obuhvata razne brige svojstvene GAP-u, skala anksioznosti koja je korišćena meri somatsku anksioznost. U budućim istraživanjima bi trebalo koristiti drugu meru anksioznosti kao kriterijum. Rezultati takođe upućuju na to da je negativna self-referentna kognitivna šema prisutna i kod anksioznih i kod depresivnih pojedinaca. Međutim, treba imati u vidu da su 90% uzorka činile osobe sa normalnim do umerenim nivoom simptoma depresivnosti, dok je 75% imalo normalne do umerene simptome anksioznosti. Ostaje da se ispita da li negativne i preteće IP merene WSAP zadatkom igraju značajnu ulogu na kliničkim uzorcima.

Ključne reči: negativna interpretativna pristrasnost, preteća interpretativna pristrasnost, hipoteza o specifičnosti sadržaja, anksioznost, depresivnost

Word-Sentence Association Paradigm: Assessing Interpretation Bias in Anxiety and Depression

Interpretation bias (IB) is a tendency to interpret ambiguous information negatively (i.e., as negative or threatening). In studies focused on IB in anxiety and depression, terms negative IB and threat IB are often used interchangeably. Also, to our knowledge, none of the studies included both negative (self-referent) and threat IB to contrast them. Thus, it is not clear yet whether a negative self-referent automatic IB is characteristic for depression, while threat-specific IB contributes to anxiety, or perhaps both threat-specific automatic IB and negative self-referent IB contribute to anxiety. For example, according to the content-specificity hypothesis, the association between the IB and anxiety is stronger when content of ambiguous situations matches specific anxiety threats. Based on this hypothesis, this study aimed to test whether threat IB is a specific predictor of symptoms of anxiety, above and beyond negative IB. We also assumed that negative IB is the only significant predictor of the symptoms of depression.

The sample was comprised of 148 undergraduates (80% women) from the University of Novi Sad. They completed a novel computerized Word-Sentence Association Paradigm (WSAP) task adapted in Serbian language as a measure of negative and threat automatic IB. Participants also completed the Depression, Anxiety and Stress Scale (DASS-21).

Two hierarchical regressions were conducted, using the Depression (model 1) and Anxiety (model 2) subscales from the DASS-21 as criteria. In model 1, at step 1, the Anxiety score was entered as a control variable explaining 42% of criterium, $F\Delta$ (1,146) = 106.61, $p < .000$. At step 2, negative IB explained additional 2% variance of

depression, FΔ (1,145) = 12.61, p = .001, β = .24, while at the step 3 threat IB did not make any significant contribution in predicting depression symptoms. In model 2, at step 1, the Depression score was entered as a control variable. At step 2, negative IB explained additional 2% of anxiety variance, FΔ (1,145) = 5.58, p = .019, β = .17. At the step 3, threat IB again did not make significant contribution in model prediction.

The obtained results suggest that negative, self-referent automatic IB is present in both anxiety and depression. We also failed to support the content-specificity hypothesis when it comes to the symptoms of anxiety. However, while threat stimuli pool was heterogeneous and included worries relevant to GAD, the Anxiety scale that was used measured somatic anxiety. Thus, future studies should use different anxiety measure as an outcome. The results also imply that negative self-referent cognitive schema is present in both anxious and depressed individuals. However, it should be considered that 90% of the sample had normal-to-moderate levels of the symptoms of depression, and 72% had normal-to-moderate levels of anxiety symptoms. It remains to be tested whether negative and threat IB measured by WSAP are playing a significant role in clinical samples.

Keywords: negative interpretation bias, threat interpretation bias, content-specificity hypothesis, anxiety, depression

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Interpretativne pristrasnosti kod brige: specifične za pretnju ili ne?

Prema izvesnom broju kognitivnih teoretičara, kod osoba sa izraženim simptomima generalizovanog anksioznog poremećaja (GAD) postoji izražena pristrasnost da se dvosmislene situacije tumače na preteći način. Međutim, postoji i druga linija razmišljanja prema kojoj pristrasnost u GAD-u nije specifična za pretnju već za negativne samo-referentne stimuluse uopšte. Do nedavno, ova dilema se nije mogla rešiti usled nedostatka validnih instrumenata za istraživanje pristrasnosti. Na osnovu literature koja podržava sličnost između GAD-a i depresije, pretpostavili smo da će pojedinci koji su skloni brizi pokazati pristranost opšteg negativnog karaktera kada

se prvi put susretnu sa neizvesnošću. Međutim, kada im se da dovoljno vremena da elaboraraju, ispoljiće se pristrasnost pretećeg karaktera.

Uzorak su činili studenti Univerziteta u Novom Sadu (N = 69). Ispitanici su popunili upitnike Penn State upitnik brige (Penn State Worry Questionnaire; PSWQ), Skalu Depresija, anksioznost i stres (Depression, Anxiety and Stress Scale; DASS-21), i skalu Netolerancija neizvesnosti (Intolerance of Uncertainty; IU) kako bi se procenili nivo brige, depresije i netolerancije neizvesnosti. Takođe su uradili dva kompjuterizovana zadatka za detekciju automatskih interpretativnih pristrasnosti. Jedan je obuhvatao temu pretnje (Reč Rečenica Asocijacija - pretnja; Word Sentence Association Paradigm - threat; WSAP), dok je drugi procenjivao pristrasnost negativnosti, primećen kod depresivnih osoba (WSAP - negativnost). Konačno, popunjavali su dva testa samoprocene interpretativih pristrasnosti, jedan koji je detektovao pristrasnosti pretnje (Dvosmisleni / nedvosmisleni dnevnik situacija; Ambiguous/Unambiguous Situations Diary; AUSD) a drugi negativnosti (Test dvosmislenih scenarija - depresija; Ambiguous Scenarios Test–Depression; AST-D).

U hijerarhijskoj regresiji, PSWQ briga je služila kao kriterijum. U prvom koraku, skala depresije iz DASS-21 i IU su doprineli varijaciji skorova PSWQ, FΔ $(2,66)$ = 15,9, p <.000, objašnjavajući 33% njegove varijanse. U drugom koraku, dve WSAP mere su objasnile dodatnih 15% varijanse brige, FΔ $(2,64)$ = 9,13, p <.000, ali samo je WSAP negativnost jedinstveno doprinela predviđanju brige (β = .41, p < .001). U trećem koraku, dve mere samoprocene objasnile su dodatnih 6% varijanse brige, FΔ $(2,62)$ = 4,02, p <.023, ali tako da je samo skala AUSD dala jedinstveni doprinos predviđanju (β = .22, p <.045).

Rezultati sugerišu prisustvo i negativnih i pretećih interpretacija kod osoba sa izraženim simptomima brige. Međutim, izgleda da ove pristrasnosti deluju na različitim nivoima obrade informacija. Čini se da pojedinci sa izraženom brigom imaju brzu, automatsku pristrasnu interpretaciju prema negativnosti uopšte, slično depresiji. Međutim, čini se da ovaj automatski postupak pokreće detaljniju obradu, ali sa dominantnom temom pretnje. Terapijske implikacije upotrebe WSAP kao tehnike kognitivne modifikacije će biti diskutovane.

Ključne reči: interpretativne pristrasnosti, netolerancija neizvesnosti, briga, generalizovani anksiozni poremećaj

Interpretative Biases in Worry: Threat-Specific or Not?

A proposition made by a number of proponents of the cognitive model of generalized anxiety disorder (GAD) is that there is a strong bias to interpret ambiguous situations in a threatening manner. However, there is another line of

reasoning, where the bias in GAD is not specific to threat but to negative self-referent stimuli in general. Until recently this dilemma could not be tackled appropriately due to a lack of valid tools. Based on the literature supporting similarity between GAD and depression, we hypothesized that individuals who are prone to worry would demonstrate negativity bias when first encountered ambiguity. However, when they are given sufficient time to elaborate, their threat bias will be noticeable.

A sample consisted of 69 undergraduates at the University of Novi Sad. They filled out the Pen State Worry Questionnaire (PSWQ), the Depression, Anxiety and Stress Scale (DASS-21), and the Intolerance of Uncertainty Scale (IU) to measure their levels of worry, depression, and intolerance of uncertainty, respectively. They also completed two computerized Word-Sentence Association Paradigm (WSAP) tests tapping automatic interpretation biases. One assessed biases typically seen in individuals who are prone to worry (WSAP-threat), whereas the other assessed negativity bias seen in depressed individuals (WSAP-negativity). Finally, they completed two self-report measures of interpretative bias, tapping threat (Ambiguous/Unambiguous Situation diary - AUSD) and negativity biases (Ambiguous Scenarios Test - AST-D).

A hierarchical regression was conducted with the PSWQ as the criterion. At step 1, the depression scale from DASS-21 and IU contributed to the variation in the PSWQ scores, $F\Delta (2,66) = 15.9$, $p < .000$, explaining 33% of its variance. At step 2, two WSAP measures explained additional 15% of worry variance, $F\Delta (2,64) = 9.13$, $p < .000$, but only the WSAP-negativity contributed uniquely to the prediction of worry ($\beta = .41$, $p < .001$). At step 3, two self-report measures explained additional 6% of variance of worry, $F\Delta (2,62) = 4.02$, $p < .023$, but only AUSD made a unique contribution ($\beta = .22$, $p < .045$).

Our results suggest the presence of both negative and threatening interpretations in people with pronounced symptoms of worry. However, it seems that these biases operate at different levels of information processing. Individuals with pronounced concern appear to have a rapid, automatic biased interpretation toward negativity in general, similar to depression. However, this automatic procedure seems to trigger more detailed processing, but with a dominant threat theme. The therapeutic implications of using WSAP as a cognitive modification technique will be discussed.

Keywords: interpretative biases, intolerance of uncertainty, worry, generalized anxiety disorder

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Od netolerancije neizvesnosti do depresivnih simptoma put vodi preko pristrasnosti

Prema kognitivnim teorijama, netolerancija neizvesnosti (NN) i sklonost da se dvosmislene situacije interpretiraju na negativan način (interpretativna pristrasnost; IP) predstavljaju transdijagnostičke faktore rizika za emocionalne poremećaje. NN i IP su konstrukti nastali u okviru različitih kognitivnih teorija i vrlo malo istraživanja se bavilo mogućnošću da NN dovodi do simptoma preko IP. NN, kao skup negativnih verovanja o neizvesnosti, bi mogao na ponašanje, razmišljanje pa i simptome da deluje preko usmeravanja interpretacija događaja na sistemski, pristrastan način. Dodatno, u literaturi o IP se pravi razlika između automatske i refleksivne (bliže svesti) interpretacije. Na primer, neka istraživanja sugerišu da kada je reč o interpretacijama situacija koje su bliže svesti, kontrolisane, osobe sa depresivnim simptomima manifestuju negativnu pristrasnost, dok osobe koje previše brinu manifestuju pristrasnost ka pretnji. Ovo istraživanje se bavilo refleksivnim interpretativnim procesom i imalo je sledeće ciljeve: a) proveru medijativnog efekta negativnih IP u relaciji između NN i simptoma depresije i anksioznosti (brige), b) proveru specifičnosti medijacije negativnih IP za depresivne simptome, ne i brigu, i c) ispitivanje postojanja polnih razlika u pretpostavljenom mehanizmu.

Uzorak je činilo 2765 odraslih (66% ženskog pola; ASgodine = 26.94 , SD = 7.86), koji su popunili sledeće upitnike u sklopu jednog online istraživanja početkom 2021. godine: skalu Netolerancije neizvesnosti (Mihić i saradnici, 2014), test dvosmislenih situacija (depresivni stimulusi) – kratka forma kao test negativnih IP (Berna i saradnici, 2011; adaptirali na srpski Volarov i saradnici, 2021), i upitnik simptoma depresivnosti i anksioznosti tokom prethodnih 7 dana (PHQ-4; Kroenke i saradnici, 2009). Analiza moderirane medijacije je urađena kroz PROCESS makro.

Rezultati su ukazali da negativne IP deluju kao medijatori u relaciji između NN i simptoma depresivnosti, pri čemu, kod visoko izražene NN, žene imaju izraženije pristrasnosti [LLCI -.32, ULCI -.19] u odnosu na muškarce [LLCI -.22, ULCI -.04]). Efekat postoji i nakon kontrole doprinosa brige. Negativne IP nisu igrale ulogu medijatora u relaciji NN i brige, uz kontrolu doprinosa depresivnog afekta.

Rezultati potkrepljuju hipotezu o specifičnosti kognitivnog sadržaja prema kojoj osobe koje su sklone razvoju depresivnog raspoloženja teže da dvosmislene,

nejasne situacije interpretiraju na negativan način, iako je postojala jednako verovatna mogućnost da se one vide i na neutralan ili pozitivan način. Rezultati mogu da posluže objašnjenju i epidemiološke činjenice da su žene podložnije depresiji tj. preko kombinacije izražene NN i izraženije sklonosti ka negativnim IP. Konačno, rezultati obogaćuju naše saznanje o načinima na koje transdijagnostički faktori (npr. doprinos automatskog naspram refleksivnog interpretativnog procesa) ipak mogu da dovedu do specifičnih psihopatoloških ishoda.

Ključne reči: netolerancija neizvesnosti; interpretativne pristrasnosti; depresivnost; anksioznost

Interpretative biases: Road from intolerance of uncertainty to depressed symptoms

According to cognitive theories of psychopathology, Intolerance of Uncertainty (IU) and a tendency to interpret ambiguous situation in a negative manner (interpretative biases, IB) are transdiagnostic risk factors for emotional disorders. IU and IB were developed within different cognitive theories and there is a scant of research examining if IU can lead to the symptoms via IB. IU, as a set of negative beliefs about uncertainty, could influence behavior, thinking and even the symptoms of emotional disorders via IB. Additionally, within IB research field, the authors distinguish between automatic and controlled IB. For example, some findings suggest that when controlled processing is activated, people with depressive symptoms demonstrate negative IB, whereas those prone to worry manifest threat-related IB. This research concerned controlled processing and had the following goals: a) to test mediating effects of IB in the relation between IU and the symptoms of depression and worry, b) to test specificity of the mediating effects of negative IB for the depressive but not worry symptoms, and c) to test for gender differences in the hypothesized mechanisms.

The sample consisted of 2756 adults (66% females; Mage = 26.94, SD = 7.86), who participated in an online research at the beginning of 2021 and who completed the following instruments: Intolerance of Uncertainty Scale-11 (Mihić et al., 2014), Ambiguous Sentences Test (depressed stimuli) – short form as a test of negative IB (Berna et al., 2011; adapted to Serbian Volarov et al., 2021), and a test of depressive and worry symptoms within the last 7 days (PHQ-4; Kroenke et al., 2009). PROCESS macro was used to test moderating mediation.

The results indicated that negative IB acted as a mediator in the relation between IU and the depressive symptoms. In addition, at the high levels of IU, women had more prominent IB [LLCI -.32, ULCI -.19] compared to males [LLCI -.22, ULCI -.04]. This

effect remained significant after controlling for worry. Negative IB did not serve as a mediator in the relations between IU and worry, controlling for depressed symptoms.

The results support the cognitive specificity hypothesis according to which persons who are prone to develop depression tend to interpret ambiguous situation in a negative way even though neutral and/or positive interpretations were equally likely. The results can help explain the epidemiological fact that women are more prone to depression than men, probably through a combination of prominent IU and a greater tendency for negative IB. Finally, the results can inform our knowledge about the ways transdiagnostic factors (i.e., automatic vs. controlled processing) might lead to specific psychopathological outcomes.

Keywords: intolerance of uncertainty; interpretative biases; depression; anxiety

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Emotional markers and uncertain situations: Baby steps in sentiment analysis

Recent advances in natural language processing have introduced new possibilities for examining the complex relations among clinically relevant phenomena and various psychological features reflected in language. This study examined the affective language-based correlates of situation perceptions using the participants' open-ended accounts of their emotional, cognitive, and behavioral reactions to each given situation. Our aim was to explore whether emotional cues contained in language are related to questionnaire measures of the responses in unclear circumstances. We used sentiment analysis, a technique frequently applied in language studies. This analytic approach is rooted in the traditional construct-indicator model. The sentiment analysis models of specific constructs are measured using coding systems or dictionaries, whose purpose is analogous to the scoring keys in questionnaire-driven studies. According to the chosen coding system or dictionary, the constructs are estimated using the frequencies of indicator occurrences. In this study, we used open-ended responses from 1322 participants (aged 18 - 77, mean = 33.64, SD = 12.24, median = 30; 51.6% female) who took the Uncertain Situations test (UST) along with The Depression, Anxiety, and Stress Scale - DASS-21, a measure of three clinically relevant constructs.

We applied the NRC Word – Emotion Association Lexicon (EmoLex; Mohammad & Turney, 2013.) Its basic installment includes the indicators of eight specific emotions (anger, anticipation, disgust, fear, joy, sadness, surprise, and trust), and two higher-order affective dimensions (positive and negative affect.) To simplify the transformation of the Serbian words to their canonical forms by avoiding conventional lemmatization, we translated the original responses to English. The two-step procedure included a) translating the participants' open-ended responses to English, b) checking for compliance with the inital Serbian wordings and correcting where necessary. We obtained the raw sum scores for lower- and higher-order affective dimensions by summing up indicator frequencies for each participant. Pearson coefficients spanned up to .25 (p<.001) for UST sum score and .29 (p<.001) for factor scores, whereby the UST correlations with anticipation, joy, positive affect, and trust were similar in size to its correlations with the DASS-21 scales. Multiple regression showed that affective features account for 9% of UST variance, whereby joy (β = .27, p<.001) and fear (β = -.17, p<.001) contribute significantly to its prediction. The results point to the utility of language-based affective cues in understanding the perception of uncertain situations, but call for further studies based on more varied language sources.

Keywords: uncertain situations test, sentiment analysis, anxiety, interpretation bias

KARAKTERISTIKE AKTERA U TURISTIČKOM SETINGU

CHARACTERISTICS OF ACTORS IN A TOURIST SETTING

Moderator: Tamara Jovanović

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The effect of emotional intelligence and personal values on employees' job satisfaction and service orientation

In the hotel sector, where direct contacts with guests are particularly emphasized, employees represent extremely valuable resource, which needs to be preserved and nurtured in order to achieve desired organizational results. Hence, for human resource management, it is important to direct their efforts on both, employees' job satisfaction and their service orientation, as well. Previous research in the field of organizational behavior, but also in the area of tourism, highlights the influence of individual competencies related to emotions, as well as of values towards which employees strive in their lives, in the formation of job satisfaction and service orientation. Nevertheless, there is no available study in the existing literature that simultaneously researched the roles of the hotel employees' emotional intelligence and personal values in shaping their job satisfaction and service orientation. Moreover, the literature lacks the studies that are focused on a relationship between the employees' personal values and service orientation in the hospitality sector. Therefore, this research attempted to fill in this literature gap, as it was focused on examining a relationship between the hotel employees' emotional intelligence, personal values, job satisfaction, and service orientation within one research framework. The survey research was conducted on the sample of 131 hotel employees in Novi Sad (male 32.1%, female 67.9%; M(age)=30.89). The main results showed that all researched emotional intelligence competencies positively shape the employees' job satisfaction and their service orientation. Specifically, Use of emotions is the strongest predictor of the employees' job satisfaction (β=.427; p<.01) and their service orientation (β=.441; p<.01), whereas Regulation of emotions had the lowest influence in shaping the employees' job satisfaction (β=.285; p<.01) and their service orientation (β=.201; p<.01). Moreover, majority of personal values were found to be positive predictors of the hotel employees' job satisfaction. In particular, Sense of Accomplishment had the strongest impact in shaping their job satisfaction (β=.359; p<.01). On the other hand, all investigated personal values were confirmed to positively influence the employees' service orientation, with Security being the strongest predictor of the hotel employees' service orientation (β=.513; p<.01). This study contributes to the existing tourism literature as it offers useful

practical implications for the human resource management regarding the enhancement and preservation of a satisfactory levels of their employees' job satisfaction and their service orientation.

Keywords: emotional intelligence, personal values, job satisfaction, service orientation, hotel employees

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Ruralni turizam kao mehanizam psiho-socijalnog osnaživanja seoskih žena

Dosadašnja ruralno turistička iskustva i istraživanja ruralne društvene strukture u našem društvu ukazuju na brojne probleme sa kojima se srpsko selo i njegovi akteri suočavaju decenijama u nazad. Promene u psiho-socijalnoj percepciji značaja i uloge ruralnog prostora i razvoja ruralnog turizma nameću i nove načine da društvo i njegovi akteri odgovore na negativne demografske i društveno-ekonomske trendove. U ovom radu, posebna pažnja usmerena je ka specifičnom odnosu koji postoji između promena u autopercepciji društvenog položaja i uloga seoskih žena, i sa druge strane. razvoja ruralnog turizma. Imajući u vidu da su seoske žene posebno osetljiva i marginalizovana društvena grupa, da na njihov status utiču ne samo prostorna, već i rodna ograničenja, istraživanje je sprovedeno na teritoriji AP Vojvodine, a relevantni podaci dobijeni su putem kombinacije metoda slučaja i biografskog metoda. Ovo kvalitativno istraživanje imalo je za cilj, da putem polu-struktuisanog naučnog razgovora, ispita da li i na koji način se autopercepcija seoskih žena članica udruženja, koja se bave ruralnim turizmom, menja i oblikuje usled ovakvog angažovanja. Da li ruralni turizam može biti jedan od mehanizama za psiho-socijalno osnaživanje seoskih žena? Koji su njegovi dometi, ograničenja i mogućnosti? Rezultati istraživanja ukazuju da postoji značajna veza između angažovanja seoskih žena u sferi ruralnog turizma i promena u njihovoj autopercepciji sopstvenog društvenog položaja i uloge. Međutim, iako te promene mogu biti raznovrsne, završni ton upućuje na stav da seoske žene, uopšteno i u ruralnom turizmu, ostaju opterećene brojnim društvenim, vrednosnim, kulturnim, ekonomskim i političkim faktorima.

Ključne reči: ruralni turizam, seoske žene, udruženja, osnaživanje, AP Vojvodina

Rural tourism as a mechanism of psycho-social empowerment of rural women

Previous rural tourist experiences and research of the rural social structure in our society indicate numerous problems that the serbian village and its actors have been facing for decades. Changes in the psycho-social perception of the importance and role of rural space and the development of rural tourism impose new ways for society and its actors to respond to negative demographic and socio-economic trends. In this paper, special attention is paid to the specific relationship that exists between changes in the self - perception of social position and the role of rural women, and on the other hand, development of rural tourism. Bearing in mind that rural women are a particularly sensitive and marginalized social group, that their status is influenced not only by spatial, but also gender restrictions, the research was conducted on the territory of AP Vojvodina, and relevant data were obtained through a combination of case and biographical methods. This qualitative research aimed to examine, through a semi-structured scientific interview, whether and in what way the self-perception of rural women members of the association, who are engaged in rural tourism, changes and shapes as a result of such engagement. Can rural tourism be one of the mechanisms for psycho-social empowerment of rural women? What are its ranges, limitations and possibilities? The results of the research indicate that there is a significant connection between the engagement of rural women in the field of rural tourism and changes in their self-perception of their own social position and role. However, although these changes may be varied, the concluding tone suggests that rural women, in rural tourism and in general, remain burdened by a number of social, value, cultural, economic and political factors.

Keywords: rural tourism, rural women, associations, empowerment, AP Vojvodina

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Characteristics of young (potential) dark tourism site visitors in Serbia: a pilot study

Dark tourism can be defined as form of tourism that is related to death and suffering and is often a subject of debate whether it is a deviant form of tourism. This study aimed to explore the relationship between personality traits and socio-demographic characteristics (gender, age, monthly income, marital status) and preferences of visiting dark tourism sites. Personality traits were measured by MiniIPIP-6 - extraversion, neuroticism, agreeableness, conscientiousness, openness to experience and honesty-humility (Međedović & Bulut, 2017), SD3 - Machiavellianism, narcissism, and psychopathy (Jones & Paulhus, 2014) and SSIS - sadism (Davies & Hammond, 2011). To measure the preference of visiting dark tourism sites, a spectrum of eight dark tourism products developed by Stone (2006) was used: fun factories, exhibitions, dungeons, resting places, shrines, conflict/battle sites, camps of genocide and places where natural disaster occurred. For each site an example from Serbia and surrounding countries was provided and respondents evaluated their preference of given sites on a 5-point Likert scale. Respondents were also asked whether they have visited any of these sites and what would be their reason to visit such sites. The sample consisted of 166 students of University of Novi Sad (72.3% female, M(age)=21.3) that filled out the questionnaire as part of the course requirements. For dark fun factories preference, conscientiousness (B=.408, F=4.453, p<.05), honesty (B=-.357, F=3.957, p<.05) and sadism (B=-0.56, F= 5.123, p<.05) were significant predictors. Since fun factories are seen as family friendly sites, with well defined activities and itineraries and truthful in their inauthentic content, it is no surprise that they are attractive to those that are conscientious and honest. Also, on these sites, there is no real suffering or macabre represented which might explain the effect of low sadism. Preference of visiting dark resting places was affected by narcissism (B=-.460, F=5.300, p<.05) and psychopathy (B=.460, F=4.507, p<.05). These are places where everything associates to the transience of life and remembrance of deceased which might not be appealing to narcissists, as our results suggest. However, those who have a high score on psychopathy prefer to visit dark resting places, which is surprising since they should be drawn to high risk places such as places where natural disaster occurred. For all other dark tourism sites, there were no significant effects of personality traits. As for socio-demographic variables, none of the selected variables showed significant influence, but marginally significant influence was shown for gender on conflict/battle sites (B=.443, F=3.598, p=.06) and age on places where natural disaster occurred (B=.063, F=3.740, p=.055). Further research on a larger and more diverse sample is needed in order to better understand the findings that this study has shown.

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Understanding vacation drone videography

Tourists are increasingly using drones on vacation, but their use and the nature of the videos that they produce are not well understood. Relatively fewer studies have considered how tourists themselves make use of advanced technologies when on vacation, despite the growth of research into mobile technology and user-generated content. Tourists have been eager to use newly introduced technologies to capture their experiences, but also as a way of connecting with local people in destinations. Thus, an international sample of 351 tourist drone videos was subjected to content analysis grounded on the works of Anja Dinhopl and Ulrike Gretzel on conceptualizing tourist videography and the additional quantitative analysis of drone video metadata. The results show a significant variation in the content and production of tourist drone videos depending on the type of video creator and establish that analyzing the videos from the perspective of videography generates insights of value to destination management organizations and tourist businesses. We conclude that destination management organizations should see tourist drone videos as a new type of user-generated content for their destinations, as well as a potential source of innovative new product ideas and that they should engage more proactively with tourist drone videographers to maximize the impact of this opportunity. Tourist drone videos, seen as data, are a new, important source of information for developing insight into the tourist's sense of a place, navigation, or for further analysis as a new source of data about tourist destinations. Understanding what could be expected from videos created by tourists, influencers, or drone pilots can be of paramount importance in developing work in this area.

Keywords: Drone; Tourist videography; Destination management; Marketing; User-generated content

LJUBAV, INTIMNE VEZE, BRAK I KRIZE

LOVE, INTIMATE RELATIONSHIPS, MARRIAGE AND CRISES

Moderator: Jelena Šakotić-Kurbalija

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Love is Healing: Romantic Relationship Quality and Stress during the COVID-19 outbreak

During the COVID-19 pandemic outbreak people are facing new and additional stressors which lead to higher levels of stress. Stress interferes with everyday functioning but can also result in more serious mental health problems, such as depression or anxiety. However, research on importance of social support suggests that quality relationships with others can have beneficial effects, especially in the time of crisis. For most people in a romantic relationship their partner represents a main source of that support, and relationships are viewed as a buffer against stress. However, research on marriage and relationship quality suggests that this is not merely an effect of relationship status, but the quality of that relationship. Therefore, the aim of this study was to examine the relation between romantic relationship quality and stress during challenging period of COVID-19 outbreak, while controlling for demographic characteristics and stressors specific for this crisis.

The study was conducted in Croatia in spring 2020, when strict preventive measures against the spread of the coronavirus were in place. 349 people in a relationship (either married or dating) participated in the online survey. 74% of participants were women. The sample was heterogeneous with respect to education level and employment status, while the age ranged from 18 to 76 years (M = 33.63, SD = 12.788). In addition to answering demographic questions and questions about perceived change in their lives due to COVID-19 pandemic, participants completed the Stress scale from the DASS-21 questionnaire and the Relationship Quality scale.

In order to test the hypothesis that the quality of a romantic relationship predicts levels of experienced stress in the time of COVID-19 pandemic over and beyond demographic and pandemic-related variables, hierarchical regression analysis was conducted. In the first step of the analysis participant's gender and age significantly predicted stress ($F_{(2,330)} = 13,562$; $p < ,001$), as did variables of fear of being infected and perceived change in life due to COVID-19 in the second step of the analysis ($\Delta F_{(2,328)} = 47,060$; $p < ,001$). Finally, in the third step the relationship quality was added into the model ($\Delta F_{(1,327)} = 11,645$; $p < ,001$) and proved to be a significant predictor of stress ($\beta = -,161$; $p < ,001$). Controlling for demographic and pandemic-related variables, participants who perceived the quality of their relationship to be

higher reported lower levels of stress in the time of pandemic. The results indicate that relationship quality can serve as an important protective factor, suggesting that promotion of quality romantic relationships can be beneficial in stressful times.

Keywords: psychosocial impact of COVID-19, stress, romantic relationship quality

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Perceived partner humility mediating attachment and relationship quality association – a dyadic study

Attachment models guide our perceptions of and reactions to social experiences including how we act towards our partners and how we perceive them (Mikulincer & Shaver, 2005). Perceiving the partner as appreciative and responsive positively affects relationship quality. Recent findings suggest perceiving the partner as humble, other-oriented and less self-focused might prove beneficial to overall relationship functioning, as well (Davis et al., 2011). The present study aimed to investigate the mediating role of perceived partner humility on the association between attachment dimensions and relationship quality using an online questionnaire with 641 Croatian dating couples (age range 20 – 39; average relationship duration 3 years) who filled out the following measures: Experience in Close Relationships (Kamenov & Jelić, 2003) to assess attachment dimensions, Perceived Partner Humility Scale (Mehulić et al., 2020) and the Quality of Marriage Index (Norton, 1983). Dyadic analyses were conducted within the APIMeM framework (Kashy & Kenny, 2000). Results showed that perceived partner humility played a mediating role in both the actor and the partner effects of attachment anxiety and relationship quality with the model explaining 27% of criteria variance for men and 31% for women. The results also indicated that perceived partner humility was only partly relevant to the association between attachment avoidance and relationship quality. Participants' anxiety was associated with perceiving their partners as less humble (βmen = -.19, p < .01; βwomen = -.29, p < .01) and at the same time being perceived as less humble by their partners (βmen = -.10, p < .01; βwomen = -.17, p < .01) whereas participants' avoidance was associated only with viewing their partner as less humble (βmen = -.23, p < .01; βwomen = -.16, p < .01). These results emphasize the importance of humility for relationship quality and provide insight

into the association between attachment dimensions and perceived partner humility.

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Romance in movies, romantic beliefs and satisfaction with relationships

The main goal of this study was to examine the effect of preference for romance in movies and beliefs about romantic relationships on satisfaction in relationships between men and women. The convenience sample was use and it consisted of a total of 190 respondents, or 95 heterosexual loving couples. The age range in the sample was from 18 to 38 years (M=24.05; SD=4.15). The variable preference of romance in movies was operationalized by the question of the extent to which the romantic story in a movie of a certain genre is important to the respondents for their preference of that genre. Besides this question, following instruments were used in this research: Romantic beliefs scale (Spreacher & Metts, 1989) for the operationalization of romantic beliefs, and Relationship assessment scale (Hendrick, 1988) for the operationalization of relationship satisfaction. The data were analyzed by path analysis in AMOS. The results show that the preference for romance predicts Idealization as a romantic belief only in women (Effect=.238; p=.006), a romantic belief Love will find the way was a significant predictor of relationship satisfaction in both genders (Males: Effect=.558; p=.000; Female: Effect =.348; p=.005), finally, romantic belief One and Only was a significant predictor of relationship satisfaction only for the males in the sample (Effect=.238; p=.006), with a negative correlation with the criterion variable. So, based on the results we can conclude that the preference for romance in movies predicts one of the romantic beliefs (Idealization and only for females) but not the satisfaction with the relationship, the romantic belief, Love will find the way predicts relationship satisfaction with a positive correlation which means that the more pronounced this belief is, the greater is the satisfaction with the relationship between both sexes, on the other hand, belief One and Only achieves a negative correlation with relationship satisfaction, which means that those respondents in whom this belief is more pronounced are less satisfied

with their relationship – this is true for male respondents, this relationship is not significant for female respondents.

Keywords: Romance in movies, romantic beliefs, relationship satisfaction, romantic couples.

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Lepota (ni)je u oku posmatrača? Percepcija bračnog zadovoljstva u alkoholičarskim porodicama iz ugla bračnih partnera

Alkoholičarski brak smatra se "centralnim procesorom" alkoholizma budući da u najvećoj meri određuje dinamiku nastanka, razvoja, održavanja i ishoda alkoholizma u porodici. Uz bračnu disharmoniju/nestabilnost, ono je ključni činilac ovog složenog odnosa. Nalazi o saglasnosti bračnih partnera na dimenziji zadovoljstva značajno se razlikuju u zavisnosti od trajanja alkoholizma u sistemu. Zatim, od toga ko o problemima u odnosima saopštava – zavisnik ili partner. Stoga, cilj rada je bio da se ispita da li postoji povezanost između trajanja zavisnosti od alkohola jednog partnera, i bračnog zadovoljstva oba partnera posmatranih ponaosob.

U istraživanju je učestvovalo 50 bračnih partnera, s mužem kao identifikovanim pacijentom (IP), i podjednak broj bračnih parova iz nekliničke populacije. Percepcija bračnog zadovoljstva ocenjena na osnovu skale Zadovoljstva IV revizije Upitnika bračne i porodične kohezivnosti i adaptibilnosti (FACES IV; Olson et al., 2019). Trajanje zavisnosti od alkohola izraženo je dužinom trajanja svakog od indikatora razvijene zavisnosti od alkohola (nemogućnost apstinencije, pad tolerancije, fizička zavisnost, alkoholne amnezije).

Prediktivni doprinosi indikatora alkoholizma u proceni zadovoljstva brakom testirani su putem četiri višestruka regresiona modela, odvojeno za žene i muževe iz kliničkog i nekliničkog uzorka. U model su kao prediktori uključeni i sociodemografski pokazatelji (životna dob, obrazovanje, prihod po članu domaćinstva) i opšti podaci o sekundarnoj porodici bračnih partnera (trajanje braka, broj dece). Dobijen je jedan statistički značajan model i to na uzorku IP, $F_{(9,41)}$ = 5.21, p = .042. Model sugeriše da prediktori uključeni u model objašnjavaju 90 % varijanse kriterijuma bračno zadovoljstvo. Među testiranim prediktorima, statistički značajan relativni prediktivni doprinos dali su starost ispitanika (β = .727, p = .039), trajanje braka (β = 1.046, p =

.047), kao i trajanje gubitka kontrole (β = 2.645, p = .030) i amnezija (β = -2.696, p = .019).

Samo na uzorku IP sa sa odmicanjem životne dobi IP odnosno porastom dužine trajanja alkoholičarskog braka, dolazi do smanjenja zadovoljstva. Pojava i ponavljanje alkoholnih amnezija takođe su vodili umanjenju zadovoljstva, moguće usled toga što su ispadi u pamćenju fenomen koji IP čini upućenim na druge i osetljivijim na odgovore okruženja. Nalaz da što duže traje nemogućnost IP da kontrolišu pijenje – veće je zadovoljstvo brakom jeste neuobičajen. Da li su u pitanju različiti tipovi alkoholizma, ili pak ponavljani ciklusi pijenja zamagljuju doživljaj krivice, ostaju otvorena istraživačka pitanja, baš kao i činjenica da ni jedan od upravo navedenih kriterijuma nije uticao na (ne)zadovoljstvo brakom supruga IP.

Ključne reči: individualne razlike percepcije zadovoljstva brakom, alkoholičarska porodica

Beauty lies (or not?) in the eye of the beholder? Perception of marital satisfaction in alcoholic families from the spouses

An alcoholic marriage is considered to be a "central processor" of alcoholism since it mostly determines the dynamics of instigation, development, upkeep and outcome of alcoholism in a family. Along with marital disharmony/instability, it is a key factor of this complex relationship. Findings on the consent of marital partners in the dimension of satisfaction significantly differ, depending on the duration of alcoholism in the system and depending on the person reporting the problems in a relationship, whether it is the addict or their partner. Therefore, the aim of this paper was to investigate if there was a connection between the duration of alcohol dependency of one partner and marital satisfaction of both partners, observed individually.

Fifty married couples have participated, all with husband as identified patient (IP) and the same number of married couples from non-clinical population. Perception of marital satisfaction was assessed by Satisfaction scale of the IV revision of Family Adaptability and Cohesion Evaluation Scale (FACES IV; Olson et al., 2019). Duration of alcohol dependency was expressed by duration of each indicator of developed alcohol addiction (inability to abstain, drop in tolerance, physical dependency, alcoholic amnesia episodes).

Significance of alcoholism indicators' contribution in predicting marital satisfaction was conducted by four multiple regression analysis, separately for wives and husbands from clinical and non-clinical sample. As predictors, in the model were included socio-demographic indicators (age, education, income per family member)

as well as general facts on the secondary families of the marital partners (duration of marriage, number of children). Statistically significant model was attained solely on a IP sample, $F(9,41) = 5.21$, $p = .042$. The model suggests that the predictors included in the model explain 90 % of the criterion variance. Among the tested predictors, age of questionees ($\beta = .727$, $p = .039$), duration of marriage ($\beta = 1.046$, $p = .047$), duration of losing control ($\beta = 2.645$, $p = .030$) and amnesia ($\beta = -2.696$, $p = .019$) made significant contribution in predicting marital satisfaction.

Only in the sample of the IP with a prolonged age of the IP and a duration of an alcoholic marriage comes a decrease in satisfaction. Appearance and repetition of alcoholic amnesia also lead to decrease in satisfaction, possibly because memory loss episodes are a phenomenon that makes IP more dependent on others and more sensitive to responses of surroundings. A result of longer the inability of IP to control their drinking – greater the marital satisfaction is indeed unusual. Whether there were different types of alcoholism in question or that repeated cycles tend to blur a sense of guilt, remain as open questions to investigate, as well as the fact that neither of these criterions has influenced marital (dis)satisfaction of the IP's wives.

Keywords: individual difference in marital satisfaction perception, alcoholic families

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Prediktori ljubomore u bračnim odnosima

Imajući u vidu različite teorijske pristupe, nalaze dosadašnjih istraživanja i uvide iz psihoterapijske prakse, u cilju provere u kojoj meri različite varijable doprinose predikciji ljubomore u bračnim odnosima, ispitano je 399 osoba (58.6% žena), različitog socioekonomskog statusa, starosti od 20 do 61 godine. Ispitanici su u braku od 6 meseci do 37 godina. Multidimenzionalnom skalom ljubomore (Multidimensional Jealousy Scale- MJS, Pfeiffer & Wong, 1989) su merene njene tri komponente: kognitivna, emocionalna i bihejvioralna. Kao potencijalni prediktori, od sociodemografskih varijabli obuhvaćeni su: pol, razlika u godinama među partnerima, obrazovanje, dužina zajedničkog života i broj dece. Ispitani su i:

depresivnost, anksioznost i stres (DASS–21: Lovibond & Lovibond, 1995), obrasci afektivne vezanosti (The Relationships Questionnaire - RQ: Bartholomew & Horowitz, 1991), kvalitet partnerskog odnosa (DAS - Dyadic Adjustment Scale: Spanier, 1976), bračna nestabilnost (Marital Instability Index: Booth, Johnson & Edwards, 1983), dijadna empatija (Interpersonal Reactivity Index for Couples - IRIC: Péloquin & Lafontaine, 2010) i sklonost neverstvu (The Infidelity Scale: Drigotas, Safstrom & Gentilia, 1999).

Rezultati multiple regresione analize ukazuju na značajnu povezanost kognitivne komponente ljubomore i ispitanog skupa prediktorskih varijabli (R = 0,535, p<0,001), pri čemu su značajni pojedinačni prediktori: dužina zajedničkog života; dijadni konsenzus; preokupirani stil afektivne vezanosti; bračna nestabilnost; kohezivnost; sigurni stil afektivne vezanosti; afektivna dijadna empatija i kognitivna dijadna empatija. Rezultati takođe ukazuju na značajnu povezanost emocionalne komponente ljubomore i seta prediktorskih varijabli (R = 0,318, p<0,01), pri čemu su značajni pojedinačni prediktori: dužina zajedničkog života; izbegavajući stil afektivne vezanosti i sklonost neverstvu. Statistički značajno je povezana i bihejvioralna dimenzija ljubomore sa setom prediktorskih varijabli (R = 0,532, p<0,001), pri čemu su značajni pojedinačni prediktori: anksioznost; dužina zajedničkog života; preokupirani stil afektivne vezanosti; kognitivna dijadna empatija i dijadno zadovoljstvo.

Ključne reči: brak, bliski odnosi, ljubomora

Predictors of jealousy in marital relationships

Having in mind different theoretical approaches, findings of previous research and insights from psychotherapy, in order to identify different predictors of jealousy in marital relationships, we have examined 399 persons (58.6% women), of different socioeconomic status, age from 20 to 61 years. At the time of the data collection the participants were married from 6 months to 37 years. The Multidimensional Jealousy Scale (MJS, Pfeiffer & Wong, 1989) was used in order to provide separate assessment of cognitive, emotional, and behavioral component of jealousy. As potential predictors we have included following sociodemographic variables: sex of the respondents, age difference between partners, education, duration of marriage, and number of children. We have also included: depression, anxiety and stress (DASS – 21: Lovibond & Lovibond, 1995), attachment styles (The Relationships Questionnaire - RQ: Bartholomew & Horowitz, 1991), marital quality (DAS - Dyadic

Adjustment Scale: Spanier, 1976), marital instability (Booth, Johnson & Edwards, 1983), dyadic empathy (Interpersonal Reactivity Index for Couples - IRIC: Péloquin & Lafontaine, 2010) and infidelity (The Infidelity Scale: Drigotas, Safstrom & Gentilia, 1999).

The results of multiple regression analysis indicate a significant correlation between the cognitive component of jealousy and the examined set of predictor variables (R = 0.535, p<0.001), with significant individual predictors of the duration of marriage; dyadic consensus; preoccupied attachment style; marital instability; dyadic cohesion; secure attachment style; dyadic empathic concern and dyadic perspective taking. The results also indicate a significant correlation between the emotional component of jealousy and a set of predictor variables (R = 0.318, p <0.01), with significant individual predictors of the duration of marriage; dismissing attachment style and infidelity. The correlation between behavioral component of jealousy and a set of predictor variables was also statistically significant (R = 0.532, p <0.001), with individual significant predictors of anxiety; duration of marriage; preoccupied attachment style; dyadic perspective taking and dyadic satisfaction.

Keywords: Marriage, Close relationships, Jealousy

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Povezanost razlika u proceni lične i partnerove vrednosti sa percepcijom kvaliteta braka: moderatorska uloga pola

Koncept "vrednosti partnera" potiče iz evolucione teorije. Izvorno je podrazumevao sve spolja vidljive karakteristike koje omogućuju uspešnu reprodukciju. Međutim, određenje vrednosti partnera je vremenom prošireno i na druge karakteristike koje pojedinac poseduje u određenom trenutku i kontekstu, a koje doprinose njegovoj sposobnosti da uspešno pronađe, privuče i zadrži partnera/partnerku. Vrednost partnera uključuje sve karakteristike ličnosti koje mogu uticati na izbor partnera i funkcionisanje partnerskog odnosa. Većina istraživanja vrednosti partnera je bila usmerena na utvrđivanje polnih razlika i razlika u izboru partnera za kratkoročne i

dugoročne veze, a malo je istraživanja koja su ispitivala parove koji su već u vezi. Nalazi dosadašnjih istraživanja, sprovedenih u inostranstvu i u našoj sredini, ukazuju da je, pored procene vrednosti partnera, značajno i kako se partnerove karakteristike procenjuju u odnosu na lične karakteristike. Odnosno, za kvalitet i stabilnost partnerskog odnosa, značajnim se pokazalo postojanje razlika u procenama lične i partnerove vrednosti.

U cilju utvrđivanja moderatorske uloge pola u povezanosti razlika u proceni lične i partnerove vrednosti sa procenom bračnog kvaliteta, prikupljeni su podaci od 858 ispitanika oba pola (50% žena), različitog socioekonomskog statusa, starosti od 20 do 81 godine. Za ispitivanje razlika u proceni lične i partnerove vrednosti, primenjena je skala MVI (Mate Value Inventory: Kirsner, Figueredo & Jacobs, 2003). Ovom skalom se procenjuje 17 karakteristika koje su se pokazale važnim pri izboru partnera, a to su: ambicioznost, privlačnost lica, privlačnost tela, želja da se imaju deca, zainteresovanost za seks, vernost, finansijska osiguranost, velikodušnost, smisao za humor, dobro zdravstveno stanje, nezavisnost, inteligencija, blagost i razumevanje, odanost, odgovornost, društvenost i emocionalna stabilnost. Za svakog ispitanika prvo su izračunati sumarni skorovi za samoprocenu i pocenu partnera na svih 17 atributa. Prediktorska varijabla korištena u analizi predstavlja razliku u proceni ukupne lične i partnerove vrednosti. Za procenu kvaliteta bračnog odnosa primenjena je DAS skala (Dyadic Adjustment Scale: Spanier, 1976). Rezultati analize moderacije govore u prilog pretpostavci o postojanju statistički značajnih efekata interakcije pola i razlika u proceni lične i partnerove vrednosti na procenu kvaliteta braka (F(1,854)=16.84, p<.01). Dobijeni rezultati sugerišu da je procena lične superiornosti u odnosu na partnera negativno povezana sa procenom bračnog kvaliteta i kod muškaraca i kod žena, ali da je taj efekat znatno izraženiji kod žena. Rezultati će biti diskutovani u kontekstu ekonomskog modela baziranog na evolucionoj teoriji.

Ključne reči: bračni odnosi, kvalitet braka, vrednost partnera, rodne uloge, polne razlike

Mate Value and Marital Quality: Sex of the respondents as a Moderator

The concept of "mate value" originate from evolutionary theory. It was initially defined as a genetic quality or fitness of the self as a potential sexual partner.

However, the definition of the mate value has been extended over time to other visible characteristics of the individual in a particular moment and context, which contribute to his ability to successfully find, attract and retain sexual partner. The mate value includes all personality characteristics that can influence the choice of a mate and the functioning of the relationship. Majority of mate value research has been focused on identifying the differences between males and females and the differences in choice of the partner for short-term and long-term relationships. Only few studies have examined couples who are already in a long-term relationship. The findings of previous research, conducted abroad and in our region, indicate that the discrepancy in the assessments of personal and partner's mate value proved to be significant in predicting marital quality and stability.

In order to determine the moderator role of the sex of the respondents in the relationship between differences in personal and partner's mate value and marital quality, data were collected from 858 respondents of both sexes (50% women), of different socioeconomic status, aged 20 to 81 years. The Mate Value Inventory (Kirsner, Figueredo & Jacobs, 2003) was used to examine differences in personal and partner's mate value. It consists of 17 traits which should be related to mating success: ambitious, attractive face, attractive body, desires children, enthusiastic about sex, faithful to partner, financially secure, generous, a good sense of humor, healthy, independent, intelligent, kind and understanding, loyal, responsible, sociable, and emotionally stable. For each respondent we first calculated summary scores for assessment of self and partner's mate value on all 17 attributes. The predictor variable used in the analysis represent the difference in the assessment of the total personal and partner's value. The Dyadic Adjustment Scale (Spanier 1976) was used to assess the quality of marriage. The results of the study support the assumption that the effect of discrepancies in personal and partner's mate value on marital quality is moderated by the sex of the respondents ($F_{(1,854)} = 16.84$, $p < .01$). The obtained results suggest that the assessment of personal superiority in relation to the partner is negatively related to the assessment of marital quality in both men and women, but that this effect is much more noticeable in women. The results will be discussed in the context of an economic model based on evolutionary theory.

Keywords: marital relations, quality of marriage, mate value, gender roles, sex differences

RADNA ETIKA: PERSPEKTIVE U TUMAČENJU ODNOSA PREMA RADU I SARADNICIMA

WORK ETHIC: PERSPECTIVES IN INTERPRETING ATTITUDES TOWARDS WORK AND COWORKERS

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Percepcija učestalosti toksičnih radnih odnosa i psiho-fizičko zdravlje uposlenika

Cilj ovog istraživanja bio je ispitivanje percepcije učestalosti toksičnih radnih odnosa i njihovog značaja za učestalost simptoma poremećaja psihofizičkog zdravlja kod uposlenika u Republici Srbiji. Pored toga, ispitana je učestalost toksičnih radnih odnosa i poremećaja zdravlja kod uposlenika različitih prema dužini radnog staža i različitih prema polu. Na prigodnom uzorku od 331 uposlenika, prosečne starosti 38.72 godine, među kojima je bilo 65% žena, prikupljeni su podaci pomoću upitnika toksičnih radnih odnosa (Faust; Majstorović, 2021), upitnika zdravlja (SPFZ-1; Majstorović, 2011) i profila demografskih osobina. Kao teorijski okvir istraživanja poslužio je novi koncept nazvan Faustovski sindrom koji objedinjuje niz oblika toksičnih radnih odnosa koje nastaju kao posledica klijentelističkog ugovornog odnosa između vođe grupe (patrona) i njegovih sledbenika. Inicijalne mere ovog sindroma grupisane su u pet faceta koji su nazvani lojalnost patronu, manipulacija sistemom odlučivanja, subverzivni odnos prema organizaciji, praksa zastrašivanja i isključivanja i negativan stav prema kolegama. Rezultati pokazuju da najveću učestalost imaju odnosi lojalnost patronu, subverzivni odnos prema organizaciji i negativan stav prema kolegama, kao i da su poremećaji fizičkog zdravlja, umor i strah i anksioznost najčešće opaženi simptomi poremećaja zdravlja. Nadalje, ispitani su regresijski modeli putem step-wise procedure i ustanovljeno je da najmanje dva tipa toksičnih odnosa statistički značajno kovarira sa merama poremećaja svih faceta psiho-fizičkog zdravlja, da uposlenici sa radnim stažom preko 20 godina, u odnosu na one sa stažom do 5 godina, izveštavaju o značajno češćem prisustvu četiri od pet merenih toksičnih radnih odnosa. Konačno, utvrđeno je da se ove grupe uposlenika ne razlikuju po učestalosti simptoma poremećaja zdravlja kao i da žene uočavaju više simptoma poremećaja svog fizičkog zdravlja, umora i straha i anksioznosti. Zaključeno je da neuređena radna etika u organizacijama koja se, između ostalog, manifestuje i u toksičnim radnim odnosima verovatno doprinosi poremećaju zdravlja uposlenika, da takve odnose značajno češće prepoznaju uposlenici sa radnim stažom preko 20 godina i da žene češće izveštavaju o narušenom zdravlju. Značaj ovog istraživanja je u tome što ukazuje na važnost uvođenja etičkog programa u organizacije koji će sprečiti pojavu klijentelističkih odnosa, pojavu klika i njihovog

subverzivnog delovanja, odnosno, pojavu Faustovskog sindroma kao kontekstualnog faktora koji ugrožava zdravlje i radnu sposobnost uposlenika.

Ključne reči: toksični radni odnosi, klijentelizam, Faustovski sindrom, psiho-fizičko zdravlje uposlenika, radni staž.

The perception of toxic work relationships frequency and psycho-physical health of the employees

The aim of this study was to examine the perception of the frequency of toxic work relationships and their significance for the frequency of symptoms of mental and physical health disorders in employees in the Republic of Serbia. In addition, the frequency of toxic work relationships and health disorders was examined on employees who had different lengths of work tenure and were of different genders. In an at-hand sample of 331 employees, with an average age of 38.72, of whom 65% were women, the data was collected using a toxic work relationship questionnaire (Faust; Majstorović, 2021), psychophysical health scale (SPFZ-1; Majstorović, 2011) and demographic trait profile. The theoretical framework of the research is a new concept called Faust syndrome, which combines forms of toxic working relationships that arise as a consequence of the clientelistic contractual relationship between the group leader (patron) and his followers. The initial measures of this syndrome are grouped into five facets named patron loyalty, manipulation of the decision-making system, subversive attitude towards the organization, practice of intimidation and exclusion, and negative attitude towards colleagues. The results show that patron loyalty, subversive attitude towards the organization and negative attitude towards colleagues have the highest frequency, as well as those physical health disorders, fatigue and fear and anxiety are the most commonly observed health disorders symptoms. Furthermore, regression models were examined by step-wise procedure, and it was found that at least two types of toxic relationships statistically significantly covariate with measures of all facets of psycho-physical health, that employees with work experience over 20 years, compared to those with up to 5 years, report significantly more frequent presence of four of the five toxic working relationships measured. Finally, it was found that these groups of employees did not differ in the frequency of health disorders symptoms and that women reported more symptoms of their physical health disorders, fatigue, and fear and anxiety. It was concluded that unregulated work ethic in organizations, which, among other things, manifests itself in toxic work relationships, probably contributes to employee health disorders, that such relationships are significantly more often recognized by employees with over 20 years of experience and that women more often report impaired health. The significance of this research is that

it indicates the importance of introducing an ethical program in organizations that will prevent the emergence of clientelistic relationships, the emergence of cliques and their subversive effects, i.e., the appearance of Faust syndrome as a contextual factor that threatens the health and work capabilities of employees.

Keywords: toxic work relationships, clientelism, Faustian syndrome, psycho-physical health of employees, work experience.

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Turning a blind eye on withholding important information from employees and tolerating personal insulting creates negative climate that chases employees away

While studying the dynamics of workplace bullying phenomenon, Leymann rooted it firmly within the context of a team and in organizational context. Numerous research relates workplace climate with potential fluctuation, but the concept of workplace climate was not closely related to acceptance of workplace bullying behaviors. The aim of this research was to explore whether the acceptance of certain workplace bullying behaviours in organizations would predict if someone would consider quitting the job.

The sample consisted of 329 employees (69% women; 70% with university diploma) from Serbia, mean age was 40 years (ranging from 20 to 65). Workplace bullying behaviour acceptance climate was assessed using an adapted version of the Negative Acts Questionnaire-Revised, NAQ-R (Cronbach's alpha was 0.95, Vukelić et al., 2019). Employees were asked to rate the level of acceptance of each negative behaviour (22 negative behaviours) at their work organization on a 4-point Likert type scale. Ratings ranged from 1 – not at all acceptable to 4 – completely acceptable. Intention to leave was assessed by the frequency of considering quitting the job (five-point scale, from 1 – never to 5 – very often). Responses were split into two categories: not at all or rarely thinking about leaving the job (ratings 1 and 2) and thinking about leaving a job to some extent (ratings 3-5).

Logistic regression was used to explain the relationship between intention to leave the organization and tolerating negative acts. Whole model was statistically

significant c2 (22; N = 329) = 78.07, p < 0.001. Model explained between 21% (Cox & Snell R Square) and 34% (Nagelkerke R Square) of variance in thinking about leaving the organization and correctly classified 82% of cases. Among all the aspects of negative (bullying) climate, only two gave a significant contribution to the model: hiding substantial information needed for work, B = .87, Exp(B) = 2.39, 95% C.I. [1.39, 4.12], and insulting personal remarks about colleagues, their opinions or private lives B = .82, Exp(B) = 2.28 95% C.I. [1.27, 4.07]. The results indicate that tolerating severe work and personal attacks could violate organizational reputation and jeopardize employee retention. Negative workplace climate demands immediate intervention aimed at rebuilding trust and employee well-being.

Keywords: workplace bullying behaviour acceptance climate, intention to leave the job, workplace bullying, well-being, Serbia

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Management crisis: The impacts of the COVID-19 on tourism students' perception of business success factors

The tourism industry is facing unexpected economic hardships due to the COVID-19 outbreak, asking for knowledge that would help crisis management create an adequate response. This study focuses on building a knowledge base of the tourism and hospitality business by examining tourism students' perceptions of actions needed to ensure success within conditions caused by the COVID-19 pandemic. Tourism students' perceptions of success factors during the crisis were analyzed by measuring their reactions on several facets of responsive and nonresponsive management. It was administered a newly constructed questionnaire UsManPan-1 (Majstorović, Janičić and Dragin, 2020), with initial 32 items and 4-point Likert type rating scale. Indicators of responsive actions included preferences of innovations in

management and HR practices, in developing marketing and crises management strategies and developing information networks with all stakeholders. On the other hand, nonresponsive managerial strategy was examined on the basis of intentions to close down parts of the business, to lay off some people, not to employ new ones and to wait for instructions from the Ministry. The sample was comprised of 206 Tourism and Hospitality Management students of the University of Novi Sad (Serbia). The questionnaire was conducted from June to October 2020. Statistical significance of differences between respondents scores on subscales was tested by using the Friedman test, while post-hoc pairwise testing was conducted by Wilcoxon test. Statistical significance of difference between mean sample score on subscales and fixed value was tested by Wilcoxon signed rank test (Mann-Whitney U). To determine what crisis management activities prefer future tourist managers, we analyzed differences among subscale scores representing importance of four crisis management strategies: Communication, Marketing, HR, and Nonresponsive strategy. The results indicate the existence of general significant differences among all subscale scores ($X2(3)=191.17$, $p<.0001$), while post-hoc analyses revealed that three responsive strategies were significantly more important to research participants than a nonresponsive strategy. More specifically, tourism students prefer crisis management activities such as advanced information management, flexible and innovative chains of command, transparency in doing business with employees and clients, redesigning products and identifying new clients, and formal crisis management planning. On the other hand, closing the business and waiting for the instruction from the state authorities (a nonresponsive management strategy indicators) tourism students considered as significantly less important approach in doing business during the crisis. These findings contribute to the development of risk management guidelines for decision-makers involved in the tourism industry operating during and after the COVID-19 outbreak.

Keywords: tourism, COVID-19 pandemic, management crisis, the impacts on managers' behaviors, responsive and nonresponsive management

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Pol i obrazovni nivo kao faktori samoprocene zdravlja kod uposlenika tokom COVID-19 pandemije

Negativne posledice pandemije COVID-19 detektovane su kod ranjivih grupa poput žena, mladih, osoba sa decom predškolskog uzrasta kao i kod osoba sa nesigurnošću zaposlenja (Perez-Gomez et al., 2021; Pierce et al., 2020; O'Connor et al., 2020). U ovim istraživanjima utvrđeno je da se negativni efekti pandemije na mentalno zdravlje manifestuju u obliku štetnih obrazaca ponašanja, poput negativnih emocija, povećane agresivnosti, zloupotrebe supstanci u obliku povećane potrošnje alkoholnih pića i cigareta. Glavni cilj ovog rada bio je da se analizira značaj pola i obrazovnog nivoa za samoprocenu psiho-fizičkog zdravlja kod zaposlenih tokom pandemije 2020. godine. Na prigodnom uzorku od 122 uposlenika iz Republike Srbije oba pola (78.7% su bile žene), sa obrazovnim nivoom do završene srednje škole (26.2%) i više od završene srednje škole (73.8%), primenjeni su upitnici psiho-fizičkog zdravlja (SPFZ-1) i demografskih odlika. Upitnik SPFZ-1 (Majstorović, 2011; α = .92) sa 23 stavke meri poremećaj pet aspekata zdravlja (poremećaj fizičkog zdravlja, strah i anksioznost, depresivne reakcije, umor i poremećaj socijalnog ponašanja) tako što ispitanici procenjuju učestalost simptoma poremećaja zdravlja u poslednjih nekoliko nedelja na četvorostepenoj skali Likertovog tipa (1 – bez siptoma, 2- da, ali retko, 3 – da često i 4 – svakodnevno). Rezultati pokazuju da zaposlene osobe tokom pandemije 2020. godine primećuju simptome povećanog umora (M=2.13), simptome poremećaja fizičkog zdravlja (M=2.05) i simptome straha i anksioznosti (M=1.92). Kada je reč o povećanom umoru češći simptomi su hronična nedovoljnost sna i povećan umor bez vidljivog razloga, dok ispitanici u okviru poremećaju fizičkog zdravlja prijavljuju simptome poput manjka fizičke energije i glavobolje. Konačno, uposlenici se žale na simptome straha bez nekog vidljivog razloga i strah da im preti nova bolest što ukazuje na povećani strah i anksioznost. Analiza značaja pola i nivoa obrazovanja za samoprocenu psiho-fizičkog zdravlja pomoću univarijatne dvosmerne analize varijanse pokazala je da zaposlene žene procenjuju svoje zdravlje kao značajno lošije u odnosu na muškarce (F(1,118)=4.74, p<.05), bez obzira na obrazovni nivo. U odnosu na muškarce, ustanovljeno je da žene procenjuje kao značajno češće simptome umora, straha i anksioznosti i poremećaja fizičkog zdravlja. Oslanjanjući se na prethodna istraživanja, mogli bismo pretpostaviti da je percepcija simptoma poremećaja zdravlja nastala kao efekat stresa zbog povećanog

rizika od zaražavanja i ozbiljnog oboljevanja, zbog potencijalng gubitka zaposlenja i novih finansijskih teškoća izazvanih krizom poslovanja u uslovima pandemije, smanjene fizičke aktivnosti u izolaciji kao i moguće povećane konzumacije alkohola, cigareta i psihoaktivnih supstanci. Zaključeno je da postoji značajan uticaj pola, ali ne i nivoa obrazovanja, na samoprocenu psihofizičkog zdravlja zaposlenih tokom pandemije COVID-19 2020. godine.

Ključne reči: psiho-fizičko zdravlje, pandemija, COVID-19, samoprocena zdravlja, uposlenici

Gender and educational level as factors of employee's health self-assessment during the COVID-19 pandemic

The negative consequences of the COVID-19 pandemic have been detected in vulnerable groups such as women, young people, people with preschool children as well as people with job insecurity (Perez-Gomez et al., 2021; Pierce et al., 2020; O'Connor et al. ., 2020). These studies have shown that the negative effects of a pandemic on mental health are manifested in the form of harmful behavior patterns, such as negative emotions, increased aggression, substance abuse in the form of increased consumption of alcoholic beverages and cigarettes. The main goal of this work was to analyze the importance of gender and educational level for self-assessment of psycho-physical health among employees during the 2020 pandemic. Questionnaires of psycho-physical health (SPFZ-1) and demographics were applied to a sample of 122 employees from the Republic of Serbia of both genders (78.7% were women), with educational level up to high school (26.2%) and higher than high school (73.8%). Questionnaire SPFZ-1 (Majstorović, 2011; α = .92) with 23 items measures the disorder of five aspects of health (physical health disorder, fear and anxiety, depressive reactions, fatigue and social behavior disorder) so that respondents assess the frequency of symptoms of health disorders in recent several weeks on a four-point Likert-type scale (1 - no symptoms, 2- yes, but rarely, 3 - yes often and 4 - daily). The results show that employees during the 2020 pandemic notice symptoms of increased fatigue ($M = 2.13$), symptoms of physical health disorders ($M = 2.05$) and symptoms of fear and anxiety ($M = 1.92$). When it comes to increased fatigue, the more common symptoms are chronic lack of sleep and increased fatigue for no apparent reason, while subjects also report symptoms such as lack of physical energy and headaches as part of a physical health disorder. Finally, employees complain of symptoms of fear for no apparent reason and fear of being threatened by a new illness indicating increased fear and anxiety. Analysis of the importance of gender and level of education for self-assessment of psycho-physical health using univariate two-way analysis of variance showed that employed women

assess their health as significantly worse than men ($F_{(1,118)}$ = 4.74, p <.05), regardless of education level. Compared to men, it was found that women reported significantly more frequent symptoms of fatigue, fear and anxiety and physical health disorders. Based on previous researches, we could assume that the perception of health disorder symptoms arose as a stress effect due to increased risk of infection and serious illness, due to potential job loss and new financial difficulties caused by the business crisis in a pandemic, reduced physical activity in isolation and possible increased consumption of alcohol, cigarettes and psychoactive substances. It was concluded that there is a significant effect of gender, but not the level of education, on employees' self-assessment of psycho-physical health during the COVID-19 pandemic in 2020.

Keywords: psycho-physical health, pandemic, COVID-19, health self-assessment, employees

KAKO SU SE PROFESORI, UČENICI I RODITELJI PRILAGODILI ONLAJN NASTAVI TOKOM COVID-19 PANDEMIJE?

HOW DID TEACHERS, STUDENTS, AND PARENTS ADJUST TO ONLINE TEACHING DURING THE COVID-19 PANDEMIC?

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Mothers' Perceptions of Changes in Children's Schooling during the COVID-19 Pandemic and their Mental Health

An increasing number of studies worldwide have demonstrated that human mental health has worsened during the COVID-19 pandemic. However, little is known about the mechanisms through which the pandemic influences people's psychological functioning. The aim of this study was to examine whether parental perceptions of changes in children's schooling during the pandemic is associated with their own mental health and parenting functioning. Because women are more involved in all aspects of parenting, including children's schooling, and prior studies have shown that the COVID-19 pandemic affected mental health among women more strongly than among men, this study is focused on mothers specifically. The study is part of the project How are we? Life in Croatia in the age of Coronavirus. Data was collected in two waves—the first wave (W1) was carried out in May, 2020 and the second wave (W2) in November and December of 2020. In this study, we analysed data provided by mothers of elementary- and secondary-school children (NW1 = 251, NW2 = 184). Using an online survey, mothers completed questionnaires assessing (a) their perception of their children's current schooling, (b) parenting functioning (Parental Stress Scale and a one-item measure of level of parenting demands during the pandemic relative to pre-pandemic), (c) mental health (DASS-21), and (d) subjective well-being (one-item measures of life satisfaction and optimism). The results indicate that mothers were worried about the possible negative consequences of changes in schooling during the pandemic on their children's health and development. They also reported that online schooling, in comparison to regular schooling, is more demanding for both them and their children. Although mothers' perceptions of children's schooling were generally similar across the two study waves, they were slightly more negative during the second wave. In both waves, more negative perceptions of schooling were associated with poorer mental health and parenting functioning. The results suggest that mothers' perceptions of and involvement in children's adapted schooling during the COVID-19 pandemic may be one of the mechanisms contributing to worsening mental health and parenting functioning.

Keywords: mothers, children's schooling, COVID-19 pandemic, mental health

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Teachers' job commitment during the COVID-19 pandemic – the protective role of motivation for online teaching, digital competencies, and social support in schools

The abrupt switch to online teaching, caused by the first lockdown during the COVID-19 pandemic, was a potential threat for teachers' occupational well-being. This study investigated possible protective factors for elementary and high-school teachers in this situation. We expected both individual characteristics (teachers' digital competencies) and institutional resources (social support in schools) to play significant roles in explaining teachers' motivation for online teaching, which we expected to in turn predict teachers' job commitment. A total of 1655 elementary and high school teachers (84% women) between 23 and 70 years old (M=42.93;SD=9.93), with teaching experience ranging from less than 6 months to 43 years (M=15.70; SD=10.30) filled out online questionnaires: Teacher Digital Competencies Scale (designed for the study based on Redecker, 2017 and Paljina-Reinić et al, 2020), Motivation for Online Teaching Questionnaire (adapted from Abos et al, 2018), Copenhagen Psychosocial Questionnaire (Pejtersen et al., 2010), Teacher Job Commitment Scale (designed for the study based on TALIS 2018 and Theien et al., 2014). The survey was distributed across 227 Croatian schools, during April and May 2020. In line with expectations, teachers' motivation for online teaching significantly mediated the effects of both digital competencies and social support on teachers' job commitment during the first lockdown. Teachers who reported higher levels of digital competencies had higher levels of intrinsic, and lower levels of extrinsic and amotivation for online teaching. In turn, higher levels of intrinsic motivation were associated with higher job commitment, while higher levels of extrinsic motivation and amotivation were associated with lower job commitment. Motivation for online teaching fully mediated the association between digital competencies and job commitment. Those who reported higher social support from fellow teachers had lower levels of amotivation, and higher levels of both intrinsic and extrinsic motivation for online teaching. In turn, higher levels of amotivation and extrinsic motivation were associated with lower levels of job commitment, while higher levels of intrinsic motivation were associated with higher job commitment. Results were similar for social support received from the

principal, although it seems that principal's support does not affect levels of extrinsic motivation. Motivation for online teaching was only a partial mediator between social support and job commitment. Our findings give important insights into protective factors for teachers' job commitment during the pandemic and highlight motivation for teaching as an important psychological mechanism underlying effects of social context and individual skills on teachers' job commitment.

Keywords: teachers; motivation for online teaching; job commitment; social support; COVID-19

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Does teacher affect mediate the relationship between psychological capital and instructional quality during the COVID-19 pandemic?

During the first lockdown due to the COVID-19 pandemic, teachers were especially affected by the sudden and profound changes in their everyday work and ways of delivering instruction. Some teachers, because of their personality characteristics such as psychological capital, could have been more successful in their adaptation during these demanding and stressful times and had more positive affective experiences related to their work. In addition, teachers who possessed greater psychological capital and consequently experienced more positive and less negative affect, might have also performed better. Thus, in this study, guided by the propositions of the affective events theory (Weiss & Cropanzano, 1996), we wanted to explore do teachers' positive and negative affect experienced in relation to their work mediate the relationship between their general psychological capital and instructional quality in the context of remote teaching during the COVID-19 pandemic. In total, 1655 elementary and high school teachers from Croatia participated in the study by approaching to online survey distributed across 227 schools. At the time of data collection, remote teaching has already lasted from five to seven weeks. The results showed that psychological capital directly and positively

predicted instructional quality, but also indirectly via positive and negative affect. Higher psychological capital predicted higher positive affect, which, in turn, predicted higher instructional quality. On the other hand, higher psychological capital predicted lower negative affect, which in turn predicted lower teaching quality, but this effect was quite small, and probably significant due to large sample (i.e., good statistical power of the research). The results suggest that psychological capital can be considered as an important psychological resource, which could help teachers in dealing with challenging situations, such as the COVID-19 pandemic, and preserve their emotional well-being and performance.

Keywords: teachers, psychological capital, positive and negative affect, instructional quality

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Application of Control-value theory in the context of online learning at universities in Serbia: the mediating role of academic emotions

Control-value theory is currently the most influential theory of emotions in an educational context. Such reputation of the mentioned theory is largely due to its integrative framework for analyzing the antecedents, i.e. sources of student emotions, and their effects on learning and achievement. Current research relies on the settings of control-value theory in order to explore the relationships between the perception of academic control and metacognitive regulation strategies, with special reference to the mediating role of academic emotions. What represents a certain modification of the initial theoretical framework is the consideration of academic emotions, as well as their antecedents and effects, in the context of online learning. The research was conducted on a sample of 500 students from state and private universities in Serbia who have attended distance learning since the beginning of the COVID-19 pandemic. Three instruments were used to measure the variables of interest: 1) Academic Control Scale (ACS) which examined cognitions about perceived causal interference of one's own action on online learning activities

or outcomes; 2) Short Version of the Academic Emotions Questionnaire (S-AEQ) covering eight different academic emotions related to distance learning (enjoyment, hope, pride, anger, anxiety, shame, hopelessness, boredom); 3) Subscale of metacognitive self-regulation from Motivated Strategies for Learning Questionnaire (MSLQ) which pertains to three general processes regarding metacognitive self-regulatory activities in the context of online learning: planning, monitoring, and regulating. Academic emotions are grouped into three factors using exploratory factor analysis: frustration ($\alpha = .84$; M = 2.58, SD = 0.93), insecurity ($\alpha = .79$; M = 2.43, SD = 0.96) and enthusiasm ($\alpha = .80$; M = 3.87, SD = 0.78). Using mediation analysis, it was found that the effect of academic control on metacognitive self-regulatory activities is partially mediated by emotions that reflect a high level of enthusiasm in the context of distance learning (ab path coefficients = .11; SE = .03; $p < .01$), while the indirect effect in the case of frustration and insecurity is registered only if the effect of enthusiasm is removed. The obtained results indicate the importance of academic emotions for self-regulation aspects of metacognition in the context of online learning. Namely, emotions that reflect enthusiasm regarding distance learning accelerate three general processes that make up metacognitive self-regulatory activities: planning, monitoring, and regulating, which is of particular importance for the final learning outcomes.

Keywords: control-value theory, academic control, academic emotions, metacognitive self-regulation, online learning

Keywords: Control-value theory, academic control, academic emotions, metacognitive self-regulation, online learning

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Engagement in online learning: the role of self-regulated learning and personality traits

Successful learning requires self-regulated learning, self-efficacy, as well as active engagement. Self-regulated learning is an active and constructive process through which students set learning goals, monitor and regulate their own behavior, thinking, emotions. Self-efficacy in the learning process refers to an individual's beliefs about their own competence to perform online learning tasks. Engagement

in learning consists of several aspects: the behavioural aspect refers to the investment of effort; cognitive aspect to learning with understanding; emotional aspect to positive emotions during learning; and agentic aspect refers to asking questions, giving suggestions. Although important for successful learning, self-regulated learning and engagement in online learning seem to be difficult for some students to achieve. For example, due to high sociability, extroverted students in isolation may find it difficult to regulate learning and become actively engaged in online learning. On the other hand, students with a higher need for cognition, due to their propensity to invest effort in cognitive tasks, might find it easier to regulate and actively engage in online learning. Therefore, the aim of this research was to explore the role of self-regulated learning and personality traits in online learning engagement. The research problem was to examine the mediating role of self-efficacy and self-regulated learning in the relationship between the need for cognition and extraversion, and different aspects of engagement in online learning. The sample consisted of 259 students (80% female) from Croatia, with an average age of 25 years. Self-reported questionnaires were used to collect data. Structural equation modeling was used for mediation analysis. The results showed that self-efficacy and self-regulated learning activities had a mediating role in the relationship between the need for cognition and behavioural, cognitive and agentic engagement in online learning (total indirect effects: B = 0.32, SE = 0.13, β = .26, 95 % CI [0.065, 0.580]; B = 0.26, SE = 0.07, β = .25, 95% CI [0.114, 0.403]; B = 0.25, SE = 0.11, β = .19, 95% CI [0.039, 0.455]). On the other hand, self-efficacy and self-regulated learning activities did not have a mediating role in the relationship between extraversion and engagement in online learning. The model explained 75% of the variance of behavioural engagement, 48% of the variance of cognitive engagement, 35% of the variance of emotional engagement, and 36% of the variance of agentic engagement in online learning. Regarding the relationship between extraversion and aspects of engagement, extraversion was significantly associated only with agentic engagement (r = .29, p <0.001), which encompasses the transaction component. This suggests that for extroverted students activities involving interaction with others are important for successful engagement in online learning activities.

Keywords: online learning, engagement, self-regulated learning, self-efficacy, personality

PSIHOLOG RADA - NAUČNIK, PRAKTIČAR, HUMANISTA

WORK AND ORGANIZATIONAL PSYCHOLOGIST - SCIENTIST, PRACTITIONER, HUMANIST, MODERATOR

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Kada zdravlje nije samo u našim rukama: stav prema pandemiji Covid-19, prema radu na daljinu i učestalost simptoma poremecćaja psiho-fizičkog zdravlja

Pandemija izazvana korona virusom (COVID-19) postavila je zahtev pred čitavo čovečanstvo da se, uz kontrolu širenja infekcije, ulože dodatni napori kako bi se život nastavio, uključujući i prilagođavanje u svetu rada i u obrazovanju. Cilj našeg istraživanja bio je da se ispita stav prema pandemiji kao i da li je stav prema radu i učenju na daljinu povezan sa učestalošću simptoma poremećaja psiho-fizičkog zdravlja. Prigodan uzorak čini 240 ispitanika (143 ispitanika iz opšte populazije i 97 iz populacije studenata), oba pola, prosečne starosti od 40 godina kod ispitanika iz opšte populacije i 23 godine kod studenata. Podaci su prikupljeni anonimno, primenom google forme na čitavoj teritoriji Srbije. Rezultati pokazuju da 45% ispitanika iz opšte populacije iskazuje pojačanu zabrinutost, a 27 % i preplašenost od moguće infekcije korona virusom. Kada je reč o studentima, njih 44% je pojačano zabirnuto, a 23% je preplašeno od moguće infekcije. Od ukupnog uzorka 73% ispitanika smatra da je redovan način rada prihvatljiviji nego onlajn, dok 70,1% studenata nalazi da je redovan način studiranja bolji nego online. Za potrebe istraživanja korišćene su Skala psihofizičkog zdravlja (Majstorović, 2011), skala Socijalne distance, pojedinačni ajtem skale Percepcije rizika po zdravlje. Kada je reč o zdravlju, utvrđeno je da studenti, u odnosu na opštu populaciju izveštavaju o značajno više simptoma poremećaja psiho-fizičkog zdravlja, t (237) =-2.077, p = .039) kao i da pojačana briga od moguće zaraze prognozira viši nivo socijalne distance (izbegavanja kontakata sa prijateljima i porodicom) r =(240) = -.207, p < 0,01 Iako pojačano zabrinuti ili preplašeni za svoje zdravlje, nisu nađene značajne razlike u učestalosti simptomima poremećaja psiho-fizičkog zdravlja kod onih studenata koji prepoznaju prednosti u online studiranju u odnosu na one koji ne vide prednosti u ovakvom modelu studiranja t (91)=.147, p=.883.

Zaključeno je da usled COVID-19 pandemije ispitanici iz opšte i studentske populacije dele visok nivo zabrinutosti i straha za svoje zdravlje kao i to da studenti, i pored rizika od zaražavanja, preferiraju standardnu nastavu u odnosu na on-line. Ovakav

stav studenata prema nastavi na daljinu nije povezan sa eventualnim narušavanjem njihovog psiho-fizičkog zdravlja nego odražava uverenje generisano drugim faktorima.

Ključne reči: Pandemija Covid 19, psiho-fizičko zdravlje, studenti, rad na daljinu, učenje na daljinu

When health is not only in our hands: the attitude towards Covid-19 pandemic, regarding of teleworking and the frequency of psycho-physical health disorders symptoms.

The corona virus pandemic (COVID-19) has posed a demand to all of humanity, in addition of control the spread of the infection, to make complementary efforts to continue life, including adaptation in the world of work and education. The aim of our study was to examine the attitude towards the pandemic as well as whether the attitude towards work and online teaching and learning is related to the frequency of symptoms of psycho-physical health disorders. The study included 240 respondents (143 respondents from the general population and 97 from the student population), both sexes, with an average age of 40 years in respondents from the general population and 23 years in students. The data were collected anonymously, using the Google form on the entire territory of Serbia. The results show that 45% of respondents from the general population express increased concern, and 27% are frightened of a possible corona virus infection. When it comes to students, 44% of them are increasingly anxious, and 23% are scared of a possible infection. Of the total sample, 73% of respondents believe that the regular way of working is more acceptable than online, while 70.1% of students find that the regular way of studying is better than online .The Psychophysical Health Scale (Majstorović, 2011), the Social Distance (Physical Distance) scale, and the single item of Health Risk Perception scale were used for research purposes. When it comes to health, it was found that students, compared to the general population, report significantly more symptoms of psycho-physical health disorders t (237) =-2.077, p = .039) and that increased concern of possible infection predicts higher level of social distance (avoiding contact with friends and family) r =(240) = -.207, p < 0,01. Although they are increasingly worried or frightened about their health, no significant differences were found in the frequency of symptoms of psycho-physical health disorders in those students who recognize an advantage in online study compared to those who do not see an advantage in online model of study t (91)=.147, p=.883. It was concluded that due to the COVID-19 pandemic, respondents from the general and student population share a high level of concern and fear for their health and that

students, despite the risk of infection, prefer standard classes over online. This attitude of students towards distance learning is not related to the possible deterioration of their psycho-physical health, but reflects the belief generated by other factors.

Keywords: Covid 19 pandemic, psycho-physical health, students, distance work, distance learning

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Career shocks for employees in Serbia during COVID-19 pandemic

Career shocks are stressful events that could have a significant impact on personal career trajectory. By challenging the idea of a career as a completely self-manageable process, the topic of career shocks represents a distinct revitalization of social context within the research of employees' career paths. It has already been noted in the literature that COVID-19 pandemic brought various career consequences. The aim of this qualitative study was to examine the career shocks of employees in Serbia during COVID-19 pandemic, i.e. to explore which events employees experienced as career shocks (in relation to previously given definition). The sample included 53 employees (66% women) from different industries. Data was collected in June 2020. Respondents were asked to list and briefly describe an event that was a career shock for them. Participants also evaluated a shock as a positive or negative one. Data were analyzed by using Gioia methodology. Data coding process was distributed into three levels: the first level categories based on the employees' answers, the second level topics (aggregated categories) and third level dimensions (aggregated topics). At the first level of analysis, the following categories were listed: new business offer, job loss, new associates; returning to the system of formal education, further formal training; getting married, birth of a child, family relocation. Based on the listed categories, on the second level, the following themes were assembled: changes related to work, return to the world of education and family circumstances. The continuation of education was perceived as a career shock as for employees the return to the world of education brings considerable

changes and challenges. The third topic, important, "milestone" family events, would imply that private events affect the career even when macro-level circumstances introduce substantial changes and challenges to employees' work status. Further analysis, at the third level, could highlight one common dimension - uncontrollable change that calls for reconsideration of someones' career path coherence. This study contributes to the rapidly emerging theory of career shocks by the finding that the valence of career shock can depend on the valence of the final career outcome and not on the valence of the shocking event itself. COVID-19 pandemic as a societal level alpha event represents a special type of stressor that waylays career path by shaking a person's identity.

Keywords: career shocks, employees, Gioia methodology, social context, Serbia

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What drives subordinates' work attitudes and perceptions of manager effectiveness? The role of managers' thinking dispositions and personality traits

Numerous studies have shown that leaders' transformational leadership style and intellectual humility are linked to work attitudes and performance of their subordinates. What cognitive and personality traits underpin these leaders' characteristics is less known. We conducted an exploratory study with a goal to examine whether managers' personality traits and actively open-minded thinking (AOT), a disposition to seek and accept opinions contrary to one's own, are related with subordinate perceptions of managers' transformational leadership style and intellectual humility, and, indirectly, with subordinates' work attitudes (work engagement and job satisfaction). Our sample consisted of managers (N = 95) who self-reported on five personality traits (openness, extraversion, conscientiousness, neuroticism, and agreeableness) and AOT, and their subordinates (N = 185) who reported on their superiors' transformational leadership and intellectual humility, as well as their own work engagement and job satisfaction. Analyses showed that subordinates' perceptions of managers' transformational leadership and intellectual humility were significantly correlated with their work engagement (r = .26, p = .008 and r = .24, p = .014 respectively). Furthermore, managers' AOT was

significantly related to subordinates' ratings of managers' transformational leadership (r = .26, p = .011) and intellectual humility (r = .28, p = .007). Of five personality traits, the only significant correlation was between managers' agreeableness and ratings of managers' transformational leadership (r = .25, p = .017). Next, we wanted to see if subordinates' perceptions managers' leadership style and intellectual humility played a role in the relationship between the managers' characteristics and subordinates' work attitudes. Mediational analyses showed that actively open-minded thinking had an indirect effect, but not direct one, both on work engagement (through perceptions of transformational leadership and intellectual humility) and job satisfaction (only through the perceptions of intellectual humility). Conversely, agreeableness failed to exhibit either direct or indirect effects on work engagement and job satisfaction, but the total effect with job satisfaction was significant. These results indicate that subordinates' work attitudes depend on their perceptions of their superiors. Those that perceive their superiors to be more intellectually humble and prone to transformational leadership style are generally more engaged in their work. These perceptions stem, at least in part, from managers' AOT. Specifically, our results indicate that managers who have tendency to seek and accept opinions and views contrary to their own are perceived by their subordinates to be more intellectually humble and transformational in their leadership, resulting in subordinates' greater work engagement and job satisfaction.

Keywords: Transformational leadership, intellectual humility, personality traits, actively open-minded thinking, work engagement

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What makes a LEAN leader? Leadership characteristics of elected LEAN leaders

There is a growing number of organizations interested in adopting LEAN managerial and production practices in order to reduce costs and increase productivity. LEAN is a management tool aiming for providing better value for customers by optimizing resources (e.g. less effort, less time, less material) and continuous improvement (e.g. better offer, fewer defects). The most extensively explored theory of

leadership is Bass and Avolio's (1994) Full Range of Leadership Model (FRLM) that focuses on transactional, transformational and laissez-faire leadership styles. Being a part of a larger study of the change management process, the aim of this research was to analyze differences in transformational and transactional leadership characteristics of employees not/elected by teammates to be their LEAN coaches.

The sample consisted of 317 employees (48% women; 14.6% managers) from a service sector company. Each employee elected one of his/her teammates as most suitable for the role of a LEAN leader that would introduce LEAN methodology. Apart from directly recommending one colleague as a LEAN leader, each employee filled out The Multifactor Leadership Questionnaire (MLQ; α = .89; Sinapsa edicije) for assessing transformational (five scales), transactional leadership (two scales), passive/avoidant behavior (two scales), and three scales that assess outcomes of leadership. LEAN leader status was an external measure assessed on the team level – best ranked 20% of team members were included in analyses as LEAN leaders chosen by colleagues from the team (the rest were treated as not chosen).

Logistic regression was employed in this study. Whole model was statistically significant c2 (12; N = 317) = 46.22, p < 0.001. Model explained between 14% (Cox & Snell R Square) and 29% (Nagelkerke R Square) of variance in LEAN leader status and correctly classified 88.7% of cases. Among all the characteristics assessed by the MLQ, only three have given the significant contribution to the model: idealized influence – attributes, B = - 1.53, Exp(B) = .27, 95% C.I. [.07, .70]; contingent reward, B = 1.74, Exp(B) = 5.68 95% C.I. [1.48, 21.77], and effectiveness, B = 2.60, Exp(B) = 13.47, 95% C.I. [2.80, 64.74].

Self-assessed characteristics of employees chosen by their teammates as LEAN leaders represent transactional style dimensions pointing to employees' perception of behavior most appropriate for supporting teams in introducing LEAN practices. The results indicate that employees choose for LEAN leaders those colleagues that are more effective and precise than inspiring.

Keywords: LEAN, transformational leadership style, transactional leadership style, MLQ, change management

PSIHOLOGIJA ADOLESCENCIJE

PSYCHOLOGY OF ADOLESCENCE

Moderators: Jelica Petrović & Danijela Šincek

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Činioci prekomerne upotrebe društvenih mreža kod adolescenata

Korišćenje interneta/društvenih mreža opisujemo kao prekomerno kada se javlja preterana i opsesivna upotreba, praćena preokupiranošću i doživljajem gubitka kontrole. Prekomerna upotreba kod manjeg broja pojedinaca može da izazove zavisnost, koja podrazumeva nedostatak kontrole, kompulzivno ponašanje i povezana je sa negativnim posledicama u različitim oblastima života. Neki autori smatraju da je zavisnost od interneta/društvenih mreža ekstremni slučaj njihove prekomerne upotrebe. Istraživanje je sprovedeno u okviru projekta Socio-psihološki činioci rizične upotrebe društvenih mreža kod adolescenata u Vojvodini, koji je finansirao Pokrajinski sekretarijat za visoko obrazovanje i naučnoistraživačku delatnost AP Vojvodine, sa ciljem da se ispitaju efekti individualnih i kontekstualnih činilaca na sklonost ka prekomernoj upotrebi društvenih mreža. Individualni nivo obuhvata socio-demografska obeležja, karakteristike onlajn aktivnosti i psihološke karakteristike (samopoštovanje i strategije emocionalne regulacije). Kontekstualni činioci se odnose na ulogu roditelja, vršnjaka i školskog okruženja. Na uzorku od 576 srednjoškolaca (71.4% učenica), uzrasta od 15-19 godina primenjeni su Bergen skala zavisnosti od društvenih mreža (Bergen Social Media Addiction Scale – BSMAS), Rozenbergova skala samopoštovanja (Rosenberg's Self Esteem Scale – RSES), Kratka forma skale teškoća u emocionalnoj regulaciji (Difficulties in Emotion Regulation Scale Short Form – DERS-SF), Inventar interpersonalnih ciljeva za decu (Interpersonal Goal Inventory for Children – IGI-C) i posebno konsturisane: Skala roditeljske medijacije i roditeljske kontrole, Skala rizičnih ponašanja na internetu, Skala za ispitivanje školske klime, Skala vršnjačkih normi. Za obradu podataka sprovedena je hijerarhijska regresiona analiza u četiri koraka, gde su u prvom uključene demografske karakteristike, u drugom varijable koje se tiču onlajn aktivnosti, zatim individualni, i u poslednjem koraku kontekstualni činioci. Rezultati testiranja celokupnog modela sugerišu da ispitivane varijable objašnjavaju zajedno 35% varijanse prekomerne upotrebe društvenih mreža, gde su najvažniji prediktori ženski pol (β=.14), veća učestalost rizičnih onlajn aktivnosti (dnevno vreme provedeno na internetu, β=.18, i rizična ponašanja na internetu, β=.11) i teškoće u emocionalnoj regulaciji (ograničen pristup strategijama emocionalne regulacije, β=.12, i teškoće u održavanju usmerenosti na cilj, β=.16), veća tolerancija na nasilje

među vršnjacima (β=.10) i želja za ostvarivanjem dominacije u interakciji sa vršnjacima (β=.08), dok uloga roditelja i škole nije bila značajna. Može se zaključiti da je prekomerna upotreba društvenih mreža složeni fenomen koji je uslovljen individualnim i specifičnim kontekstualnim činiocima iz domena vršnjačke interakcije. Osim za razumevanje etiologije, dobijeni rezultati su važni i za kreiranje interventnih programa namenjenih prevenciji prekomerne upotrebe interneta i društvenih mreža.

Ključne reči: adolescenti, prekomerna upotreba društvenih mreža, onlajn rizično ponašanje, emocionalna regulacija, vršnjaci

Factors associated to excessive use of social networks in adolescents

We describe the use of the internet as excessive when it is extreme and obsessive, followed by preoccupation and experience of losing control. Excessive use in a small number of individuals can cause addiction, which implies a lack of control, compulsive behavior and is associated with negative consequences in various areas of life. Some authors believe that dependence on the internet / social networks is an extreme case of their overuse. The research was conducted within the project Socio-psychological factors of risky use of social networks among adolescents in Vojvodina, funded by the Provincial Secretariat for Higher Education and Scientific Research of AP Vojvodina, with the aim of examining the effects of individual and contextual factors on propensity to overuse social networks. Individual factors include socio-demographic characteristics, features of online activities and psychological properties (self-esteem and strategies of emotional regulation). Contextual factors refer to role of parents, peers, and school environment. The following instruments were applied to the sample of 576 high school students (71.4% females) aged 15-19: Bergen Social Media Addiction Scale (BSMAS), Rosenberg's Self Esteem Scale (RSES), Difficulties in Emotion Regulation Scale - Short Form (DERS-SF), Interpersonal Goal Inventory for Children (IGI-C); and specially constructed scales: Parental Mediation and Parental Control Scale, Internet Risk Behavior Scale, School Climate Scale, Peer Standards Scale. For data analysis, a hierarchical regression was conducted in four steps, where the first included demographic characteristics, the second variables related to online activity, then individual, and in the last step contextual factors.. The results of the whole model testing suggest that the examined variables together explain 35% of the variance of excessive use of social networks, where the most important predictors are female gender (β=.14), higher frequency of risky online activities (daily time spent online, β=.18, and risky online behaviors, β=.18) and difficulties in emotional regulation (limited access to emotion regulation strategies, β=.12, and difficulties engaging in goal-directed

behavior, β=.16), greater tolerance for peer violence and desire to achieve dominance in interaction with peers (β=.08), while role of parents and school was not significant. It can be concluded that excessive use of social networks is a complex phenomenon, determined by individual and specific contextual factors from domain of peer interactions. In addition to understanding the etiology, the results are important for creating intervention programs aimed at prevention of excessive use of the internet and social networks.

Keywords: adolescents, excessive use of social networks, online risky behavior, emotional regulation, peers

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Kvalitet porodičnih interakcija kao prediktor agresivnog ponašanja adolescenata

Teorijsku osnovu rada čine Ronerova teorija vaspitnih stilova i koncept agresivnog ponašanja koji se temelji na DSM-IV klasifikaciji mentalnih poremećaja. Cilj istraživanja je bio da se utvrdi prediktivna moć kvaliteta porodičnih interakcija (zadovoljstvo svojom porodicom, prihvatanje i odbacivanje od strane majke i oca), u predviđanju agresivnog ponašanja adolescenata. U istraživanju je učestvovalo 205 ispitanika oba pola (51,2% ispitanica i 48,8% ispitanika), uzrasta od 14 do 18 godina (AS=16,22; SD=1,27). Podaci su prikupljeni pomoću instrumenata: Skala kvaliteta porodičnih interakcija (KOBI - sa 5 subskala: Zadovoljstvo svojom porodicom, Prihvatanje od strane majke, Prihvatanje od strane oca, Odbacivanje od strane majke, Odbacivanje od strane oca) i Skala agresivnosti za decu i adolescente (SNOP - sa 4 subskale: Prkošenje i suprotstavljanje, Ophođenje, Žrtva i Nasilnik).

Rezultati regresione analize pokazuju da kvalitet porodičnih interakcija objašnjava 42% varijanse prkošenja kao aspekta agresivnog ponašanja (F(5,199) =28,76, p<.01), a iz grupe prediktorskih varijabli su se izdvojili odbacivanje majke (β=.37, p<.05) i odbacivanje oca (β=43, p<.01). Kvalitet porodičnih interakcija objašnjava 56,3% varijanse ophođenja kao aspekta agresivnog ponašanja adolescenata (F(5,199)=51,28, p<.01), a iz grupe prediktorskih varijabli su se izdvojili zadovoljstvo porodicom sa negativnim predznakom β koeficijenta (β=-.22, p<.05), prihvatanje oca (β=.25, p<.05) i odbacivanje oca (β=.57, p<.01). Zatim, kvalitet porodičnih interakcija

objašnjava 41,9% varijanse žrtve kao aspekta agresivnog ponašanja (F(5,199) =28,72, p<.01), a značajni prediktori su zadovoljstvo porodicom sa negativnim predznakom β koeficijenta (β=-.39, p<.05), prihvatanje oca (β= .24, p<.01) i odbacivanje oca (β=.37, p<.01). Takođe, kvalitet porodičnih interakcija objašnjava 55,1% varijanse nasilnika kao aspekta agresivnog ponašanja (F(5,199) =48,77, p<.01), a iz grupe prediktorskih varijabli su se izdvojili zadovoljstvo porodicom sa negativnim predznakom β koeficijenta (β=-.32, p<.05), prihvatanje oca (β=.35, p<.01) i odbacivanje oca (β=.54, p<.01). Dobijeni rezultati su još jednom potvrdili značaj porodičnih interakcija u funkcionisanju adolescenata, uz izdvajanje kvaliteta interakcije sa ocem. Odbacivanje od strane oca povezano je sa različitim oblicima agresivnog, delinkventnog i zavisničkog ponašanja adolescenata, kao i sa depresivnoščču, anksioznošću, somatizacijom, adaptacijom na školsku sredinu i vršnjake, stavovima prema zlostavljanju i slično, pa je značajno nastaviti istraživanje ove problematike uz isticanje praktičnih implikacija.

Ključne reči: kvalitet porodičnih interakcija, agresivno ponašanje, adolescenti

Quality of family interactions as a predictor of aggressive adolescent behavior

The theoretical basis of the paper is Roner's theory of educational personality styles and the concept of aggressive behavior based on the DSM-IV classification of mental disorders. The aim of the research was to determine the predictive power of the quality of family interactions (satisfaction with one's family, acceptance and rejection by mother and father), in predicting aggressive behavior of adolescents. The study involved 205 respondents of both sexes (51.2% of respondents and 48.8% of respondents), aged 14 to 18 years (AS = 16.22; SD = 1.27). Data were collected using the instruments: Family Interaction Quality Scale (KOBI - with 5 subscales: Family Satisfaction, Mother Acceptance, Father Acceptance, Mother Rejection, Father Rejection) and Aggression Scale for Children and Adolescents - with 4 subscales: Defiance and Opposition, Behavior, Victim and Violent).

The results of regression analysis show that the quality of family interactions explains 42% of the variance of defiance as an aspect of aggressive behavior (F(5,199)= 28.76, p<.01), and from the group of predictor variables the rejection of the mother stood out (β= .37, p<.05) and father rejection (β= .43, p <.01). The quality of family interactions explains 56.3% of the variance of behavior as an aspect of aggressive behavior of adolescents (F(5,199)= 51.28, p <.01), and from the group of predictor variables, family satisfaction with a negative sign of the β coefficient stood out. .22, p<.05), father acceptance (β= .25, p<.05) and father rejection (β= .57, p <.01). Then, the quality of family interactions explains 41.9% of the victim's variance as an

aspect of aggressive behavior (F(5,199)= 28.72, p<.01), and significant predictors are family satisfaction with a negative sign of the β coefficient (β= -. 39, p<.05), acceptance of the father (β= .24, p<.01) and rejection of the father (β= .37, p<.01). Also, the quality of family interactions explains 55.1% of the variance of the abuser as an aspect of aggressive behavior (F(5,199) = 48.77, p<.01), and from the group of predictor variables, family satisfaction with a negative sign of the β coefficient stood out. -.32, p<.05), acceptance of the father (β= .35, p<.01) and rejection of the father (β= .54, p<.01). The obtained results once again confirmed the importance of family interactions in the functioning of adolescents, with the emphasis on the quality of interaction with the father. Rejection by the father is associated with various forms of aggressive, delinquent and addictive behavior of adolescents, as well as depression, anxiety, somatization, adaptation to school environment and peers, attitudes towards abuse and the like, so it is important to continue research on this issue.

Keywords: quality of family interactions, aggressive behavior, adolescents

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Relation of depression, anxiety and stress in adolescents with the committing and experiencing cyber-violence

Cyber-violence, like violence in general, is often associated with unfavorable characteristics of an individual such as higher levels of anxiety, depression, and stress. As online interaction changes and develops, so do some new forms of cyber-violence. Therefore, the Committing and Experiencing Cyber-Violence Scale (CECVS) was revised last year. A newer version of the scale showed a five-factor structure: Violence directed at the individual; Manipulation of information to cause harm; Hate speech; Using technology to cause harm and Share personal information. Therefore, the aim of this study is to examine how much anxiety, depression, and stress contribute to the explanation of the committing and experiencing of violence, and after controlling the gender and age of the participants. The survey was conducted in February 2021 over the Internet and 1725 young people aged 15 to 19 participated

in it (M = 17.17; SD = 1.307), with 30.6% of participants being male . It was a part of a larger, longitudinal study. In addition to the revised Committing and Experiencing Cyber-Violence Scale (CECVS-2021), the DASS-21 scale was used for the purposes of this paper. Hierarchical regression analyzes were used, and the model included the gender and age of the participants in the first step, and the scales of anxiety, depression and stress in the second step. The criteria were experiencing and committing violence. The results of the regression indicated the model explained 18% of the variance of experiencing cyber-violence (R^2 =.18, $F(3,1719)=126,37$, $p <.001$), while the same model explained only 7, 5% of the variance of committing cyber-violence (R^2 =.18, $F(3,1719)=39,31$, $p <.001$) Increased levels of depression (experiencing β = .21, $p <.001$; committing β = .12, $p <.001$), anxiety (experiencing β = .19, $p <.001$; committing β = .08, $p <.05$) and stress (experiencing β = .08, $p <.05$; committing β = .09 $p <.05$) were associated with more pronounced committing and experiencing of cyber-violence. As expected, a higher percentage of explained variance and higher beta coefficients of predictors for the criterion of experiencing cyber-violence indicate that anxiety and depression are more associated with experiencing violence than with committing the same. Equal beta coefficients for the stress as a predictor indicate that young people experience stress both when committing and experiencing cyber - violence, which has also been found in some previous research.These results further indicate the vulnerability of young people involved in cyber-violence, especially when they experience such violence.

Keywords: cyber-violence, depression, anxiety, stress, adolescents

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Razvojne krize i kapacitet za mentalizaciju kod studenata

Cilj istraživanja je ispitivanje povezanosti kapaciteta za mentalizaciju i razvojnih kriza. Problemi sa mentalizacijom povezani su sa većim brojem psihopatoloških fenomena, a naš cilj je bio povezivanje sa normativnim razvojnim krizama. Kao teorijski okvir uzeta je Eriksonova teorija, prema kojoj se celoživotni razvoj deli na 8 stadijuma definisanim razvojnom krizom koju svaka individua razrešava manje ili više uspešno. Uzorak je prigodan, čini ga 200 studenata Filozofskog fakulteta. Korišćeni su instrumenti MEPSI Modifikovani Eriksonov psihosocijalni inventar (Darling-Fisher & Lady, 1988), kao mera izraženosti atributa svojstvenih fazama razvoja prema

Eriksonovoj teoriji (supskale koje se odnose na prvih 5 faza - poverenje, autonomija, inicijativa, marljivost, identitet) i RFQ Upitnik reflektivne funkcije (kraća verzija) (Fonagy et al., 2016), samoopisna tehnika namenjena ispitivanju kapaciteta za mentalizaciju koja uključuje dva faktora: sigurnost u mentalna stanja (S) i nesigurnost u mentalna stanja (N). Rezultati korelacione analize između dva faktora mentalizacije i atributa koji se stiču prevazilaženjem svake od razvojih kriza pokazuju da je bolji kapacitet za mentalizaciju statistički značajno povezan sa optimalnijim razrešenjem svake od kriza. Koeficijenti korelacije kreću se od niskih do umerenih (.27 - .47, p <.001). Hipermentalizacija, kao preterano verovanje u procene svojih i tuđih mentalnih stanja bez provere i uvažavanja informacija iz realnosti, koja je negativan pol faktora sigurnost u mentalna stanja, ostvaruje najveću povezanost sa niskom autonomijom i konfuzijom identiteta. Hipomentalizacija, negativan pol faktora nesigurnost u mentalna stanja, koju karakteriše nedostatak znanja o mentalnim stanjima, takođe ostvaruje najveću povezanost sa konfuzijom identiteta i niskom autonomijom. Kako MEPSI omogućava kategorijalni pristup proceni razrešenosti svake od razvojnih kriza, uzorak je deljen na poduzorke spram skorova na svakoj od supskala. Poređenjem grupa (Mann-Whitney U test) ispitane su razlike na dva faktora mentalizacije. Rezultati pokazuju da postoje statistički značajne razlike na oba faktora mentalizacije između ispitanika koji su uspešno razrešili svaku od ispitivanih razvojnih kriza u odnosu na one koji su krizu razrešili na manje uspešan način. Bolji kapacitet za mentalizaciju, koji uključuje svest o neprozirnosti mentalnih stanja i shvatanje da je zaključivanje o svojim i tuđim mentalnim stanjima podložno greškama, postižu ispitanici koji imaju pozitivno razrešene razvojne krize - poverenje (S U=2366.5, p<.001; N U=2451.5, p<.001), autonomija (S U=2366.5, p<.001; N U=2451.5, p<.001), inicijativa (S U=3209; p≤.001; N U=3415, p≤.005), marljivost (S U=2520.5, p<.001; N U=2772, p<.001) i identitet (S U=2520.5, p<.001, N U=2772, p<.001). Rezultati se tumače u svetlu značaja kapaciteta za mentalizaciju za optimalno prevazilaženje razvojnih kriza i otvaraju pitanje doprinosa kapaciteta za mentalizaciju zdravom razvoju.

Ključne reči: razvojne krize, kapacitet za mentalizaciju

Developmental crises and capacity for mentalization in university students

The aim of our study was to examine relations between mentalization capacity and developmental crises. Mentalization problems are related to different types of psychopathology, and our goal was to examine relations with developmental crises. Erikson's theory postulates 8 stages of development, each determined by a specific developmental crisis that each individual resolves in a more or less optimal manner. The sample consisted of 200 students of Facutly of Philosophy in Novi Sad. We used

MEPSI (The Modified Erikson Psychosocial Inventory) (Darling-Fisher & Lady, 1988) as a measure of the strenght of psychosocial attributes that arise from progression through Erikson's stages of development (subscales for the first 5 stages - trust, autonomy, initiative, industry & identity), and RFQ (The Reflective functioning questionnaire, short version) (Fonagy et al., 2016), a self-report measure of the capacity for mentalization that includes two factors: certainty about mental states (C) and uncertainty about mental states (U). Correlation analysis between the two factors of mentalization and the attributes acquired by resolving each of the developmental crisis showed that better capacity for mentalization was statistically significantly associated with a more optimal resolution of each of the crisis. Correlation coefficients ranged from low to moderate (.27 - .47, p <.001). Both hypermentalization (negative side of the factor certainty in mental states), characterized by an excessive assessment of own and others' mental states without apropriate evidence available in reality, and hypomentalization (negative side of uncertainty in mental states), characterized by a lack of knowledge about mental states, achieved highest correlations with identity confusion and low autonomy. As MEPSI allowes a categorical approach to assessment of the resolution of developmental crises, the sample was divided into subsamples according to the scores on each of the subscales. Using the nonparametric Mann-Whitney U test, we examined differences in both mentalization factors. The results showed significant differences between those who succsessfully resolved each developmental crisis compared to those who resolved the crisis in a less successful way on both factors of mentalization. More genuine mentalization, defined as being aware of the opacity of mental states and understanding that reasoning about mental states is prone to errors, was achieved by those who have positively resolved each of the developmental crisis - trust (S U = 2366.5, p <.001; N U = 2451.5, p <.001), autonomy (S U = 2366.5, p <.001; N U = 2451.5, p <.001), initiative (S U = 3209; p≤.001; N U = 3415, p≤.005), industry S U = 2520.5, p <.001; N U = 2772, p <.001) and identity (S U = 2520.5, p <.001, N U = 2772, p <.001). The results suggest the importance of mentalization capacity for optimal resolution of developmental crises and raise the question of the contribution of mentalization to heathy development.

Keywords: developmental crisis, capacity for mentalization

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Differences in structuring of appearances through drawing among students with disabilities in regular and special schools

Research problem: Structuring of appearances and knowledge of the world, i.e. the way of building, composition, layout and presentation of objects from the social environment, understanding of persons and their relationships and activities, among students with intellectual disabilities, involved in school life with a group of peers through drawing technique.

The purpose of this pilot study is to investigate, whether students with intellectual disabilities who attend regular school will show better structured drawings of several elements related in some way in a whole, social and spatial perspective as well as dynamism in drawing, compared to students with intellectual disabilities which attending a special school.

The sample consisted of 38 respondents. The first group are 18 students (6males and 9 females) with intellectual disabilities included with healthy children with typical development in regular school. The average age of the students is 16, 6. The second group are 23 students (18 males and 5 females) included in a special school, with an organized program according to the characteristics and requirements of the type of disability and they are included with students with similar disabilities. The average age of the students is 17. Students are equated by type of disability (Mild mental retardation; IQ=50– 69), type of education (secondary vocational education) and all students live with their families. The research was conducted in a high school and a special secondary school for students with disabilities in Bitola. The following tool was used is drawing, as a form of communication with the environment and other persons. Each student had to make a simple drawing. All students received the same instruction, to draw members of the peer group and people with whom they cooperate and contact in school life and what activities they want with them. (With no time limit to draw, the instruction is repeated several times). These drawings are compared on the basis of three aspects: 1.Well-structured drawings of several elements connected in some way in a whole, or clumsy structuring of the elements. 2. Representation of double perspectives or not. 3. Dynamicity in the drawing or not. The analysis of comparative drawings of the two groups based on the three aspects is presented in percentages. The students from regular school 20% draw a clumsy connection of the elements as a whole, there is no double perspective in drawing

and there is no dynamism. While 80% of the students drew well-structured drawings, there is a double perspective and there is dynamism. The students in the special school 60% draw awkwardly connecting the elements as a whole, there is no double perspective and there is no dynamism, only 40% of the students drew well-structured drawings, there is a double perspective and there is dynamism in the drawing. From the applied statistical analysis, there is a significant difference between percentages: SD%=16.48; Q=44.22; CR=2.42>1.96; 2.42>.05. Although this is a pilot study conducted on a relatively small sample. Interesting results have been obtained-there is a significant difference in structuring the drawings of students with disabilities in the regular school, compared to students with disabilities in the special school. The obtained results show that the students with disabilities in the regular school, have better structured of appearances through drawing compared to students with intellectual disabilities who attend a special school.

Keywords: drawings, structuring, appearances intellectual disability, regular school, special school

KLINIČKA PSIHOLOGIJA: IZAZOVI COVID-19 PANDEMIJE

CLINICAL PSYCHOLOGY: CHALLENGES IN COVID-19 PANDEMIC

Moderators: Alessandra Pokrajac-Bulian & Radomir Belopavlović

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Psychological research on COVID-19 related topics: a bibliometric study

Since the outbreak of coronavirus disease 2019 (COVID-19) large number of COVID-19-related reports has been produced. The main goal of this study was to investigate contribution of psychology in research about COVID-19. Specifically, we wanted to: 1) explore scientific fields that mostly contributed in conducting research about COVID-19 and discover what is psychology's part in it; 2) investigate themes dominant in psychological studies about COVID-19.

To explore scientific fields dominant in studies about COVID-19, we retrieved data about 2000 most cited articles in 2020 and 2000 most cited articles in 2021 from all fields offered by Scopus database. To investigate psychology themes that covered COVID-19, we retrieved data about 2000 most cited psychological articles in 2020 and 2000 most cited in 2021. All articles were selected using query that contained terms related to coronavirus. Data about cited journals were used to create co-citation map of journals. On the other hand, articles' descriptors were used to create co-occurrence map of descriptors. For bibliographic maps' construction VOSviewer software was used.

Results show that the most cited journals in articles about COVID-19 are those with subjects of multidisciplinary medical and scientific topics (The Lancet, Nature, Science) and that research are mostly based on two specific medical themes - microbiology and virology, and clinical medicine and infectious diseases. Most influential psychological journals are Personality & Individual Differences, Journal of Affective Disorders and Journal of Personality & Social Psychology, which are in 200 most cited ones. They share cluster with a multi-disciplinary journal PLOS One, but are rather isolated from journals with other specific subjects. As regards psychological studies about COVID-19, dominant topics are those related to mental health, anxiety, depression and stress. Additionally, researchers in psychology field also studied various other themes such as telemedicine, e-learning and life in prisons. Considering that we used data about most cited articles, it is possible that some other themes were also explored but this study couldn't record them due to characteristics of the sample.

Study indicates that psychology science has a significant and specific contribution to exploration and explanation of psychological consequences of COVID-19 pandemic, including its influence not only on mental health, but also on everyday life and human behavior.

Keywords: COVID-19, psychology, bibliographic mapping

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Is anxiety sensitivity a risk factor for mental health problems in times of pandemic and earthquake? A 10-year prospective study

It is well known that stressors of global proportions, as those that can be experienced in a pandemic crisis and due to earthquakes, represent increased and long-lasting demands on psychological functioning. The increased interest of scientists in the field of mental health is necessary as a contribution in overcoming such crises. So far, it is known that for many who have had mental disorders before, the crisis has worsened their symptoms. Moreover, some individuals have developed mental health problems for the first time due to this crisis. Therefore, we wanted to explore the role of individual differences in anxiety sensitivity (AS) as a stable, long-term risk factor and indicator of vulnerability to adverse adaptation to large stressors and trauma, over a period of ten years. In a longitudinal study, we collected the data at three measurement points (2011. n=1199, 2014. n=521, and 2021. n=198). We measured AS, anxiety as a personality trait and mental health problems at all three points, while in the last one we also collected data on experienced stressors and their intensity, traumatic experience of earthquakes, experience of phantom earthquakes, symptoms of panic disorder, symptoms of obsessive compulsive disorder, general anxiety disorder, fear of coronavirus and consumption of psychoactive substances and sedatives. High levels of AS predict the onset of panic disorder after three years, but not a deterioration in general mental health during the same period. However, AS measured 10 years ago proved to be a significant predictor of impaired mental health in 2021. With control of sociodemographic variables, mental state in 2014. and anxiety as personality trait, AS independently contributes to explaining the intensity of symptoms of obsessive-

compulsive disorder, traumatic earthquake reactions, phantom earthquake sensations, fear of coronavirus and frequency of use of tranquilizers.

Keywords: anxiety sensitivity, prospective monitoring, mental disorders, coronavirus, earthquake

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Basic psychological needs as mediators: an examination of the relations between subjective vitality and positive and negative affectivity in a two-wave longitudinal study during the COVID-19 pandemic

According to the Eudaimonic Activity Model (EAM) eudaimonia concepts (like vitality) lead to subjective well-being (like positive and negative affect), via satisfaction of the basic psychological needs. Since the Self-Determination Theory and organismic hypothesis propose that basic psychological needs are environment dependent, the aim of this study was to test the EAM in the context of the current health pandemic. The data were repeatedly gathered using Subjective Vitality Scale (SVS), The Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS), and PANAS-X during the pandemic. The first wave (T1) took place during the curfew (29 April – 5 May) and the second (T2) closely after harsh lock-down in mid-June. Coefficients of test-retest consistency were from .62 to .78 indicating the relative stability of measures. The sample consisted of 395 participants (56% females) with average age of 29.47 years. Paired samples t-tests showed that respondents had significantly higher subjective vitality (SV), positive affect (PA), and frustration of need for autonomy in the week after the lockdown comparing to the curfew week. Path analysis was performed using residualized change scores as variables calculated as the residuals of score at T2 after its regression on score at T1 for each variable separately. Path analysis showed that basic psychological needs partially mediate effect of SV on PA and negative affect (NA) (S.-B. χ_2 (36, N =395) = 1.01, p > .05; CFI = 1.00; RMSEA = .00, with 90% confidence intervals (CI) = .00–.11; SRMR = .04). Model explained 28% variance of difference in PA and 31% in NA. (S.-B. χ_2 (36, N =395) = 1.01, p > .05; CFI = 1.00; RMSEA = .00, with 90% CI= .00–.11; SRMR = .04). Model explained variance 28% of PA and 34% variance of NA. The results showed that Autonomy (β=.05, p<.05), Competence (β=.05, p<.05), and Relatedness satisfaction

(β=.04, p<.01), mediated the effect of SV on PA while Competence (β=-.06, p<.01), Autonomy (β=-.04, p<.01), and Relatedness frustration (β=-.04, p<.05) mediated effect of SV on NA. Relatedness (β=.16, p<.01), Autonomy (β=.14, p<.01) and Competence satisfaction (β=.14, p<.01) had direct effect on PA. Frustration of need for Competence (β=.25, p<.01), Relatedness (β=.22, p<.01), and Autonomy (β=.16, p<.01) had direct effects on NA. SV had significant direct effect on all dimensions of basic psychological needs satisfaction (β from .18-.36) as well as on PA (β=.31, p<.01) and NA (β=-.13, p<.05). Results bring confirmation to the EAM in the pandemic context and explain that greater vitality can bring greater well-being. Also in line with EAM, when basic psychological needs were satisfied, vitality even more enhanced the positive affect, and on the contrary, when they were frustrated, negative affect aroused. This study proved that basic psychological needs for Autonomy and Competence are important mechanisms in attaining the subjective well-being in the times of the pandemic.

Keywords: COVID-19, well-being, Self-Determination Theory, Vitality, basic psychological needs, longitudinal study

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Psihološke karakteristike pacijenata sa zatajivanjem srca tijekom COVID-19 pandemije

Netolerancija neizvjesnosti (NN) definira se kao tendencija negativnoga reagiranja na emocionalnoj, kognitivnoj i bihevioralnoj razini na neizvjesne događaje i situacije. Pojedinci s NN osjećaju uznemirenost, vjeruju da je ona negativna i da je treba izbjegavati. Istraživanja su utvrdila da bi NN mogao biti transdijagnostički mehanizam koji doprinosi održavanju simptoma anksioznosti i depresivnosti. Zatajivanje srca (ZS) je poremećaj funkcije ili strukture srca, a očituje se u

nesposobnosti srca da primi i istisne količinu krvi potrebnu za metaboličke funkcije tkiva. Depresivnost i anksioznost povezane su s lošijom kliničkom slikom, pogoršanjem stanja i brojnijim simptomima kod pacijenata sa ZS. Cilj je ovoga istraživanja bio ispitati odnos NN, socijalne podrške te anksioznih i depresivnih smetnji kod pacijenata sa ZS tijekom COVID-19 pandemije. U istraživanju je sudjelovao 139 pacijenata (39.6% Ž i 60.4% M), u dobi od 27 do 89 godina (M=63.01; SD=13.30), 65 je hospitaliziranih bolesnika s akutnim ZS, te njih 74 ambulantnih pacijenata koji čine klinički kontrolni uzorak, a boluju od arterijske hipertenzije, hiperlipidemije, poremećaja srčanog ritma te ishemijske bolesti srca. Pacijenti su ispunili: Upitnik netolerancije na neizvjesnost, Upitnik socijalne podrške, Ljestvicu generaliziranog anksioznog poremećaja i Upitnik depresivnosti, pregledani su od strane kardiologa (fizikalni pregled, EKG), te su obavili rutinske laboratorijske analize. Skupina ZS starije je dobi, višeg sistoličkog i dijastoličkog tlaka i glukoze u krvi u odnosu na ambulantne pacijente. Rezultati pokazuju da, uz kontrolu dobi kao kovarijate, postoji značajna razlika između bolničkih i ambulantnih pacijenata u depresivnosti ($F_{(1,121)}$ = 11.78; $p < .01$) i percepciji socijalne podrške ($F_{(1,125)}$ = 12.01; $p < .01$); bolnički su pacijenti depresivniji te percipiraju manje socijalne podrške. Provedene su 2 hijerarhijske regresijske analize; u prvom je koraku uključena dob, spol te ambulantno ili bolničko liječenje, a u drugom NN i socijalna podrška. Viša NN, niža percepcija socijalne podrške te bolničko liječenje zbog ZS, objašnjavaju značajan dio depresivnosti kod pacijenata (43%) ($F_{(5,111)}$ = 15.99; $p < .01$), dok se dob i spol nisu pokazali značajnima. Značajnim se prediktorom anksioznosti pokazala samo NN koja objašnjava 23% varijance ($F_{(85,116)}$ = 6.65; $p < .01$). Rezultati pokazuju da NN doprinosi depresivnim i anksioznim smetnjama. Navedeno se uklapa u transdijagnostičku teorijsku perspektivu koja sugerira da psihološke smetnje poput anksioznosti i depresivnosti nastaju i održavani su sličnim temeljnim vulnerabilnostima koje bi trebale biti zastupljene u svim dijagnostičkim kategorijama. Razumijevanje čimbenika rizika kao što je NN važno je u smislu poboljšanja liječenja i razumijevanja anksioznih i depresivnih smetnji posebno kod oboljelih od srčanih bolesti dodatno izloženih stresu zbog pandemije.

Ključne reči: zatajivanje srca, netolerancija na neizvjesnost, socijalna podrška, anksioznost, depresivnost

Psychological Characteristics of Patients with Heart Failure during the COVID-19 Pandemic

Intolerance of uncertainty (IU) is a tendency to react negatively on an emotional, cognitive, and behavioural level to uncertain events. Individuals with IU experience

anxiety in uncertain situations and avoided them. Research has shown that IU could be a transdiagnostic process that contributes to the maintenance of symptoms of anxiety and depression. Heart failure (HF) is a disorder in the function or structure of the heart, manifested in the inability of the heart to pump the amount of blood needed for metabolic tissue functions. Depression and anxiety are associated with a poor clinical picture, worsening of the condition and more symptoms. This study aims to examine the relationship between IU, social support, anxiety and depression in patients with HF during the COVID-19 pandemic. One hundred and thirty-nine patients (39.6% F and 60.4% M), aged 27 to 89 years (M = 63.01; SD = 13.30) participated in this study; 65 of them were hospitalized patients with acute HF, and 74 were outpatients part of a clinical control sample that suffer from arterial hypertension, heart rhythm disorder, and ischemic heart disease. The participants completed a set of questionnaires (Uncertainty Intolerance Questionnaire, Cardiac Patient Social Support Questionnaire, Generalized Anxiety Disorder Scale, and Health Questionnaire). They were examined by a cardiologist (physical examination, ECG) and underwent a routine laboratory analysis. The group of hospital patients with HF consists mostly of elderly people, who have higher systolic and diastolic blood pressure and higher levels of blood glucose compared to outpatients. The results show that there is a significant difference between the hospitalized patients and outpatients in depression ($F_{(1,121)} = 11.78$; $p < .01$), and perception of social support ($F_{(1,125)} = 12.01$; $p < .01$), using age as a covariate. Hospitalized patients are more depressed and have a perception of less social support. Two hierarchical regression analyses were performed: age, gender, and group (hospitalized or outpatients) entered in the first step, while IU and social support were entered in the second step. Higher IU, lower perception of social support, and hospital treatment account for significant part of depression (43%) ($F_{(5,111)}=15.99$; $p<.01$), but age and gender were not significant. Only IU, which explains 23% of the variance ($F_{(85,116)}=6.65$; $p<.01$), proved to be a significant predictor of anxiety. IU contributes to depressive and anxiety disorders. This is in accordance with transdiagnostic perspective which suggests that psychological disorders, such as anxiety and depression are facilitated or maintained by similar underlying vulnerabilities that should be represented across diagnostic categories. Understanding risk factors such as IU is important in terms of improving treatment, and understanding of anxiety and depression particularly in heart disease patients in stress situation during the COVID-19 pandemic.

Keywords: heart failure, intolerance of uncertainty, social support, anxiety, depression

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Mrežni pristup odnosu između stavki Skale stresa zbog COVID-a i mera opšteg distresa

Za procenu različitih reakcija povezanih sa pandemijom COVID-19 konstruisana je nekolicina instrumenata uključujući i Skalu stresa zbog COVID-a (CSS; Taylor i sar., 2020). Autori su predložili petofaktorsko rešenje (strah od opasnosti i kontaminacije, strah od ekonomskih posledica, ksenofobija, kompulzivno proveravanje i traženje ohrabrenja i simptomi traumatskog stresa u vezi sa COVIDOM-19). Mrežnim pristupom pokazali su da je strah od opasnosti i kontaminacije centralni čvor. Međutim, Taylor i sar. su ispitivali odnose na nivou supskala, a ne stavki, mada bi takvi odnosi mogli biti informativniji. Prethodna istraživanja su pokazala i da je distres meren skalom CSS povezan sa opštom anksioznošću, depresivnošću i opsesivnim proveravanjem. To postavlja pitanje razgraničenja između opšteg i distresa izazvanog COVID-om. Zato su ciljevi ovog istraživanja bili da se na velikom srpskom uzorku ispitaju: a) odnosi među stavkama koristeći analizu zajednica i b) odnosi stavki skale CSS sa nekoliko mera anksioznosti, disforije, kompulzivnog pranja i proveravanja.

Ispitanici (N = 3096, 1045 muški, Mstarost = 26.86, SD = 8.09) su popunili onlajn set upitnika koji je uključivao CSS, Upitnik zdravlja pacijenata (PHQ-4; Kroenke, Spitzer, Williams & Lowe, 2009) za anksioznost i depresivnost, te Inventar opsesivnosti i kompulsivnosti (OCI-R; Foa et al., 2002) za skale kompulzivnog proveravanja i pranja. Procenjeni su struktura, gustina mreže, centralnost čvorova i stabilnost ivica. Dobijene mreže su precizne i stabilne (koeficijent stabilnosti CS = 0.75). U prvoj mreži, isključivo sa CSS ajtemima, izdvojeno je 6 zajednica (razlika u odnosu na rešenje Taylora i sar. je što su se razdvojili strah od opasnosti i kontaminacije). U drugoj mreži sa uključenim merama distresa, PHQ distres i OCI-R kompulzije formirali su odvojenu zajednicu, najjače povezanu sa proveravanjem i traumatskim stresom iz skale CSS. OCI-R kompulzivno pranje bilo je uglavnom povezano sa brigama u vezi sa prenosom virusa dodirom, OCI-R kompulzivno proveravanje sa praćenjem mogućih znakova bolesti. PHQ anksioznost je imala najjače veze sa intruzivnim mislima u vezi sa virusom i zaštitnim ponašanjima, dok je PHQ depresivnost bila povezana sa problemima koncentracije. Za obe mreže centralne stavke su one koje se tiču brige da će se osoba inficirati, brige o mogućim nestašicama osnovnih potrepština, te straha od stranaca koji prenose virus.

Ovo je prva, nezavisna replikacija nalaza da simptomi mereni skalom CSS čine zatvorenu mrežu koja se naziva Sindromom stresa zbog COVID-a. Analiza na nivou stavki potvrdila je da su stavke straha od opasnosti i kontaminacije centralne u okviru ove mreže, a slede ih zabrinutost za socio-ekonomske posledice i sa COVID-om povezana ksenofobija. Preporuka za naredna istraživanja reakcija povezanih sa pandemijom je da nije dovoljno koncentrisati se isključivo na mere opšteg distresa pošto one nisu snažno povezane sa centralnim reakcijama koje provocira pandemija.

Ključne reči: Ključne reči: Skala stresa zbog COVID-a, analiza zajednica, mrežna analiza

Network approach to the relations between Covid Stress Scale items and general distress

Several instruments have been constructed to assess different reactions related to the COVID-19 pandemic, including the Covid Stress Scale (CSS; Taylor et al., 2020). The authors proposed a 5-factor solution (danger and contamination fears, fears about economic consequences, xenophobia, compulsive checking and reassurance seeking, and traumatic stress symptoms about COVID-19). Using network approach, the authors demonstrated that the danger and contamination fears is the most central node. However, Taylor et al. examined the scale-level relations rather than the item-level relations, which could be more informative. Previous research also demonstrated that distress measured by the CSS is related to general anxiety, depression, and obsessive checking, raising the question of demarcation between the COVID-19 distress and general distress. Hence, the aims of this study on a large Serbian sample were to examine: a) the inter-item relations using community detection; and b) relations of the CSS items with several measures of anxiety, dysphoria, checking, and washing compulsions.

Participants (N = 3096, 1045 male, Mage = 26.86, SD = 8.09) filled out a set of questionnaires including the CSS scale, the Patient Health Questionnaire (PHQ-4; Kroenke, Spitzer, Williams & Lowe, 2009) for anxiety and depression, and the Obsessive-Compulsive Inventory – Revised (OCI-R; Foa et al., 2002) for compulsive checking and washing. Network structure, sparsity, node centrality and stability were estimated. The analysis suggest that the networks are accurate and stable (CS coefficient = 0.75). Within the network of only CSS items, the analysis returned a six-community solution (difference from Taylor et al. being that danger and contamination fears split). In the second network which included distress, general distress and OCI-R compulsions formed a community which was connected mostly to CSS compulsive checking and CSS traumatic stress. Compulsive washing was mostly connected to worries about contact transmission, compulsive checking with

monitoring the signs of illness. PHQ anxiety was connected highest to intrusions about the virus and safety behaviors, while PHQ depression was connected to concentration problems. In both networks, most central items concerned the worry about getting infected, worry about the shortage of basic necessities, and the fear about foreigners transmitting the virus.

This is the first, independent replication of the findings that the symptoms measured by the CSS form a close network termed the Covid Stress Syndrome. Item-level analysis confirmed the finding that the danger and contamination fears are most central within the network, followed by socio-economic concerns and COVID-xenophobia. Recommendation for future research on pandemic-related reactions is that it is not sufficient to focus solely on the measures of general distress given that these measures are not connected strongly to the core reactions provoked by the pandemic.

Keywords: Covid Stress Scale, community detection, network analysis
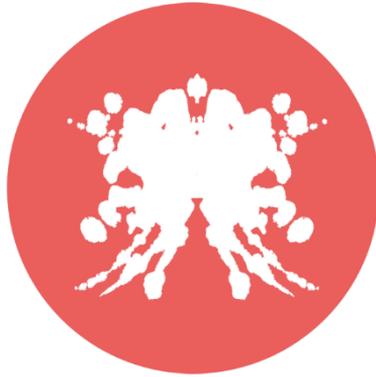
KLINIČKA PSIHOLOGIJA

CLINICAL PSYCHOLOGY

Moderators: Alessandra Petra Anić, Lana Tucaković, Tatjana Krstić & Milica Ninković

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Adult children of alcoholics: emotional experiencing in childhood and consequences in adulthood

Adult children of alcoholics are people over the age of 18 who spent part or all of their childhood in a dysfunctional family where the biggest problem was the alcohol addiction of one or both parents. Addicted parents often form a different parental approach, take a different attitude towards their children, pass on different values and thus a distorted picture of reality. In addition, physical and psychological violence and other forms of abuse and neglect that children perceive as traumatic are often present in these families. All this has severe consequences for the child, which he also deals with in adulthood. On one hand, adult children of alcoholics remain trapped in the child's fears and reactions, and on the other hand, as children they were forced to grow up too quickly without going through the child's natural stages of development into a healthy adult person. Adult children of alcoholics have two identities: they are both adults and children, as unresolved and traumatic childhood content remains repressed and unprocessed and co-shapes their functioning in adulthood, which is often emotionally and socially immature. They often have problems in experiencing and regulating their emotions, as they experienced many emotional burdens in a dysfunctional family, and at the same time there was no real opportunity for the healthy development of the regulation of these emotions. The paper will present research on what the emotional experience of children with alcoholic parents was and how they recognize that this has consequences in their adult lives. Using the content analysis method, we analyzed 71 anonymous posts of different participants on the topic "adult children of alcoholics" on the counseling forum, where they described their childhood experiences with an alcoholic parent. Directed approach to content analysis was used to validate forum posts. The analyzed content fell into two predetermined categories: childhood emotional experience with an alcoholic parent and experiencing consequences in adulthood. The results showed that in their childhood, adult children of alcoholics experienced mainly severe feelings of fear, shame, sadness and disgust with their alcoholic parents, and these feelings often remained unprocessed. In adulthood, they feel negative consequences in their personal sphere (e.g. poor self-esteem, the feelings of inferiority, anxiety, depression), in interpersonal relationships (e.g. problems in intimate couple

relationships, mistrust, social phobia, parental stress, complicated relationships with parents) and in everyday functioning (e.g. coping with their own addiction, non-functional patterns of behavior), but they also recognize that because of this experience they have managed to lay the foundations of their lives differently and better. The results confirm that children are hidden victims of parental alcoholism and justify the need for psychosocial and therapeutic support even in their adulthood.

Keywords: alcoholism, children, emotions, addiction, content analysis

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Transgenerational transmission of addictive behavior patterns researched in a case study in the process of Relational Family Therapy

The influence of the dysfunctional family system is a major cause of the development of intrapsychic conflict, and dysregulated intrapsychic conflict may contribute to the abuse of alcohol or other drugs or influence some other addictive patterns. Through the influence of the family's dysregulated affect patterns of substance abuse or addictive patterns are carried forth between generations.

Family is the primary place where children develop intrapsychic patterns and basic affect under the impact of their surroundings. If the family is dysfunctional and they regulate their emotions with alcohol abuse, children will be more vulnerable to dysfunctional affect regulation in their adult lives.

Often, adult children of alcoholics themselves do not drink alcohol at all and even reject it. However, the hidden pattern of dysregulated affect is passed on and the individual is full of the feelings of shame, worthlessness, and rage. The pattern can be passed on through various forms of addictive behaviour and through rigid family rules.

The transformation of addiction can even divert attention from the problem because some addictions are socially acceptable and even approved, such as workaholism, dependence on relationships, dependence on the role of a victim.

However, addictive behaviour has a strong negative impact on the health and well-being of individuals, families, and communities.

The case study will explore the transmission of an addiction pattern across three generations in the light of Relational Family Therapy.

The main source of data collection was therapeutic diaries written after each therapeutic season and in time. There were documented therapist observations of the clients and the therapeutic process itself. The other important source of data collection was therapeutic diaries of supervision process which took place in parallel. We used holistic analysis to analyse our data, because we want to draw conclusions based on the text as a whole.

With the couple who entered therapy, we noticed the problem of workaholism in the third generation, the second generation was affected by alcohol abuse, addiction to the role of a victim and an obsessive need for cleanliness and order. In the first generation we discovered alcohol addiction as a regulation of severe affects of physical abuse, shame, and rejection. In therapy, we followed and regulated entirely unconscious and dissociated feelings of rejection, shame, and anger that manifested in a completely different form in the third generation.

In Relational Family Therapy we reveal deep-seated causes of the development of addiction, as only the recognition and regulation of dysregulated affects in current relationships can bring about a lasting resolution of the transgenerational transmission of addiction.

Keywords: Relational family therapy, addiction, transgenerational transmission

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Personality and value correlates of attitudes towards the use of marijuana for recreational and medical purposes

In recent years, various initiatives have been launched to legalize the use of marijuana, for both medical and recreational purposes. The use of marijuana in medical purposes has already been legalized in numerous countries, while the use in recreational purposes has also been legalized in some countries. Therefore, the aim

of this study, conducted on students (N = 571, 59.2% females, aged 18 to 28 years) was to examine attitudes towards marijuana use for both purposes. Based on previous research, conducted with the aim of examining attitudes towards the use of marijuana for recreational purposes, the following variables were included in this research: thrill seeking (from HPI model; α = .86), openness to experience (from Big Five model; α =. 79), liberalism-conservatism (operationalized by the scale created for the purposes of this research; α = .70), and religiosity (DUREL; α = .90). Attitudes towards marijuana use were operationalized using a scale created for the purposes of this research, where attitudes towards recreational (α = .86) and medical use (α = .86) were assessed with five items each. Attitudes towards the use of marijuana for recreational purposes are generally neutral at the sample level, and generally positive towards the use for medical purposes. More positive attitudes towards the use of marijuana for recreational purposes are associated with thrill seeking (r = .27, p <.01), religiosity (r = -.30, p <.01), and liberalism-conservatism (r = -.29, p <.01), and more positive attitudes towards the use of marijuana for medical purposes are related to religiosity (r = -.18, p <.01) and liberalism-conservatism (r = -.28, p <.01). Examination of regression models where personality and value correlates are included as predictors showed that in the case of attitudes towards recreational marijuana use (R^2 = .17; F (4; 566) = 30.25; p <.001) thrill seeking (β = .23, p <.01), liberalism-conservatism (β = -.20, p <.01), and religiosity (β = - .18, p <.01) have an independent contribution in explaining the criterion, while in the case of marijuana use for medical purposes (R^2 = .08; F (4; 566) = 13.46; p <.001) only liberalism-conservatism stands out as a significant predictor (β = -.25, p <.01). In conclusion, it can be said that people who are more oriented towards excitement, people with liberal worldview, and lower religiosity have a positive attitude towards the use of marijuana for recreational purposes. In line with expectations, individuals who have somewhat reserved attitudes toward medical marijuana use can be described as more conservative. The results of this research can contribute to public health policies regarding marijuana consumption.

Keywords: attitudes, marijuana use, conservatism, religiosity, thrill seeking

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Affect regulation in Relational Family Therapy - treatment of an addict's partner

Relational Family Therapy is an innovative integrative approach in psychotherapy. It integrates the basic principles of systems theories, object relations theory, interpersonal theory, and theory of self with modern findings in neuroscience. Affect regulation is a key therapeutic intervention in Relational Family Therapy. In their relation to the client, the therapist recognizes, internalizes, evaluates the client's emotional states, transforms them into a manageable experience and returns them to the client in a new, safe form of emotional expression. With the new experience of emotional responding within a relationship in Relational Family Therapy, clients change their implicit relational awareness, allowing them to experience themselves, others, and relationships in a different way. The therapist is actively involved in the process of change, as only through confrontation with their countertransference feelings can they fully understand and evaluate the client's experience. The change in therapy thus occurs in a therapeutic relationship, where the therapist and the client, through implicit experience, together actively create and change the relationship and thus their own experience of themselves and others. The paper will present the therapeutic process with the partner of an addict according to the single instrumental case study method. The client is 33 years old, a mother to one child and has been in an intimate couple relationship for 8 years. Her partner has attended a recovery programme for alcohol addicts for one year. During this time, the client attended two therapeutic cycles consisting of 12 sessions each. The sessions were audio taped and transcribed. Qualitative data (transcripts) was then coded according to principals of content analysis by two researchers. According to previous studies the first order codes for identifying therapeutic interventions were: 1. addressing the affective atmosphere, 2. strengthening the affective atmosphere, 3. linking the affective atmosphere to the intrapsychic experience, and 4. compassion. The key moments of change in therapy, which we recognize in the new experience of regulating shame and sadness felt in the body, will be presented. The regulation of affect enables a change in the clients' implicit relational awareness and thus the possibility of re-establishing an intimate relationship. A key step in affect regulation in Relational Family Therapy is linking the client's current affective experience with their intrapsychic experience. Excessive affect in the present is linked to past experiences that have shaped specific psychoorganic responses, which are transformed and named through regulation and compassion. The paper will also present the study limitations and guidelines for further research.

Keywords: relation family therapy, addiction, affect regulation, case study

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Simptomi poremećaja hranjenja, obrasci hranjenja i tjelesna aktivnost kod adolescenata u Hrvatskoj

Prevalencija simptoma poremećaja hranjenja (PH) viša je u djevojaka i mladih žena u usporedbi s mladićima, a novija istraživanja pokazuju porast učestalosti simptoma PH i kod adolescenata. Cilj je ovoga istraživanja ispitati simptome PH, obrasce hranjenja, fizičku aktivnost i motive za vježbanje na uzorku hrvatskih adolescenata. U istraživanju je sudjelovalo 649 učenika 1. razreda srednjih škola u Primorsko-goranskoj županiji u Hrvatskoj; 321 djevojka (49.5 %) i 328 mladića (50.5 %), raspona dobi od 14 do 16.5 god. (M = 15.00, SD = 0.32). Ispitanici su tijekom sistematskih zdravstvenih pregleda obavili kratak intervju sa školskim liječnikom, ispunili set upitnika te im je izmjerena visina i težina. Korišteni su: Upitnik za ispitivanje poremećaja hranjenja (EDE-Q), Trofaktorski upitnik obrazaca hranjenja (TFEQ-R18) te skraćeni Upitnik motivacije za vježbanjem (EMI-2). Ispitanici su podijeljeni u dvije skupine s obzirom na broj simptoma PH, korištenjem kritične vrijednosti rezultata na EDE-Q upitniku (0 ili 1 simptom = bez simptoma PH; 2 ili više simptoma = simptomi PH). Prilikom testiranja razlika između grupa korištena je Bonferroni korekcija, ali je zbog konvencije prikazana uobičajena razina značajnosti. Rezultati pokazuju da ne postoji značajna razlika u broju djevojaka i mladića sa simptomima PH ($\chi2$ = 0.69, p > .05) te da podjednak broj adolescenata sa i bez simptoma PH vježba ($\chi2$ = 0.68, p > .05). Rezultati su također pokazali da ne postoji razlika u indeksu tjelesne mase (t(598) = 0.81) adolescenata sa i bez simptoma PH, no ispitanici sa simptomima PH značajno češće koriste ispitane obrasce hranjenja: nekontrolirano jedenje (t(544.72) = 9.02, p < .01), kognitivno suzdržavanje (t(586) = 3.90, p < .01) i emocionalno jedenje (t(540.21) = 7.05, p < .01). U skupini adolescenata koji vježbaju (N = 350), motivi za vježbanje ne razlikuju se značajno ovisno o simptomima PH. Nadalje, razlika je u broju mladića i djevojaka koji vježbaju značajna ($\chi2$ = 17.93, p < .01); vježba više mladića no što smo očekivali i manje djevojaka. Razlike između djevojaka i mladića dobivene su i za obrasce hranjenja: djevojke postižu više rezultate na nekontroliranom jedenju (t(574.06) = 3.21, p < .01) i emocionalnom jedenju (t(497.03) = 6.99, p < .01). Razlike u motivima zbog kojih mladići i djevojke vježbaju nisu dobivene. Rezultati su u skladu s literaturom te pokazuju da su djevojke sklonije emocionalnom i nekontroliranom jedenju u usporedbi s mladićima koji kako bi prevladali negativne emocije češće pribjegavaju drugim strategijama suočavanja poput konzumiranja alkohola ili kockanja. Dobiveni rezultati pokazuju da rad s

adolescentima sa simptomima PH zahtjeva različit pristup u radu s djevojkama i mladićima, ali vodeći računa i o kognitivnim i ponašajnim strategijama hranjenja i kontrole težine koji su važni u održavanju simptoma PH.

Ključne reči: simptomi poremećaja hranjenja, motivacija za vježbanje, obrasci hranjenja, indeks tjelesne mase, adolescenti

Eating Disorders Symptoms, Eating Patterns and Physical Activity in Adolescents in Croatia

The prevalence of eating disorder (ED) symptoms is higher in girls and young women in comparison to boys and young men. Recent research indicates an increase in the occurrence of these symptoms in adolescents as well. This study aimed to examine ED symptoms, eating patterns, physical activity, and exercise motives in a sample of Croatian adolescents. A total of 649 first grade high school students from the Primorje-Gorski Kotar County in Croatia participated in the study; 321 girls (49.5%) and 328 boys (50.5%), age 14 to 16.5 years (M = 15.00, SD = 0.32). During the regular health examinations, the students participated in a short interview with their doctor, completed a set of questionnaires, and had their height and weight measured. The Eating Disorder Examination Questionnaire (EDE-Q), the Three-Factor Eating Questionnaire (TFEQ-R18), and the short Exercise Motivations Inventory-2 (EMI-2) were used. Participants were divided into two groups according to the number of ED symptoms, using the critical value of the results on the EDE-Q questionnaire (0 or 1 symptom = no ED symptoms; 2 or more symptoms = ED symptoms). When testing the differences between groups, Bonferroni correction was used, nontheless as convention the usual significance levels were used. The results have shown that there is no significant difference in the number of girls and boys with ED symptoms ($\chi2$ = 0.69, p > .05) and that an equal number of adolescents with and without ED symptoms exercise ($\chi2$ = 0.68, p > .05). There was no difference in body mass index (t(598) = 0.81) of adolescents with and without symptoms of ED, but adolescents with ED symptoms adopted more often the following eating patterns: uncontrolled eating (t(544.72) = 9.02, p < .01), cognitive restraint (t(586) = 3.90, p < .01) and emotional eating (t(540.212) = 7.05, p < .01). Amongst those adolescents that exercise (N=350), there are no differences in motives for exercise between those with and without ED symptoms. Furthermore, the difference in the number of boys and girls exercising is significant ($\chi2$ = 17.93, p < .01); more boys and fewer girls exercise than we anticipated. Differences between girls and boys were also obtained for eating patterns: girls achieved higher results on uncontrolled (t(574.06) = 3.21, p < .01) and emotional eating (t(497.03) = 6.99, p < .01). Differences in motives

for exercising in boys and girls were not obtained. The results are consistent with the literature and show that girls are more prone to emotional and uncontrolled eating compared to boys, who more often turn to other coping strategies such as alcohol consumption or gambling to overcome negative emotions. According to our results, working with adolescents with PH symptoms requires a different approach for girls and boys, but also needs considering cognitive and behavioral eating and weight control strategies that are important in the maintenance of ED symptoms.

Keywords: eating disorder symptoms, exercise motives, eating patterns, body mass index, adolescents

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Razrešenje dijagnoze i reagovanje na averzivne emocije deteta kod majki dece sa cerebralnom paralizom

Razrešenje dijagnoze podrazumeva roditeljski odnos prema detetovoj dijagnozi, odnosno kognitivno i emotivno prihvatanje detetovog zdravstvenog stanja i posledica koje ono sa sobom nosi. Koncept razrešenja svoj teorijski oslonac nalazi u Teoriji afektivne vezanosti i iz nje proisteklim istraživanjima. Ona su konzistentno potvrdila da odsustvo razrešenja ometa roditeljske kapacitete da prepoznaju i senzitivno odgovore na emocionalne signale svog deteta. Sprovedeno je istraživanje sa ciljem ispitivanja relacija između majčinog razrešenja u odnosu na detetovu dijagnozu cerebralne paralize (razrešen/ nerazrešen) i njene sposobnosti da uvremeni i adekvatno odreaguje na averzivne emocije svog deteta. Pošli smo od pretpostavke da postoji razlika između razrešenih i nerazrešenih majki u odnosu na reagovanje na averzivne emocije deteta, pri čemu se očekuje da će majke sa nerazrešenim odnosom imati veće poteškoće da senzitivno reaguju na averzivne emocije svog deteta. U svrhu procene odnosa prema dijagnozi sa majkama je obavljen polustruktuisani Intervju o reagovanju na dijagnozu (Pianta & Marvin, 1992). Svi intervjui su snimani, nakon čega su dobijeni odgovori kodirani koristeći Klasifikacioni sistem o ragovanju na dijagnozu (Pianta & Marvin, 1993). Skala roditeljskih reakcija na averzivne emocije deteta (Fabes, Eisenberg, & Bernzweig,

1990) je primenjena za procenu reagovanja majki na averzivne emocije deteta. Uzorak je činilo 100 majki dece sa cerebralnom paralizom, uzrasta od 2 do 7 godina. Rezultati su pokazali da nisu dobijene statistički značajne razlike u načinima reagovanja na ispoljavanje detetovoih averzivnih emocije, s obzirom na majčin status razrešenja F(6,93)=1.19, p=.32. Preciznije, majke su, bez obzira na status razrešenja, najčešće dominantno koristile podržavajuće strategije u reagovanju, odnosno na problem i na emocije usmerene reakcije, kao i podsticanje izražavanja emocija. Najređe korištena strategija se pokazala strategija kažnjavanja. To su ohrabrujući podaci s obzirom da deca sa cerebralnom paralizom, kao i sa drugim vidovima zdravstevnih,a posebno neuroloških stanja, mogu imati teškoće u ispoljavanju emotivnih doživljaja, što posledično može da oteža adekatno prepoznavanje detetovih emocionalnih reagovanja. Njihovim roditeljima je teže da ispravno protumače detetovo ispoljavanje besa, tuge, straha ili neke druge averzivne emocije. Postoji i mogućnost da deca koja su od ranog uzrasta izložena stresogenim dijagnostičkim i terapijskim procedurama, koje zahtevaju regulaciju negativnog afekta, bolje tolerišu averzivne emocije. Važno je naglasiti značaj roditeljskog razrešenja za senzitivno prepoznavanje detetovih potreba i majčinog podržavajućeg reagovanja u situacijama ispoljavanja averzivnih emocija kod dece sa hroničnim zdravstvenim stanjima.

Ključne reči: majčino razrešenje, averzivne emocije, deca

Maternal resolution of diagnosis and coping with negative emotions of children with cerebral palsy

Resolution of diagnosis implies the parental attitude towards their child' diagnosis, i.e. cognitive and emotional acceptance of the child's health condition and its implications. The concept of resolution is grounded in the attachment theory and studies based on it. These studies have consistently found that the lack of resolution hinders parental capacity to recognize and sensitively respond to emotional cues from the child. We conducted a study aimed at investigating the relationship between maternal resolution with respect to the child's diagnosis of cerebral palsy (resolved/unresolved) and their capabilities to respond in a timely and adequate fashion to their child's aversive emotions. We hypothesized that there is a difference in reacting to their child's aversive emotions between mothers who are resolved vs. those unresolved and we expected those that are unresolved to have more difficulties in reacting sensitively to their child's aversive emotions. In order to assess resolution of diagnosis semi-structured Reaction to Diagnosis Interviews (Pianta & Marvin, 1992) were held with mothers. All interviews were recorded and the answers were coded using the Reaction to Diagnosis Classification System (Pianta & Marvin, 1993). The Coping with Children's Negative Emotion Scale (Fabes, Eisenberg,

& Bernzweig, 1990) was used to assess maternal reactions to their children's negative emotions. Our sample included 100 mothers of children with cerebral palsy, aged 2 to 7 years. Our results yielded no statistically significant differences in ways of reacting to manifestations of children's aversive emotions with regard to maternal resolution status $F(6,93)=1.19$, $p=.32$. More precisely, regardless of their resolution status, mothers predominantly used supportive strategies, i.e. strategies focused on the problem and emotionally focused strategies, along with strategies that encourage expressing emotions. The least used strategy was punishment. This is encouraging since children with cerebral palsy and other types of health conditions, particularly neurological, can have difficulties in expressing emotions which makes it harder to recognize their emotional reactions. Parents are faced with difficulties in accurately interpreting manifestations of anger, sadness, fear or any other aversive emotion. It is also conceivable that children subjected from a young age to stressful diagnostic and therapeutic procedures that require regulating negative affect, subsequently tolerate aversive emotions better. It is important to underline the importance of parental resolution for sensitively recognizing and reacting supportively in situations when children with chronic health conditions exhibit aversive emotions.

Keywords: maternal resolution, aversive emotions, children

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The role of past physician-patient communication in passivity normalization during childbirth

One of the most important determinants of patients' adherence to the treatment is the quality of the physician-patient relationship. Studies show that overall positive communication with healthcare workers positively affects treatment adherence and the other desirable patients' behaviors. Therefore, positive experiences of physician-patient interaction increase the frequency of normative behaviors. In this

study, we examined the relationship between experiences of physician-patient communication and the normalization of passivity (i.e. submissiveness and subservience) during childbirth. Thus, if this relation is positive, i.e., if communication quality is positively related to passivity normalization, that would confirm that passivity during labor IS a normative behavior.

A total of 271 women (Mage = 42.4) who gave birth were recruited. They completed 24 items regarding the frequency of physician-patient communication experiences (100-point slider scale). Promax-rotated principal component analysis revealed three dimensions of experience: 1. Aggressiveness (15 items, e.g., When I am at a healthcare facility, it happens that employees threaten patients; α = .88), 2. Supportiveness (six items, e.g., When I am at a healthcare facility, it happens that employees sympathize with me; α = .78), and 3. Shaming for not having children yet (three items, e.g., When I am at a healthcare facility, it happens that employees shame me for not having children yet; α = .85). They also completed seven items that capture normalization of passivity during childbirth (e.g., Women exaggerate their childbirth experiences; α = .73; 5-point Likert scale). Both scales were constructed for the purpose of this study.

Multiple linear regression model revealed that communication experience dimensions explained 21% of the variance of passivity normalization ($F(3, 268)$ = 19.54, p < .000, R2adj = .21). More precisely, passivity normalization was positively predicted by Supportiveness (β = .27, t(268) = 4.27, p < .001), and negatively by Aggressiveness (β = -.24, t(268) = -3.18, p = .002). Shaming did not significantly contribute to the model (β = -.03, t(268) = -.37, p = .712).

Our results indicate that the more positive physician-patient communication, the higher passivity normalization is. This pattern suggests that positive experiences tend to silence women in that they do not critically re-examine old-fashioned and strongly established practices that define a birthing woman as a fully inactive agent. However, positive communication experiences are not passivizing per se - it is rather the social system that reinforces passivity during childbirth as a norm. In other words, mental representation of the passive female body seems to be internalized by both patients and health care providers. In that realm experiences of supportive and unaggressive communication can be abused, rather than used in a positive way to make the physician-patient relationship beneficial for both sides.

Keywords: physician-patient relationship, physician-patient communication, passivity normalization, childbirth, women's agency

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Kratki test dvosmislenih situacija za procenu negativnih interpretativnih pristrasnosti

Negativne interpretativne pristrasnosti (tendencija da se dvosmislene situacije vide u negativnom svetlu, a ne u jednako verovatnom pozitivnom ili neutralnom) se u savremenim kognitivnim modelima vide kao važni činioci nastanka i održavanja emocionalnih poremećaja. Njihova modifikacija je postala jedna od važnih tehnika u savremenim kognitivističkim tretmanima. Iako su centralne u teorijskim i terapijskom smislu, istraživači i kliničari nemaju veliki izbor instrumenata za njihovo merenje. Kako bi nadomestili nedostatak, Berna i saradnici (2011) su osmislili test koji se sastoji iz 24 dvosmislene situacije, pri čemu ispitanik ima zadatak da proceni stepen prijatnosti/neprijatnosti situacije. Volarov i saradnici (2018) su adaptirali ovaj instrument za srpski jezik (Test dvosmislenih situacija -TDS) i ukazali na njegovu validnost i pouzdanost interne konzistencije. Međutim, kao problematičnim se pokazuje dužina njegovog zadavanja, posebno prilikom rada sa kliničkom populacijom. Svrha ovog istraživanja bila da se kreira kraća verzija testa dvosmislenih situacija, pri čemu se ne bi narušila njegova validnost i pouzdanost.

Za kreiranje kraće verzije korišćeni su podaci Volarov i sar. (2018) koji su prikupljeni na nekliničkom uzorku od 1322 ispitanika koji su prikupljeni po prinicupu snežne grudve, kao i podaci prikupljeni na uzorku studenata Univerziteta u Novom Sadu (N = 69). Uz TDS, ispitanici u prvom uzorku su popunili Skalu depresivnosti, anksioznosti i stresa-21 (DASS-21) kao meru opšteg distresa, dok su ispitanici u drugom uzorku dodatno popunili upitnike za procenu stepena brige (Penn State Worry Questionnaire-PSWQ). U cilju provere validnosti skraćene verzije instrumenta, upoređene su međusobne korelacije duže i skraćene verzije instrumenta, kao i sa merama distresa.

Faktorska analiza u užem smislu na prvom uzorku je uključivala 24 situacije i sugerisala je dvo-faktorsko rešenje. Prilikom skraćivanja upitnika razmatrani su praktični i statistički pokazatelji, što je dovelo do odabira 10 situacija. Pouzdanost interne konzistencije skraćene skale je bila .78 na prvom uzorku i .76 na drugom uzorku (vrednosti na celovitom testu su bile .86 i .76.). Inter-korelacija duže i kraće verzije instrumenta je bila .91 (p < .001). Korelacije celovitog testa sa merama distresa i brige su bile -.37 (p < .001) i -.49 (p < .01). Korelacije skraćenog testa sa istim merama su bile -.35 (p < .001) i .51 (p < .001). Konačno, ispitanici prvog uzorka koji su imali

izražen distres (od umerenog do istraženog prema DASS-21 graničnim vrednostima) u odnosu na one bez distesa (normalan skor-blag distres prema DASS-21 vrednostima), su ispoljili tendeciju da situacije vide u negativnom svetlu (t (1277) = 10.05, p < .001, Cohen's d = .72).

Kratka verzije testa dvosmislenih situacije je pouzdana i validna mera negativnih interpretativnih pristrasnosti. Usled kratkoće, pogodna je za istraživanja i klinički rad gde se očekuje brzina procene.

Ključne reči: interpretativne pristrasnosti, dvosmislene situacije, validacija

A brief test of ambiguous situations for assessing negative interpretive biases

Negative interpretative biases defined as tendencies to interpret ambiguous situations negatively, and not in equally probable positive or neutral, are regarded in modern cognitive models as important factors of development and maintenance of emotional disorders. Their modification has become one of the important techniques in modern cognitive treatments. Despite being important for both theory and practice, researchers and clinical experts do not have a variety of measurement instruments to measure this construct. To compensate for this, Berna et al. (2011) created a test that consisted of 24 ambiguous situations where a respondent has the task to evaluate the degree of pleasantness/unpleasantness of a situation. Volarov et al. (2018) adapted this instrument to the Serbian language (the Ambiguous Scenario Test -AST) and documented its validity and reliability of internal consistency. However, its length appears problematic, especially in clinical settings. Hence, the purpose of this research was to create a shorter version of the ambiguous situations test, maintaining its validity and reliability.

For the creation of a shorter version, we used Volarov et al.'s data (2018) collected in a non-clinical sample of 1322 respondents recruited via the snowball technique, as well as the data collected on the sample of students of the University of Novi Sad (N=69). Besides AST, the respondents in the first sample filled out the Depression, Anxiety and Stress scales-21 (DASS-21) as a measure of general distress, while the respondents in the second sample filled out the Penn State Worry Questionnaire. To check validity of the shortened version, the correlations between the long and shortened versions were estimated, as well as their correlations with distress measures.

Factor analysis (Maximum Likelihood) in the first sample suggested a two-factor solution. During reduction of the questionnaire, practical and statistical indicators were considered, suggesting 10 situations for the shortened test. The reliability of

the type of internal consistency of this shortened scale was .78 in the first sample, and .76 in the second one (values on the whole test were .86 and .76). The corelations between the longer and shortened versions were .91 (p < .001) and .99 (p < .001). Correlations of the whole test with the measures of distress and worry were -.37 (p < .001) and -.49 (p < .001). The correlation of the shortened test with the same measures were -.35 (p< .001) and .51 (p< .001).

Finally, the respondents from the first sample who had high distress (according to the DASS-21 cut off scores), compared to those without distress, expressed higher tendencies to interpret ambiguous situation negatively (t(1277)= 10.05, p < .001, Cohen's d= .72).

The shortened version of the AST is a reliable and valid measure of negative interpretative bias. Due to its shortness, it's convenient for research and clinical work where the speed of evaluation is needed.

Keywords: interpretive biases, ambiguous situations, validation

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Struktura netolerancije na neizvesnost – Mrežni pristup

Ljudi sa visokom netolerancijom na neizvesnost (NN) negativno interpretiraju neizvesne situacije, doživljavaju distres u susretu sa neizvesnošću i vide sebe kao nespremne da se sa njom suoče. NN predstavlja transdijagnostički faktor vulnerabilnosti prvenstveno za emocionalne poremećaje. Izvestan broj faktorsko-analitičkih studija sugeriše da konstrukt ima dva apsekta – prospektivnu i inhibitornu anksioznost, pri čemu prospektivna podrazumeva aktivno traganje za izvesnošću, dok inhibitorna podrazumeva reakcije zamrzavanja na kognitivnom i bihejvioralnom planu u susretu sa neizvesnošću (Birrell et al., 2011). Međutim, još uvek ne postoji konsenzus oko broja dimenzija NN. Bottessi i sar. (2020) su prvi autori koji su se bavili problemom određenja prirode NN sa aspekta mrežnog pristupa. Rezultati ovog istraživanja su pokazali da su opšta averzija prema neizvesnosti i uverenje da stvari moraju biti isplanirane unapred centralne karakteristike u mreži, odnosno karakteristike koje su najsnažnije povezane sa preostalim karakteristikama konstrukta NN. Takođe, ova studija pokazuje da se u okviru mreže mogu detektovati tri zajednice – negativna uverenja o neizvesnosti, emocionalne i bihevioralne reakcije

na neizvesnost. Cilj ovog istraživanja bilo je ispitivanje strukture srpske skale NN (NN-11) primenom mrežnog pristupa.

Istraživanje je sprovedeno na uzorku od 3096 ispitanika iz opšte populacije (*M*starost=26.82, SD=7.92). U okviru veće baterije upitnika zadate online, ispitanici su popunili srpski NN-11 početkom 2021. godine. Estimacija modela rađena je u paketu bootnet, dok su za određivanje zajednica korišćeni algoritmi spinglass i walktrap (R paket igraph).

Analiza mreža je pokazala da uznemirenost povodom nepredviđenih događaja predstavlja centralnu karakteristiku na našem uzorku. Analizom zajednica detektovane su četiri zajednice – negativna uverenja o neizvesnosti, emocionalne reakcije, inhibiranost i pad kvaliteta života usled neizvesnosti.

Mrežna struktura NN-11 u velikoj meri odgovara strukturi dobijenoj u prethodnom istraživanju, te govori u prilog tome da konstrukt NN uključuje kognitivnu, emocionalnu i bihejvioralnu dimenziju. Posmatranje direktnih veza između ajtema, kao i zajednica koje se na osnovu njih izdvajaju, predstavlja novi pristup proučavanju strukture NN-11, te potencijalno može doprineti odgovoru na pitanje nestabilnosti faktorske strukture upitnika. Na kraju, budući da centralni simptomi igraju ključnu ulogu u mreži, pretpostavlja se da bi terapijske intervencije usmerene na njih dale najbolje rezultate (Borsboom & Cramer, 2013). S obzirom na centralnu ulogu uznemirenosti povodom nepredviđenih događaja u mreži, sugestija za naredna istraživanja je ispitivanje efikasnosti terapijskih intervencija usmerenih upravo na uznemirenost povodom neizvesnosti, u poređenju sa intervencijama usmerenim na druge karakteristike NN (npr. izbegavajuća ponašanja poput planiranja).

Ključne reči: Netolerancija na neizvesnost, analiza mreža, prospektivna anksioznost, inhibitorna anksioznost

The internal structure of intolerance of uncertainty - A network analysis approach

People with high intolerance of uncertainty (IU) interpret uncertain situations negatively, experience emotional distress, and perceive themselves as unable to cope with uncertainty. IU is a transdiagnostic vulnerability factor for emotional disorders. A certain number of factor-analytic studies suggest that the construct is comprised of two aspects – prospective IU (active information seeking aimed to reduce uncertainty) and inhibitory IU (cognitive and emotional freezing when faced with uncertainty; Birrell et al., 2011). However, there is still no consensus concerning the number of dimensions IU consists of. Bottessi et al. (2020) were the first to address the issue of assessing the nature of IU using the network approach. In this

study, a general internal state of aversion towards uncertainty and beliefs about the importance of action planning emerged as central network characteristics (i.e., characteristics with the strongest connections with all other characteristics of IU). Moreover, three network communities were identified in this study – negative beliefs about uncertainty, emotional and behavioural reactions to uncertainty. The present study aimed to examine the structure of the Serbian translation of the IU scale (IUS-11) using the network approach.

The study sample included 3096 respondents from a general population (Mage=26.82, SD=7.92). The IUS-11 was part of the larger set of questionnaires and was completed online at the beginning of 2021. The main analysis was performed using a bootnet package in Rstudio, while both spinglass and walktrap algorithms were employed for community detection (igraph package).

Network analysis showed that, in our sample, feeling upset when unforeseen events occur is the central network characteristic. Community detection analysis revealed four communities - negative beliefs about uncertainty, emotional reactions, inhibition, and decreased quality of life due to uncertainty.

The network structure of the IUS-11 largely corresponds to the structure obtained in the previous study, supporting the idea of IU being a construct comprising of cognitive, emotional, and behavioural dimensions. Observing direct relationships between the items, as well as the communities based on these items, is a novel approach to studying the structure of IU, and thus, might contribute to answering the question regarding the instability of factor structure of IUS. Finally, due to the key role that central characteristics have for a network, therapeutic interventions targeting such characteristics might be the most effective ones (Borsboom & Cramer, 2013). As feeling upset when unforeseen events occur was the central network characteristic, future research could examine the efficiency of therapeutic interventions focusing on the reduction of aversive emotional response to uncertainty, compared to interventions targeting other IU characteristics (e.g., avoidant behavior such as excessive planning).

Keywords: Intolerance of uncertainty, network analysis, prospective anxiety, inhibitory anxiety

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Subjective Vitality Scale - Validation of the Serbian translation

According to the Self-Determination Theory, subjective vitality as a significant indicator of well-being, represents the subjective feeling of energy and aliveness. Originally, the Subjective Vitality Scale (SVS) is a one-dimensional 7- items scale, but further validation studies of the SVS yielded different factor-solutions (unidimensional solution with 5 to 7 items), therefore the aim of this study was to validate the Serbian translation of this scale. The study involved 723 participants (71.1% females) aged from 18 to 66 (M=28.19). Along with SVS the Satisfaction with Life Scale (SWLS), the Patient Health Questionnaire (PHQ-15) and the Depression Anxiety Stress Scale (DASS-21) were used. The validation of SVS was conducted with confirmatory factor analysis using maximum likelihood estimators. The item 6 "I nearly always feel awake and alert" diminished the fit of model and had loading lower than .30. Results showed that the six-item model proved to be the best ($\chi2$(df=7)= 40.84; CFI=.987; RMSEA=.08, SRMR=.02; BIC= 14268.99) so it was accepted as a baseline model when testing for measurement invariance across genders. Analysis of modification indices suggested the addition of an error covariance between items one and two that asks for feeling energetic, as well as between two and seven that both contain the word "energy". In line with the obtained results configural invariance had adequate fit ($\chi2$(14)= 49.43; CFI=.986; RMSEA=.08, SRMR=.02, BIC=14388.16). The metric model fitted the data equally well as configural model ($\Delta\chi2$(df=5)=6.38, p>.05, ΔCFI=.001, ΔRMSEA=.01) and scalar with partial invariance as metric model ($\Delta\chi2$(df=2)=.84, p>.05, ΔCFI=0, ΔRMSEA=-.005). In order to improve the fit of the scalar model, intercepts of items 3, 5, and 7 were freely estimated across groups. Comparisons of intercepts showed that males had higher scores on the item 3 ("Sometimes I am so alive I just want to burst") and item 7 ("I feel energized") and females on the item 5 ("I look forward to each new day"). It seems that the vitality of males is more based on being full of energy, while the vitality of females is more related to positive expectations of life. Reliability of the modified scale was satisfactory (αC=.85). Finally, according to Pearson's correlations subjective vitality was significantly correlated with the satisfaction with life (r=.55), somatic symptoms (r=-.36), depression (r=-.56), anxiety (r=-.33), and stress (r=-.54). The pattern of relationships reveals that subjective vitality has potential to improve satisfaction with life. It seems that it could be more protective in case of stress and depression than in case of anxiety and somatic symptoms. In

conclusion, the sample size, meaningful results, and achieved validity indicate that SVS represents a satisfactory measure of vitality in Serbian population. However, since the sample was not gender and age balanced, further studies are needed.

Keywords: Subjective Vitality Scale, vitality, Self-Determination Theory, validation

KLINIČKA I PSIHOLOGIJA LIČNOSTI

CLINICAL AND PERSONALITY PSYCHOLOGY

Moderators: Snežana Tovilović & Siniša Lakić

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Šta je mračno u Mračnoj tetradi: osobine ličnosti naspram kognitivnih varijabli

Karakteristike Mračne tetrade (MT): Makijavelizam, Psihopatija, Narcizam i Sadizam se smatraju rano ukorenjenim, delom biološki utemeljenim karakteristikama. Kognitivne teorije psihopatologije, sa druge strane, pretpostavljaju da rano stečene kognitivne strukture sadrže bazična uverenja koja zajedno sa pristrasnom obradom informacija rukovode doživljavanjem sveta i ponašanjem. Cilj ovog rada je da se uporedi doprinos dva potencijalna objašnjenja ispoljavanju karakteristika MT, biološkog i kognitivnog,. Biološki činioci predstavljeni su dimenzijama Zakermanovog alternativnog petofaktorskog modela ličnosti, dok su za predstavnike kognitivnog objašnjenja odabrana iracionalna uverenja poznata kao Niska frustraciona tolerancija (NFT) i Hostilna interpretativna pristrasnost (HIP).

Uzorak čine 621 muškarac iz opšte populacije (Mage = 41,64, SD = 15,09) kojoj su pridružena 180 zatvorenika (Mage = 41,15, SD = 11,43) radi povećanja varijabiliteta uzorka, pri čemu je pripadnost uzorku kontrolisana statistički. Podaci su prikupljeni pomoću srpskih adaptacija sledećih instrumenata: Upitnik ličnosti Zuckerman – Kuhlman – skraćena verzija, ZKPQ-50, Upitnik hostilnih pristranosti, Skala frustracione netolerancije, Kratka skala Mračne trijade i Sveobuhvatni upitnik sadističkih tendencija.

Sprovedene su četiri hijerarhijske linearne regresije sa četiri karakteristike MT kao kriterijumima. U prvom koraku analiza kontrolisan je tip populacije (opšta populacija i zatvorenici). U drugom koraku dodate su dimenzije Zuckermannovog modela, a potom LFT i HIP u trećem. Rezultati pokazuju da su nakon kontrole tipa populacije osobine Zuckermannovog alternativnog modela poboljšale predviđanje celokupnog modela: najmanje u slučaju Makijavelizma ($\Delta R2$ = .10), a najviše kada je reč o Psihopatiji ($\Delta R2$ = .27). Agresivnost i Impulsivnost su bili značajni prediktori svih MT osobina, dok su ostale varijable imale specifične veze samo sa pojedinim MT dimenzijama. Na posletku, NTF i HIP su značajno poboljšali celokupni model objašnjavajući od 14% do 34% varijabiliteta DT povrh Zuckermannovih osobina. NTF je imao najveći doprinos u slučaju Narcizma (β = .18, p <.001), dok je HIP najbolje predvideo sadizam (β = .24, p <.001).

Naše analize podupiru ideju da se MT može delimično objasniti širim, biološki određenim osobinama ličnosti, ali potvrđuju da i kognitivni konstrukti poput NFT i HIP imaju značajan doprinos u predviđanju. To bi moglo da ukazuje da osim od Impulsivnosti i Agresivnosti, kao zajedničkih osnova Tetrade, ispoljavanje tih osobina zavisi i od toga kako ,,mračni pojedinci" misle o svojoj sposobnosti da se nose s frustracijama, osećanjima i potrebama, kao i od načina na koji interpretiraju svakodnevne izazove. Razvojna istraživanja doprinosa bioloških vs. kognitivnih i drugih sredinskih činilaca razvoju MT bi svakako obezbedila sigurnije zaključke ove vrste.

Ključne reči: Mračna tetrada, Zuckermannove dimenzije, niska frustraciona tolerancija, hostilni interpretativni bias

What makes the darkness of the Dark tetrad: personality trait vs. cognitive variables

Characteristics of the Dark tetrad: Machiavellianism, Psychopathy, Narcissism, and Sadism are considered to be characteristics that are early rooted and partially biologically determined. On the other hand, cognitive theories of psychopathology assume that cognitive structures, which contain our basic beliefs and are acquired early in life, together with biased information processing manage how we experience the world and our behavior. The aim of this study is to compare the contribution of these two alternative explanations, biological and cognitive, in the manifestation of DT characteristics. Biological factors are represented through Zuckermann's alternative five model of personality, while for the cognitive factors irrational beliefs such as low frustration tolerance (LFT) and hostile interpretative bias (HIB) have been choosen.

The sample was comprised of 621 male individuals from the general population (Mage=41.64, SD=15.09), to which 180 male inmates have been added (Mage=41.15, SD=11.43), in order to increase the variability of the sample. The data was collected using Serbian adaptations of the following instruments: Zuckerman–Kuhlman Personality Questionnaire - Shortened, ZKPQ-50-CC (Aluja et al., 2006), The Hostile Bias Questionnaire (Lobbestael, et al., 2013), The Frustration Discomfort scale (Harrington, 2005), The Short Dark Triad (Jones & Paulhus, 2014) and The Comprehensive Assessment of Sadistic Tendencies (Buckels & Paulhus, 2014).

Four hierarchical linear regressions were performed with four DT traits as criteria. In the 1st step of analysis the population type (general vs. inmate) was controlled. In the 2nd step, Zuckermann`s dimensions were added, followed by LFT and HIB added in the 3rd step. Results revealed that, after controlling for the type of population,

Zuckermann`s traits improved the overall model prediction, in the case of Machiavellianism the least ($\Delta R2$ = .10), and Psychopathy the most ($\Delta R2$ = .27). Aggression and Impulsivity were significant predictors of all DT traits, while other variables had specific relations with some but not all DT dimensions. Finally, LFT and HIB significantly improved the overall model explaining from 14% to 34% of the DT variability above and beyond Zuckermann's traits. LFT had the largest effects in case of Narcissism (β = .18, p<.001) while HIB predicted Sadism best (β = .24, p<.001).

Our analyses support the idea that the DT can be partially explained by broader, biologically rooted personality traits, but also confirm that cognitive constructs such as LFT and HIB have an incremental contribution in the prediction. So, although impulsivity and aggression can be common base of the Tetrad, manifestation of those traits in a behavior depends also on the way how "dark individuals" think about their ability to deal with frustrations, emotions, urges and the way how they interpret everyday challenges. Developmental studies would provide sounder basis for these conclusions.

Keywords: Dark Tetrad, Zuckermann`s trait dimensions, low frustration tolerance, hostile interpretative bias

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Još jedna neposredna potraga za mračnom esencijom ličnosti

Nakon što su mračne crte ličnosti dovedene u sistematsku vezu sa mnogobrojnim važnim životnim ishodima, pažnja istraživača je postepeno usredsređivana i na ispitivanje unutrašnje strukture multidimenzionalnog sklopa tih crta. Posebno interesovanje je zavladalo za definisanje toga šta zapravo predstavlja srž mračnih crta ličnosti. U svrhu identifikovanja mračne srži su dominantno korišteni modeli sa latentnim varijablama, ali je u posljednje vrijeme popularizovana i mrežna analiza koju smo koristili u našoj studiji. Naš teorijski pristup je zasnovan na Buberovom "ja-ono" nasuprot "ja-ti" doživljaju međuljudskog odnosa, te smo pokušali direktno operacionalizovati mračnu srž nakon što smo je definisali kao tendenciju da se druga ljudska bića prvenstveno doživljavaju kao objekat, odnosno potencijalni eksploatabilni resurs. Kako bismo provjerili hipotezu da to predstavlja centralni element zadali smo Ekstenzivni upitnik mračnih crta (Lakić i Mrđa, 2020) - koji se

sastoji iz skale mračne srži i još 13 skala mračnih crta identifikovanih na osnovu pregleda literature (Sadizam, Grandioznost, Manipulativnost, Impulsivnost, Sumnjičavost, Reaktivnost ega, Glad za pažnjom, Cinizam, Neodgovornost, Manjak empatije, Depersonalizovana seksualnost, Moć, Grupna kategorizacija) - na uzorku od 293 ispitanika (75.1% ženskog pola, prosječnog uzrasta 23 godine). U skladu sa hipotezom, u mrežnoj analizi su za mračnu srž dobijene najviše mjere centralnosti uz sadizam i neempatičnost. Ipak, u poređenju sa sadizmom i neempatičnošću, za mračnu srž su opažene nešto konzistentnije korelacije sa crtama ličnosti koje su dodatno procjenjivane (crte HEXACO modela procjenjivane pomoću BHI upitnika, te crte Mračne trijade procjenjivane jednoajtemskim skalama kreiranim za ovu studiju). Konačno, ostvarena je i visoka korelacija (r = .76, p < .001) sa prvim nerotiranim faktorom dobijenim na osnovu 13 preostalih skala Ekstenzivnog upitnika mračnih crta. Sve u svemu, naši rezultati sugerišu da je kognitivna osnova na kojem počivaju mračni aspekti ličnosti viđenje druge osobe kao objekta za zadovoljenje sebičnih nagona, a da su sadističke tendencije i neempatičnost njeni najbliži afektivni korelati. U radu diskutujemo sličnosti, ali i određene razlike u odnosu na predloženi D-faktor (Moshagen, Hilbig & Zettler, 2018).

Ključne reči: mračne crte ličnost, mračna srž, crte ličnosti

Another Direct Quest for the Dark Essence of Personality

After enough evidence was collected associating the dark personality traits with many important life outcomes, researchers have been gradually turning their focus on exploring the internal structure of this multidimensional set of constructs. A special interest has been devoted to defining what makes the core of the dark personality traits. Previous research has predominantly inferred about the dark core indirectly by employing latent variable models, but we opted for the network analyses which started to be recently used for this purpose. Our theoretical approach was based on Buber's "I-it" versus "I-Thou" experience of a personal relationship, so we attempted to directly operationalize the dark core after defining it as a tendency of a person to primarily perceive other human beings as objects, i.e. potentially exploitable resources. To test our hypothesis that this might represent the central element we administered the Extensive Questionnaire of the Dark Personality Traits (EQDPT; Lakić & Mrđa, 2020) - consisting of a separate dark core scale and 13 other dark trait scales identified through the literature review (Sadism, Grandiosity, Manipulativeness, Impulsivity, Mistrustfullness, Ego Reactivity, Narcissistic Supply, Cynicism, Irresponsibility, Lack of Empathy, Depersonalized Sexuality, Power Hunger, Group Categorization) - on a sample of 293 respondents (75.1% female, mean age 23 years). In line with our hypothesis, we observed the highest network analysis centrality measures for the dark core, sadism and the lack

of empathy. However, compared to sadism and the lack of empathy we observed somewhat more consistent correlations with personality traits we additionally assessed (the traits of the HEXACO model assessed by the BHI questionnaire, and Dark Triad traits assessed by single-items designed for this study). Finally, a large correlation (r = .76, p <.001) was obtained between the dark core scale and the first factor obtained by factor analyzing responses on 13 remaining scales of the EQDPT. Overall, our results suggest that the cognitive foundation of the dark aspects of personality is perceiving the other person as an object to satisfy egoistic needs, and that sadistic tendencies and the lack of empathy are its closest affective correlates. We discuss the similarities, but also certain differences, to the proposed D-factor (Moshagen, Hilbig & Zettler, 2018).

Keywords: dark traits of personality, dark core, personality traits

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Uloga niske frustracione tolerancije i hostilnih interpretativnih pristrasnosti u ispoljavanju osobina ličnosti Mračne tetrade

Mračna tetrada (MT) odnosi se na četiri socijalno averzivne crte (psihopatija, narcizam, Makijavelizam i sadizam) istraživane kako u opštoj, tako i u zatvorskoj populaciji. Niska frustraciona tolerancija (NFT) je osnovno iracionalno uverenje predstavljeno u ekstremnoj, nerealističnoj i nelogičnoj ideji da je neprijatnost nemoguće tolerisati i duboko je ukorenjeno u kognitivnu šemu antisocijalno orijentisanih osoba. Hostilne interpretativne pristasnosti(HIP) odnose se na tendenciju da se dvosmislene namere drugih interpretiraju na hostilan način. Prema modelu obrade socijalnih informacija, HIP mogu značajno da utiču na način reagovanja na neutralno/pozitivno ponašanje u socijalnom okruženju (tj. biti okidač agresivnog ponašanja). Istraživanja nalaze vezu između agresije i svake od gorepomenutih varijabli. Uprkos tome, malo se zna o uticaju koji bi HIP i NFT mogle da imaju na ekspresiju crta MT. Iracionalna uverenja i pristasna obrada informacija mogu dodatno oblikovati, potkrepiti i ojačati ponašanja u skladu sa osobinama MT. Cilj nam je bio da testiramo da li NFT 1)utiče i na pristrasnu obradu (HIP) i MT, 2)ima

direktan i indirektan (medijator HIP) efekat na MT, 3) da li su efekti NFT na HIP moderirani tipom uzorka.

Uzorak je obuhvatio 180 zatvorenika muškog pola (Muzrast=41.15, SD=11.43) ispitanih u četiri zatvora u Srbiji i 621 ispitanika iz opšte populacije (Muzrast=41.64, SD=15.09). Zatvorenici su osuđeni za teška krivična dela (ubistvo 32%, nehotično ubistvo 44% i silovanje 22%). Podaci su prikupljeni upotrebom srpskih adaptacija sledećih upitnika: Upitnik hostilnih pristrasnoşti, Skala frustracione netolerancije, Kratka skala mračne trijade i Upitnik za procenu sadističkih tendencija.

 Rezultati ukazuju na značajne direktne efekte NFT na psihopatiju (LLCI .04, ULCI .09), narcizam (LLCI.03, ULCI.07), Makijavelizam (LLCI .04, ULCI .10) i sadizam (LLCI.05, ULCI .12). Značajna je interakcija NFT i tipa uzorka (p=.005), sa NFT kao značajnim prediktorom HIP samo na uzorku opšte populacije. Značajan parcijalni medijatorski efekat HIP detektovan je u sva četiri modela na uzorku opšte (LLCI .13, ULCI .19), ali ne i zatvorske populacije.

Dobijeni direktni efekti idu u prilog ideji da disfunkcionalni sistem uverenja može voditi maladaptivnom ponašanju i biti u osnovi potencijalno štetnih stavova. Parcijalna medijacija na uzorku opšte populacije može da sugeriše da usled NFT ljudi mogu da se ponašaju impulsivno i pristrasno intepretiraju socijalne stimuluse u skladu sa svojim sistemom uverenja; mogu biti skloni pripisivanju odgovornosti i agresivnih motiva drugima (tj. HIP) automatski pojačavajući odbrambeni stav prema njima, racionalizujući tako sopstvena agresivna ponašanja. S druge strane, zatvorenici imaju tendenciju da se ponašaju impulsivno bez potrebe da „nalaze alibi" za svoju agresiju.

Ključne reči: Ključne reči: Mračna tetrada, niska frustraciona tolerancija, hostilne interpretativne pristrasnosti, zatvorenici

The role of low frustration tolerance and hostile interpretation bias in expressing Dark Tetrad personality traits

The Dark Tetrad (DT) refers to four socially aversive traits (psychopathy, narcissism, Machiavellianism and sadism) that have been widely investigated in both general and inmate populations. Low frustration tolerance (LFT) is a core irrational belief presented in an extreme, unrealistic, illogical idea that one cannot tolerate discomfort and it is deeply rooted in the cognitive schema of antisocially oriented persons. Hostile interpretation bias (HIB) reflects the tendency to interpret ambiguous intentions of others in a hostile way. According to the Social Information Processing model, HIB can significantly influence the way of reacting to neutral/positive behavior in social environment (i.e., trigger aggressive behavior).

Previous research showed a link between aggression and each of the above-mentioned variables. However, little is known about the influence that HIB and LFT could have on expressing the DT personality traits. Irrational beliefs and biased information processing could further shape, reinforce or strengthen behavior in accordance with DT. We aimed to test whether LFT 1)influences both biased processing (HIB) and DT characteristics, 2)has both direct and indirect (mediated by HIB) impact on DT, 3)whether effects of LFT on HIB are moderated by the sample type.

The sample was comprised of 180 male inmates (Mage=41.15, SD=11.43) tested in four prisons in Serbia and 621 males from the general population(Mage=41.64, SD=15.09). The inmates were convicted for serious crimes (murder 32%, manslaughter 44%, and rape22%). The data were collected using Serbian adaptations of the following instruments: The Hostile Bias Questionnaire, The Frustration Discomfort scale (Harrington, 2005), The Short Dark Triad and The Comprehensive Assessment of Sadistic Tendencies

The results indicated significant direct effects of LFT on psychopathy (LLCI .04, ULCI .09), narcissism (LLCI.03, ULCI.07), Machiavellianism (LLCI .04, ULCI .10) and sadism (LLCI.05, ULCI .12). LFT by sample type interaction was significant (p=.005), with LFT being a significant predictor of HIB only in the community sample. The significant partial mediating effect of HIB was detected in all four models, but only in the community (LLCI .13, ULCI .19), and not in the inmate sample.

Obtained direct effects can support the idea that a dysfunctional belief system can lead to maladaptive behavior and lay beneath potentially harmful attitudes. Partial mediation found in the community sample may suggest that due to the LFT people can act impulsively and make biased interpretations of social stimuli in accordance with their belief system; they can be prone to attributing responsibility and aggressive motives to others (i.e. HIB) automatically strengthening the defensive attitude toward them and rationalizing their own aggressive behavior. On the other hand, inmates tend to act on impulse without the need of "finding an alibi" for their aggression.

Keywords: Key words: Dark tetrad, low frustration tolerance, hostile interpretation bias, inmates

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Prediction of the SCID-II personality disorders from NEO-PI-R domains

Although the Structured Clinical Interview (SCID-II) is a diagnostic tool based on DSM-IV categorical classification of personality disorders (PDs), it provides a dimensional view of PDs in accordance with DSM-5 which favors the dimensional approach, and thus might be a useful tool in studies aimed to explore the relationships between the PDs features and other measures assessing the structure of personality. On the other hand, NEO-PI-R stands for one of the most comprehensive inventories that captures a wide range of individual differences in personality traits – from normal variations to pathological expressions. Recent findings are providing the support for dimensional nature of PDs, whereby some of them could be seen as an aberration of basic personality traits. Thus, the aim of our study was the examination of the possibility to predict PDs features from the NEO-PI-R domains. The sample consisted of 223 inpatients (Mage = 37.63, SD = 13.00) diagnosed with PDs according to ICD-10 criteria. All the participants were assessed with 119-item SCID-II (Avoidant, Dependent, Obsessive-Compulsive, Paranoid, Schizotypal, Schizoid, Histrionic, Narcissistic, Borderline, Antisocial) by experienced clinicians and had completed the self-report 240-item NEO-PI-R (Neuroticism, Extraversion, Openness, Agreeableness, Conscientiousness). We ran ten regression models where participants' personality domains were entered as predictors, while the PDs features were set as the criterion variables. In exception to Antisocial (R^2adj = .08; $F_{(5, 191)}$ = 3.76; $p < .01$), a considerable variance was explained for the rest of PDs (R^2adj. ranging from .22 for Obsessive-Compulsive to .54 for Borderline) with two or more significant predictors for each criteria. As expected, Neuroticism was the strongest predictor of Dependent (β = .64; $p < .001$), Borderline (β = .63; $p < .001$), Avoidant (β = .46; $p < .001$), Schizotypal (β = .35; $p < .001$) and Obsessive-Compulsive (β = .35; $p < .001$) PD features. Extraversion had the greatest contributions in predicting Histrionic (β = .56; $p < .001$) and Schizoid (β = -.38; $p < .001$), while Agreeableness was the strongest predictor of Paranoid (β = -.41; $p < .001$) and Narcissistic (β = -.33; $p < .001$), and the only significant predictor of Antisocial (β = -

.26; p < .001) PD features. In sum, three conclusions can be made. First, a reasonable amount of variance in the majority of PDs features is explained by basic personality traits. Second, there is substantial similarity between some PDs profiles depicted by NEO-PI-R and the contribution of certain traits in their prediction, which is in accordance with the dimensional view of PDs rather than categorical. Third, the results pointed to the utility of NEO-PI-R in predicting the majority of PDs features, however, a negligible amount of variance of Antisocial PD features explained by NEO-PI-R can be seen as a disadvantage of this personality model given the importance of antisocial behavior.

Keywords: personality disorders, SCID-II, NEO-PI-R, neuroticism, antisocial behavior

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Drukčiji pogled na ulogu Pune svesnosti i pažnje u kontekstu osobina ličnosti i psiholoških poteškoća

Tran, Wasserbauer i Vorachek (2020) su ustanovili da postoji značajna povezanost faceta Neuroticizma i Savesnosti sa Punom svesnošću i pažnjom, ali postoji još interesovanja da se ispita potencijalni mehanizam uticaja na psihološke poteškoće. Cilj ovog istraživanja je da se ispitaju medijacioni doprinosi Pune svesnosti i pažnje u odnosima Neuroticizma i Savesnosti sa Brigama, Tenzijama i Izostankom sreće. Uzorak su činili dobrovoljci iz opšte populacije sa nemačkog govornog područja (N=430; 73% ženskih i 23% muških ispitanika) prosečne starosti x̄=39 godina, σ=14.6 (min=19 maks=77 godina). Upotrebljene skale su demonstrirale dobru i visoku pouzdanost. Ustanovljeno je da varijabla Puna svesnost i pažnja pravi negativnu vezu sa Neuroticizmom (r=-0.64; p<.01) i pozitivnu sa Savesnošću (r=-0.41; p<.01), kao i negativne veze sa Brigama (r=-0.57; p<.01), Tenzijama (r=-0.54; p<.01) i Izostankom sreće (r=-0.62; p<.01), na osnovu čega je formiran Konceptualni model 1.2. Rezultati medijacionih analiza modela ukazuju na značajan indirektan efekat putem Pune svesnosti i pažnje u testiranim relacijama: Neuroticizam i Brige (b=0.15; β=0.12; p <.001, 95% Bca CI 0.091, 0.217), Neuroticizam i Tenzije (b=0.13; β=0.12; p <.001, 95% Bca CI 0.077, 0.208), Neuroticizam i Izostanak sreće (b=0.18; β=0.19; p <.001, 95% Bca CI 0.124, 0.241), kao i u relaciji Savesnost i Izostanak sreće (b=-0.10; β=-0.08; p <.001, 95% Bca CI -0.096, -0.058). Nalazi ukazuju da Puna svesnost i pažnja potencijalno igraju značajnu ulogu u vezi sa osobinama ličnosti i poteškoćama na

kognitivnom i somatsko-afektivnom planu. Međutim, smer relacija nije moguće utvrditi ni u jednoj od ispitivanih veza s obzirom na transverzalnu prirodu istraživanja. Uz nedostatke istraživanja navedene su i odrednice za buduća istraživanja.

Ključne reči: Ključne reči: Puna svesnosti i pažnja, neuroticizam, savesnost, psihološke poteškoće

Another look on the role of Dispositional Mindfulness in the context of personality traits and psychological difficulties

Tran, Wasserbauer i Vorachek (2020) concluded that there is a significant relationship between facets of Neuroticism and Conscientiousness and Dispositional mindfulness, however there is still interest in examining the potential mechanisms of influence on psychological difficulties. The goal of this research is to examine the mediation influence of Dispositional Mindfulness in the relationship of Neuroticism and Conscientiousness with Worries, Tensions and (lack of) Joy. Research sample was constituted by examinees from general population in German speaking area (N=430; 73% female and 23% males) mean age x̄=39, σ=14.6 (min=19 max=77 years old). The questionnaires demonstrated good and high reliability. It has been shown that Dispositional mindfulness relates negatively to Neuroticism (r=-0.64; p<.01) and positively toward Conscientiousness (r=-0.41; p<.01), and that relates negatively with Worries (r=-0.57; p<.01), Tensions (r=-0.54; p<.01), and (lack of) Joy (r=-0.62; p<.01), which was used to form a Conceptual model 1.2. Results of mediation analysis indicate a significant indirect effect of Dispositional mindfulness in all of the tested relationships: Neuroticism and Worries (b=0.15; β=0.12; p <.001, 95% Bca CI 0.091, 0.217), Neuroticism and Tensions (b=0.13; β=0.12; p <.001, 95% Bca CI 0.077, 0.208), Neuroticism and (lack of) Joy (b=0.18; β=0.19; p <.001, 95% Bca CI 0.124, 0.241) as well as in the case of Conscientiousness and (lack of) Joy (b=-0.10; β=-0.08; p <.001, 95% Bca CI -0.096, -0.058). This points out the potential significant role of Dispositional mindfulness in the relationship of personality traits in the context of cognitive, affective and somatic difficulties. However, the direction of influence, in all of the tested relationships, is not possible to discern, due to the cross-sectional nature of the study. Along with the research limitations the directions for future research are discussed.

Keywords: Dispositional mindfulness, neuroticism, conscientiousness, psychological difficulties

KOGNITIVNA PSIHOLOGIJA I PERCEPCIJA

COGNITIVE PSYCHOLOGY AND PERCEPTION

Moderators: Ivana Jakovljev & Predrag Nedimović

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The intensity of actual vs possible experience with an object and its role in word recognition

According to embodiment theories, our experience with the environment influences the way the concepts are mentally represented. We have identified two aspects of that experience: perceptual diversity (e.g. the number of sensory modalities used for experiencing the object, NoM) and perceptual intensity (e.g. Euclidean distance of the vector containing per-modality sensory ratings, VL). Both can relate to the possible and the actual experience with objects. In a previous study, we explored the relevance of actual experience for the perceptual diversity in a lexical decision task (LDT). In that study, we controlled for the intensity of perceptual experience and for the diversity of the possible experience while manipulating the diversity of the actual experience with an object. Concepts that could be experienced with two modalities consisted of concepts that were indeed experienced with two modalities (a badge) and the group of concepts that were actually experienced with only one modality (a flock). Although the two groups did not differ in terms of processing latencies, the recognition of the words which were actually experienced in two sensory modalities was facilitated by VL. Therefore, in this study, we aimed to explore the relevance of the actual experience for the effect of perceptual intensity, as operationalized by VL, while simultaneously controlling for the perceptual diversity.

We conducted two experiments (28 participants in E1 and 32 in E2) using LDT. In E1, we sampled 116 concepts rated as actually experienced with two or three sensory modalities. We manipulated the VL of the actual experience ratings and controlled for the VL of the possible experience ratings. In E2, we did the opposite. For 104 concepts, we manipulated the VL of possible experience ratings, simultaneously controlling for the VL of true experience ratings.

In E1, we did not record the VL effects for the concepts that could be experienced with two modalities. However, for the concepts that could be experienced with three modalities, VL based on actual experience facilitated LD reaction times: $ß=-.11$, $t(52.07) = -4.06$, $p<.001$. In E2, VL did not affect the processing of concepts that could be experienced with two modalities. In contrast, VL based on possible experience

inhibited processing of concepts that could be experienced with three modalities: ß=.05, t (52.07) = 2.22, p< .05.

Results from the E1 are in accordance with our previous study and with the embodiment theories. However, the inhibitory effect of VL recorded in E2 was not expected as all previous experiments showed the opposite. One likely explanation is that it was a consequence of the concept selection. Bearing in mind our previous study and results from E1, we could conclude that the actual experience is more relevant for word recognition. However, given the results of E2, further testing of the effect of the intensity of the possible experience is needed.

Keywords: embodiment theories, perceptual intensity, actual experience, possible experience

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Can a naive discrimination learning model classify inflected forms of polysemous nouns?

The interactive approach in the modularity-of-syntax debate suggests that we simultaneously process a vast amount of information regarding both semantic and syntactic meaning of a word. When we add to the consideration the ubiquity of ambiguity phenomena such as polysemy (multiple related senses), the information that most words convey seems quite demanding. Knowing that multiple approaches demonstrated the interaction between semantic and syntactic meanings (Kostić et al., 2004; Mišić & Filipović Đurđević, 2021), the aim of this study was to investigate whether this complexity can arise from a simple and cognitively plausible learning mechanism such as Rescorla-Wagner rule (RW; Rescorla & Wagner, 1972) implemented in the ndl framework (Arppe et al., 2015). Starting from the fact ndl can perform as a classifier (Milin et al., 2017, Sering et al., 2018), we wanted to test whether it can predict the correct inflected form of a polysemous word based on both orthographic and semantic cues.

For the purposes of this paper we conducted two simulation studies with two different networks. Orthographic network learned inflected forms of 150 Serbian polysemous words (outcomes) based on the orthographic cues (trigrams; bradom – #br, bra, rad, ado, dom, om#). Each appearance of a target word in corpus was considered a learning event. These events were used to train the network using the RW rule. For each of the unique learning events, we calculated the bottom-up support that the outcome gets from cues that appeared by summing cue-outcome connection weights. The network correctly classified 94.6% of the outcomes.

The semantic network utilized co-occurring words from the corpus as cues with the same outcomes. We preselected 3000 most frequent nouns, verbs, and adjectives (Frequency Dictionary of Contemporary Serbian Language; Kostić, 1999) for context words. Learning events in this simulation were built by moving a seven-point window centered on the outcome through the corpus. Whenever any of the context words were found within the positions flanking the outcome word, they would be considered cues in that learning event. RW rule training and classification on 880975 unique learning events was the same as in the orthographic network, however the success rate was opposite – only 3.4% of the words were correctly classified.

The success of the orthographic network is not surprising, considering the small sample of words which reduces the need for cue competition. On the other hand, semantic cues i.e. context words seem to have the exact opposite problem. When most frequent words are selected, they are shared between many of the outcomes. Fewer distinct cues make discrimination between outcomes harder. Therefore, this low classification rate in the semantic network does not reject the interactive approach, but suggests the cue selection that does not capture the complex semantic and syntactic information.

Keywords: polysemy, ambiguity, syntax, naive discrimination learning

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Individualne razlike u heurističkom i analitičkom reznovanju i njihov uticaj na zadatak leksičke odluke

Teorije dualnih procesa pretpostavljaju postojanje dva tipa rezonovanja: tip 1 koji je heuristički, automatski i kognitivno jeftiniji i tip 2 koji je analitički, namerni i

kognitivno skuplji. Odgovori na testu kognitivne refleksije (CRT) se mogu svrstati u tri kategorije, pri čemu su u interesu ovog istraživanja tačni i heurisitčki (tipično pogrešni) odgovori. Na osnovu ovih odgovora je moguće zaključiti koji tip rezonovanja pojedinci koriste prilikom rešavanja zadataka. Cilj ove studije bio je da ispita posledice koje dva tipa rezonovanja imaju na izvršenje jednostavnog kognitivnog zadatka kakav je zadatak leksičke odluke (LO), kao i da istraži diferencijalne mere koje bi mogle da ukazuju na sklonost ka analitičkom tj. heurističkom rezonovanju, ispitujući inteligenciju (IQ), kapacitet radne memorije (RM) i podložnost efektu okvira (EO). Ispitanici (N=82) su radili 16 parova CRT zadataka i nakon svakog bi usledio odgovarajući zadatak LO koji se sastojao od imenica koje su identične onima u CRT zadacima, od imenica koje su sa njima semantički povezane i nepovezane, kao i od pseudoreči. Ponovljeni faktori bili su tip reči i tip odgovora ispitanika. Rezultati dvostruke ANOVE ukazali su da ne postoji značajna interakcija dva faktora, ali da postoji glavni efekat tipa reči ($F_{(2, 81)} = 5.589$, $p = .005$, $\eta2 = .067$) i tipa odgovora ($F_{(1, 81)} = 4.756$, $p = .032$, $\eta2 = .057$). Ukoliko je dat tačan odgovor, identične i povezane reči, ali ne i nepovezane su se prepoznavale brže u poređenju sa situacijom kada je dat herusitički odgovor, što je u suprotnosti sa inicijalnim očekivanjima. Rezultati takođe ukazuju na postojanje očekivanih pozitivnih, ali statistički neznačajnih korelacija između analitičkog rezonovanja i IQ ($r = .276$, $p = .115$), kao i kapaciteta RM ($r = .267$, $p = .128$), dok je registrovana negativna korelacija ovih indikatora sa heurističkim rezonovanjem ($r = -.224$, $p = .204$ sa IQ, odnosno $r = -.323$, $p = .063$ sa kapacitetima RM). Naposletku, registrovana je neznačajna negativna korelacija između analitičkog rezonovanja i podložnosti EO ($r = -.053$, $p = .767$), kao i pozitivna korelacija između ove podložnosti i heurističkog rezonovanja ($r = .129$, $p = .468$). Ovi rezultati upućuju na zaključak da rezonovanje tipa 1 i tipa 2 imaju drugačiji efekat na kognitivni sistem, dok se korelacije između analitičkog i heurističkog rezonovanja sa IQ, kapacitetima RM i podložnosti EO kreću u očekivanom smeru, ali ostaju zanemarljive u pogledu čvrste predikcije.

Ključne reči: dualni procesi, zadaci kognitivne refleksije, zadatak leksičke odluke, individualne razlike

Individual differences in analytical and heuristic reasoning and their infulence on lexical decision task

Dual-process approach to reasoning postulates that human reasoning may appear in two distinct modes: heuristic, automatic and cognitively cheap (type 1), and analytical, deliberate and cognitively expensive (type 2). Answers on Cognitive Reflection Test (CRT) cue three types of answers: correct, heuristic (or typical incorrect) and atypical incorrect answers, assuming the types of reasoning used during solving the tasks. The aim of this study was to examine what kind of

consequences the two types of reasoning have on subsequent simple cognitive task - the lexical decision (LD), along with exploring their linkage with constructs that could indicate a tendency towards analytical and heuristic reasoning – intelligence (IQ), working memory capacity (WM) and susceptibility to framing effect (FE). Participants (N = 82) completed 16 pairs of CRT tasks while each task was followed by a LD task that consisted of nouns that were the same as nouns in CRT, semantically related nouns, semantically unrelated nouns and pseudo-words. Repeated factors were type of words and type of answers. Two-way ANOVA revealed main effects of both the type of words (F (2, 81) = 5.589, p = .005, η2 = .067) and the type of answers (F (1, 81) = 4.756, p = .032, η2 = .057), but showed no significant interaction between two factors. Preceded by the correct answers, the same and the related words, but not the unrelated, were recognized faster than after the heuristic answers, contrary to our expectations. The results also indicate positive, but statistically insignificant correlations between analytical reasoning and IQ (r = .276, p = .115) alongside with WM capacity (r = .267, p = .128), thus negative correlation between these indicators and heuristic reasoning (r = -.224, p = .204 with IQ and r = -.323, p = .063 with WM capacity). Finally, insignificant negative correlation was registered between analytical reasoning and susceptibility to FE (r = -.053, p = .767), as well as positive correlation between this susceptibility and heuristic reasoning (r = .129, p = .468). These results suggest that the two types of reasoning affect the subsequent LD task and that this effect is different for Type 1 and Type 2 processes, while correlations between analytical and heuristic reasoning with IQ, WM capacity and susceptibility to FE remain in expected direction, but negligible in terms of prediction.

Keywords: dual processes, cognitive reflection, lexical decision, individual differences

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Examining the categorical colour perception using the contingent capture paradigm

Visual attention, when influenced by top-down control, enables efficient performance that is also in accordance with the current task goals. Contingent-capture theory (CCT) further postulates that attention can only be captured by the top-down matching stimuli. In experiments within this search paradigm, participants are asked to memorize a predefined target and to find it among distractors. But there is also a location cue, shown shortly before the search set, mostly not coinciding with the location of the forthcoming target. Despite that, according to CCT, the cue which shares relevant features with the target (i.e. matching cue) still captures attention, and only the cue that does not match the target could be successfully ignored. Statistically, the contingent capture effect is demonstrated by the significant interaction between cue type (matching/non-matching) and cue validity (valid – the same position as the target / invalid – different position from the target). Although the contingent capture of attention is a well-known and thoroughly studied phenomenon, there is still no consensus on the characteristics of the top-down template which guides the search for colours. We tried to replicate the classical contingent capture effect on colour (Experiment 1) and to examine the role of language in this perceptual effect (Experiment 2). The sample for both experiments were the same 25 participants (7 men, 18 to 55 years: AS = 29.36 , SD = 13.10). Participants memorized the colour of the target ring and searched for it among the distractor rings of 4 different colours. In Experiment 1, the matching cue was the same colour as the target, while the non-matching cue was of a different colour. Repeated measures two-way ANOVA showed that attention is captured by cues of the same colour as target, while cues of different colours were successfully ignored (interaction: $F_{(1, 24)} = 60.37$, $p < .05$, $\eta p2 = .72$). In Experiment 2, the cue colour was never identical to the target colour but either belonged to the same linguistic category (matching cue) or not (non-matching cue). Cues were in both cases made to be equally perceptually distant from the target. In this task, attention is captured by both cue types, but the degree of capture was significantly higher for matching cues (effect: $F_{(1, 24)} = 4.91$, $p < .05$, $\eta p2 = .17$). Our research replicated the classic contingent capture effect but on colour, and also demonstrated the categorical colour perception effect in search task. Results show that the template for colour search contains physical characteristics of colour, as well as the information about colour category names.

Keywords: top-down contingent capture, categorical color perception, visual search

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Teorija kotve u opažanju prosečne luminanse skupova — može li se izvesti online eksperiment iz vizuelne kognicije?

Naš vizuelni sistem je izuzetno osetljiv na prosečne vrednosti odlika skupa stimulusa. Ovaj nalaz demonstriran je na velikom broju svojstava stimulusa, ali jedno od svojstava koje je ostalo slabije istraženo jeste luminansa skupa stimulusa. U seriji eksperimenata nastojali smo da proverimo da li se predikcije teorije kotve mogu generalizovati na opažanje prosečne luminanse skupa. Cilj ovog istraživanja bio je provera ekvivalentnosti nalaza eksperimenata koji su izvedeni na kalibrisanom i nekalibrisanom ekranu, kao i preko interneta. Kao mera nesistematskih grešaka uzrokovanih tehnologijom uzete su prosečne apsolutne greške u proceni prosečne luminanse, a kao mera sistematskih grešaka uzete su prosečne greške u proceni prosečne luminanse. Tri eksperimentalne situacije se nisu razlikovale po nesistematskoj ($F_{(2,53)}=1.13$; $\eta^2=0.04$; $p>0.05$), ali jesu po sistematskoj greški ($F_{(2,53)}=4.46$; $\eta^2=0.14$; $p<0.05$), gde se eksperiment na kalibrisanom ekranu ne razlikuje od eksperimenta na nekalibrisanom ($-3.58\pm1.64\%$ opsega svetlina, $p>0.05$) ali se razlikuje od eksperimenta preko interneta ($-3.68\pm1.31\%$ opsega svetlina, $d=-0.85$, $p<0.05$). Iako rezultati ukazuju na statističku značajnost razlika između eksperimenata, ove razlike su praktično neznačajne i očekivane, ako se uzme obzir to da kalibracija ekrana dovodi do precenjivanja luminanse prikazanih stimulusa. Stoga, zaključujemo da je opravdano koristiti podatke skupljene putem internet eksperimenta kako bismo odgovorili na hipoteze iz teorije kotve u okviru opažanja skupova.

Ključne reči: opažanje skupova, prosečna luminansa, online eksperimenti

Anchoring Theory in Average Ensemble Luminance Perception — Are We Justified in Using Online Data?

Our visual system is extremely sensitive to the average of a set of stimuli. This finding — ensemble perception — has been demonstrated on a variety of stimulus

properties. One of the less researched properties is the luminance of ensembles. In a series of experiments, we endeavored to test the predictions of the anchoring theory, extrapolated to perception of average luminance of ensembles. The aim of this study was to verify the equivalence of findings obtained using a calibrated and uncalibrated screen in-lab, as well as data obtained over the Internet. Mean absolute errors are taken to measure random deviations, whereas mean errors are taken to measure systematic deviations from the estimates of average luminances. These errors are compared across the three experiments. The experiments do not differ by random error ($F_{(2.53)}=1.13$; $η^2=0.04$; $p>0.05$), but they did differ by systematic error ($F_{(2.53)}=4.46$; $η^2=0.14$; $p<0.05$), wherein the calibrated-screen experiment did not differ from the uncalibrated-screen experiment (-3.58±1.64% of the brightness range, $d=-0.91$, $p<0.05$) but it did differ from the online experiment (-3.68±1.31% of the brightness range, $d=-0.85$, $p<0.05$). Although the results indicate statistical significance of the difference between the experiments, this difference is practically insignificant and also expected, given that screen calibration tends to introduce a positive bias in luminance estimates. Therefore, we conclude that using online data for the purposes of testing our further hypotheses regarding anchoring theory in ensemble perception is justified.

Keywords: ensemble perception, average luminance, online experiments

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Computational models of lightness perception: Review and testing

Lightness of a surface depends not only on its physical characteristics, but also on the properties of the surrounding context. As a result, varying the context can significantly alter surface lightness, an effect exploited in many lightness illusions. Theoretical models of lightness perception attempt to explain lightness illusions by using wide range of mechanisms. Computational models offer a possibility to

rigorously test their predictions by comparing their output with human data. Various computational models were developed so far and they differ based on assumed mechanism they invoke to explain lightness illusions.

Oriented Difference of Gaussians (ODOG; Blakeslee & McCourt, 1999), locally normalized LODOG and frequency-specific FLODOG (Robinson et al., 2007) are multiscale filtering models that simulate the activity of cortical cells with ON and OFF component of their receptive field. Importantly, the OFF component is spatially displaced relative to ON part thus creating an oriented cell's response. High-Pass model (Shapiro & Lu, 2011) is another spatial filtering model that removes medium and low spatial frequencies from input image. In other words, it extracts high spatial frequencies that amplify surface edges. RETINEX (McCann, 1999) is an edge integration model that calculates luminance ratios between neighboring surfaces. Markov Illuminance and Reflectance (Murray, 2020) implement the idea of decomposition. This model constructs two maps: illumination and reflectance map. By doing this, the model decomposes the influence of illumination and reflectance on registered luminance. In the second stage, the model applies the ideas from the Anchoring theory, such as: highest luminance as white and scale normalization. Finally, the newly proposed model (Lerer et al., 2021) takes the alternative approach to modeling lightness illusions, as it is based on the statistical analysis of the real-world images. It implements the idea of dynamic decorrelation in order to predict various lightness illusions.

These 7 computational models were evaluated by comparing their output against human empirical data for 16 theoretically important visual illusions. The first group of visual illusions were the variations of Simultaneous Lightness Contrast (SLC) display. The second group is inspired by Maniatis proposal to place white surface on the black background: a theoretically important alternation to SLC. Third group consisted of White's illusion and its variations, whose explanation requires some form of assimilation processes similar to assimilation. The fourth group consisted of variations of the Reversed contrast illusion displays, which in human observers produces results opposite to the SLC.

Obtained results show that all tested models predicted lightness values that are comparable to human data for the 1st and 2nd group of stimuli. Only the most recent model of Lerer et al. (2021) is capable to predict assimilation and reverse contrast effects.

Keywords: Computational models of lightness perception; ODOG; High-Pass; RETINEX; MiR

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Estetska preferencija dizajna automobila

Objektima koji nas okružuju spontano pripisujemo karakteristike poput lepo ili ružno, međutim i dalje ne znamo zašto ljudi određene objekte doživljavaju kao lepe ili ružne. Dosadašnja istraživanja pretežno su se fokusirala na objektivne karakteristike objekata u traganju za uzročnicima estetskog doživljaja. Ovom istraživanju pristupamo iz teorijskog okvira VACe modela estetskog doživljaja (Janković, 2015) po kome je estetski doživljaj nekog objekta rezultat subjektivnog, afektivnog doživljaja svih pojedinačnih značenja koja su aktivirana/konstruisana u svesti posmatrača prilikom opažanja datog objekta. Cilj istraživanja je najpre utvrditi koje kriterijume ispitanici koriste prilikom estetske evaluacije dizajna automobila, a potom utvditi odnos između afektivnog doživljaja tih kriterijuma i estetske preferencije. Istraživanje se sastojalo iz dva dela. U prvom delu ispitanici su procenjivali trideset stimulusa (dizajn automobila) na bipolarnoj skali ružno-lepo i navodili šta su imali na umu prilikom odlučivanja da li im je navedeni dizajn lep ili ružan. U drugom delu ispitanici su procenjivali svoj afektivni doživljaj verbalno produkovanih kriterijuma. Obrada podataka je uključivala kvalitativnu analizu u vidu kategorizacije produkovanih značenja, kao i mutiplu regresionu analizu kako bi se utvrdilo koliko dimenzije afektivnog doživljaja aktiviranih značenja imaju udela u objašnjenju varijanse estetske preferencije dizajna automobila. Koeficijent multiple determinacije je pokazao da 95.8% varijanse estetske preferencije može biti objašnjeno prediktorskim skupom od tri afektivne dimenzije ($R^2=.958$, $F_{(3,26)}=199$, $p<.001$). Dimenzije Valence i Pobuđenosti pokazale su značajan doprinos objašnjenju varijanse estetske preferencije, dok doprinos Kognitivne evaluacije mimo navedene dve afektivne dimenzije nije dosegao statističku značajnost. Dobijeni nalazi ukazuju na to da što se više značenja koje dizajn automobila aktivira kod posmatrača doživljavaju kao prijatna, uzbudljiva i poznata, viša je estetska preferencija dizajna automobila. Rezultati istraživanja sugerišu da oblast primene VACe modela, prvobitno formiranog na podacima o estetskom doživljaju umetničkih dela, može biti proširena i na oblast vizuelnog dizajna.

Ključne reči: eksperimentalna estetika; estetska preferencija; dizajn automobila; VACe model estetske preferencije;

Aesthetic preference of car design

People spontaneously attribute characteristics such as beautiful or ugly to the objects surrounding us, but we still do not fully understand why we perceive certain objects as beautiful or ugly. Previous studies mainly focused on the characteristics of objects in the search for the causes of our aesthetic preferences. The present study relies on the theoretical framework of the VACe model of aesthetic experience (Janković, 2015) according to which the aesthetic experience of an object is the result of affective experiences of all individual meanings that are activated/constructed in the mind of the beholder. The aim of the study is first to determine which criteria participants use during the aesthetic evaluation of car design, and then to determine the relationship between the affective experience of these criteria and aesthetic preferences. The research consisted of two parts. In the first part, the participants rated thirty stimuli (car design) on the scale ugly-beautiful and stated what they had in mind when deciding whether the design is beautiful or ugly to them. In the second part, participants rated their affective experience of verbally produced criteria. Data analysis included a qualitative analysis i.e. categorization of criteria, as well as multiple regression analysis to determine the overall fit of the VACe model and the relative contribution of the affective dimensions. The coefficient of multiple determination showed that 95.8% of the variance of aesthetic preference can be explained by a predictor set of three affective dimensions ($R^2 = .958$, $F(3,26) = 199$, $p < .001$). Valence and Arousal dimensions showed a significant contribution to the total variance explained, while the contribution of cognitive evaluation did not reach statistical significance. The obtained findings showed that the more meanings that the car design activates in the beholders are experienced as pleasant, exciting and familiar, the stronger is aesthetic preference. The results of the study suggested that the VACe model, originally formed on the basis of data on the aesthetic experience of artworks, can be extended to include the field of visual design.

Keywords: experimental aesthetics; aesthetic preference; car design; VACe model of aesthetic preference;

PSIHOLOGIJA LIČNOSTI

PERSONALITY PSYCHOLOGY

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Multidimenzionalni pristup mjerenju motivacije približavanja i izbjegavanja

Povijest teorijskog razmatranja motivacije približavanja i izbjegavanja datira iz vremena starogrčke filozofije. Međutim, način mjerenja ovih temeljnih oblika motivacije u psihologiji još uvijek nije u potpunosti razjašnjen. Cilj ovog rada je predstaviti multidimenzionalni teorijski okvir za područje motivacije približavanja i izbjegavanja, te operacionalizaciju tih konstrukata putem samoprocjene. Upitnik motivacije približavanja i izbjegavanja (eng. Questionnaire of Approach and Avoidance Motivation; QAAM) mjeri motivacijske mehanizme približavanja i izbjegavanja kao temeljne procese u podlozi ličnosti. Sadrži četiri ljestvice povezane s pristupom: Želja - odražavajući razinu težnji; Traženje - planiranje i traženje novih prilika; Ustrajnost - ustrajnost u postizanju željenih ciljeva; Ugoda - reaktivnost pri primanju nagrada. Nadalje, skala Anksioznosti odražava tendenciju doživljavanja psihofizioloških reakcija u prisutnosti situacija koje izazivaju stres, dok skala Straha odražava pojavu simptoma panike. Valjanost upitnika ispitana je u pet studija provedenih na 2.518 sudionika. Psihometrijske i eksperimentalne studije koje će se ukratko predstaviti u ovom izlaganju ukazuju na odgovarajuću konstruktnu valjanost upitnika. QAAM je uspoređen s nekoliko dobro definiranih upitnika koji mjere osobine ličnosti iz modela Velikih pet, Teorije osjetljivosti potkrepljenja, Afektivne neuroznanosti teorije ličnosti, Barrattovog modela impulzivnosti, Mračne trijade i drugih mjera izvršnih funkcija, subjektivne dobrobiti i životnog zadovoljstva. Generalno, skale Anksioznosti i Straha su umjereno do visoko povezane sa skalama koje mjere tendenciju doživljavanja negativnih emocija poput neuroticizma, bihevioralnog inhibicijskog sustava i slično. S druge strane, skale koje se odnose na motivaciju približavanja su umjereno do visoko povezane sa skalama poput ekstraverzije, bihevioralnog aktivacijskog sustava, impulzivnosti i slično. Nadalje, QAAM se pokazao korisnim i u dvije eksperimentalne studije. Prva eksperimentalna studija je pokazala korisnost skale Anksioznosti u previđanju fiziološke i subjektivne reakcije na stres izazvanim virtualnoj realnosti, dok u drugoj studiji su skale Želje pozitivno i Anksioznosti negativno predvidjele tendenciju pretjeranog zarađivanja koja se dovodi u usku vezu s konstruktom pohlepe.

Ključne reči: želja; traženje; ustrajnost; ugoda; izbjegavanje

Multidimensional assessment of approach and avoidance motivation

The history of approach-avoidance motivation can be traced to Ancient Greek philosophy. However, the operationalisation of these fundamental types of motivation in psychology is still under debate. This study aims to present the multidimensional theoretical perspective of approach and avoidance motivation and its self-report operationalisation. The Questionnaire of Approach and Avoidance Motivation (QAAM) was designed to measure approach and avoidance mechanisms as underlying personality processes. It contains four approach-related scales: Wanting - reflecting the level of aspirations; Seeking - planning and searching for new opportunities; Getting - the persistence in attaining desired goals and; Liking - reactivity on receiving rewards. In addition, the avoidance scale of Anxiety reflects the tendency to experience psychophysiological reactions in the presence of stress-provoking situations, whereas the Fear scale reflects the occurrence of experiencing panic symptoms. The validity of the questionnaire was examined in five studies conducted on 2,518 participants. Psychometric and experimental studies presented in this paper provide evidence that the QAAM has adequate construct validity. The QAAM was compared with several well-established questionnaires measuring personality traits from the big five model, reinforcement sensitivity theory, affective neuroscience of personality theory, Barratt's model of impulsivity, dark triad, and other measures of executive functions, wellbeing, life satisfaction and aspirations. In general, Anxiety and Fear scales are moderately and highly correlated with the scales assessing negative emotionality such as neuroticism, behavioural inhibition system, and similar. On the other hand, scales assessing approach motivation are also moderately and highly correlated with scales assessing extraversion, behavioural activation system, impulsivity and similar. In addition, the QAAM was found useful in two experimental studies. In the first experimental study, the Anxiety scale predicted physiological and subjective responses to the stress-provoking virtual environment, whereas in the second study Wanting positively and Anxiety negatively predicted the level of overearning tendencies, a construct strongly related to greed.

Keywords: wanting; seeking; getting; liking; avoidance

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BFI-20: Psychometric properties for the shortened form of BFI-44

Big Five Inventory (BFI-44), which comprises of 44 items and includes extraversion, neuroticism, agreeableness, conscientiousness, and openness, is a useful researchers' tool for already three decades. However, the development of psychological science and the contemporary way of life have created the need for abbreviated versions of psychological instruments which should be, on the one hand, time-efficient and thus allow quick assessment, and on the other hand sufficiently reliable and representative as compared to the original versions. Therefore, we aimed to derive a number of items from the BFI-44 questionnaire in order to create a shortened form of the questionnaire (BFI-20), which should represent the optimal balance. In the first study (N = 1350, 82.4% females, aged 18 to 60), using a series of item analyzes and factor analyzes, we identified 20 items (four for each trait) that most optimally represent each dimension separately as well as the five-factor structure of the BFI model. Using PCA (Promax rotated), we isolated five components (59.96% cumulative variance) with correspondent items loading above .52 (without secondary loadings), correlated with the original dimensions in a range from .86 to .93. Using SPSS macro RTT10G we established satisfactory levels of reliability (α ranging from .69 to .79), representativeness (PSI1 ranging from .76 to .89; PSI2 ranging from .59 to .70) and homogeneity (H1 ranging from .36 to .49; H2 ranging from .87 to .91). The findings from the first study regarding the five-factor structure were mostly replicated in the second (N = 215, 65.1% females, aged 18 to 65) and third study (N = 263, 83.7% females, aged 18 to 42), whereby five principal components were also isolated (KMO = .776, $\chi2$ =1680.22; df = 190; p < .001; 63.81% variance; KMO = .779, $\chi2$ =1813.26; df = 190; p < .001; 61.86% variance, respectively) but with the presence of cross-loadings for one item in both studies. In these two studies, we explored the relations of the original 44-item and the shortened 20-item BFI with the measures of schizotypy, satisfaction with life, and positive orientation, whereas the expected attenuation was observed for BFI-20. Besides, a lower level of reliability was registered for the agreeableness dimension in the third study (α = .65). In sum, we can recommend the use of BFI-20 as a time-efficient, satisfactory reliable and representative questionnaire, in particular for the studies where personality traits are not the main focus, but are included as covariates.

Keywords: BFI-20, BFI-44, psychometric properties, factor structure, reliability

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Psychometric evaluation of the Serbian adaptation of the Need for Chaos scale

Recent studies conducted by Bang Petersen et al. showed that some individuals may be predisposed to have a Need for Chaos (NFC), especially when they are facing social isolation and/or forms of discontent. Overall, the NFC is defined as a tendency toward the destruction of order, established structures, and hierarchy with the goal to gain status and power. The aim of this study was to evaluate the brief, 8-item NFC scale and to test its reliability and unidimensional factor structure, convergent and discriminant validity via correlations with Dark Tetrad and HEXACO traits, as well as criterion validity via correlations with the frequency of compliance with COVID-19 protective measures. In the period from December 2020 to January 2021, on a sample of 345 participants (47.5% males), aged between 18 and 70 (M=27.43, SD=11.48), five instruments were applied: Need for Chaos, Brief HEXACO Inventory (BHI), Dark Triad Dirty Dozen (DTDD), 8-item version of the Assessment of Sadistic Personality (ASP), and COVID-19 Protective Behaviors Scale. Results showed acceptable fit indices for the unidimensional model of NFC (DWLS Chi-square (19) = 53.30, p < .001, CFI = .92, TLI = .88, RMSEA = .08) with loadings ranged from .30 to .78. The alpha reliability of the scale was .76. However, since TLI is under recommended cut-off, the fit was improved by adding residual correlation between the 1st and the 7th items (r = .13) as modification indices suggested (DWLS Chi-square (20) = 64.45, p < .001, CFI = .94, TLI = .91, RMSEA = .07). The other suggestion for modification of the scale is to omit the 7th item (DWLS Chi-square (14) = 29.90, p < .01, CFI = .97, TLI = .95, RMSEA = .06). However, we kept the original solution in order to compare results with the previous ones. This item is the only one that refers to destroying nice and beautiful things, while others refer to destroying order, establishment and similar. The main correlate of NFC was Sadism (.46), following the rest of the Dark traits (Psychopathy: .37; Machiavellianism: .34; and Narcissism: .25), which is in line with previous research. Among HEXACO traits, NFC showed a significant negative correlation with Honesty-Humility (-.29), Agreeableness (-.16), and Conscientiousness (-.20), while the correlations with the rest of the HEXACO traits were not significant. Furthermore, correlation with protective measures was significant and negative, although of low intensity (-.11). Results confirmed adequate alpha reliability, convergent and discriminant validity as well as criterion validity of NFC scale. Further studies should consider omitting the 7th item and to address

other criteria in order to test the usefulness of NFC in the prediction of destructive and malice behaviors.

Keywords: Need for Chaos, Dark Tetrad, Dark Triad, HEXACO, COVID-19, protective measures, validity, confirmatory factor analysis

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Validation of the Self-Absorption Scale: Data from Serbia

Self-absorption predisposes the constructs that encompass a pathological focus on oneself, characterized by excessive thoughts about oneself that interfere with an individual's daily functioning. This concept has two dimensions: public and private. Private self-absorption is characterized by excessive thoughts about itself ("I think about myself more than anything else") . Public self-absorption is characterized by excessive thoughts about what others think of us and how others perceive us ("I find myself wondering what others think of me even when I don't want to"), and is often positively associated with a critical attitude toward itself.

McKenzie and Hoyle (2008) made the first Self-Absorption Scale (17 Items). Outside the English speaking area, it has been translated and used in Brazil, Spain, and Turkey and showed to be valid and reliable measure for assessing the pathological aspect of self-focusing. Since this scale is not available in Serbian, we designed two studies aimed on adaptation (Study 1, N = 400), and validation of the instrument (Study 2, N = 212). Results of Study 1 confirmed original two-factorial structure, but without two items on each subscale ($\chi2(61)=112.22$, p<.01, CFI=.95, NFI=.91, RMSEA=.05, GFI=.96, AGFI=.94). The reliability of the scale as a whole is α=.77 (public self-absorption α=.75; private self-absorption α=.72). The factors in both, the original and translated version, are congruent (measured by Tucker`s congruence coefficient). Results of Study 2 showed that self-absorbtion was positively correlated to the most aspects of pathological narcissism, self-consciousness, depression, stress and anxiety. Also, it was negatively correlated to self-esteem. These results are consistent with findings in other populations (Perona-Garcelán et al., 2014; Öngen, 2015; DaSilveira, DeCastro & Gomes, 2011; DaSilveira, DeSouza & Gomes, 2015).

Therefore, we can conclude that The Self-Absorption Scale is a short, reliable, and valid measure for assessing the pathological aspect of self-focusing in Serbian population.

Keywords: public self-absorption, private self-absorption, adaptation, Serbian version

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Faktorska struktura Brief COPE skale

Brief COPE skala (Carver, 1997) se često koristi u našoj sredini. Da bi se mogla efikasnije koristiti potrebno je 14 različitih stretegija suočavanja sa stresom, od kojih je svaka predstavljena sa po dva ajtema, svesti na manji broj subskala sa zadovoljavajućim metrijskim karakteristikama. Ovaj rad predstavlja početni korak u tom pravcu.

U cilju utvrđivanja faktorske strukture, podaci su prikupljeni na uzorku od 908 ispitanika oba pola (51% žena), različitog socioekonomskog statusa, starosti od 20 do 79 godina. Pošto među autorima ne postoji konsenzus o raspodeli strategija prevladavanja stresa (ni po broju, ni po pitanju njihove strukture), izabrali smo eksplorativnu, a ne konfirmatornu faktorsku analizu.

Primenjena je eksplorativna faktorska analiza glavnih osovina uz Oblimin rotaciju. Za određenje broja značajnih faktora konsultovano je više kriterijuma. Po Guttman–Kaiserovom kriteriju izdvojeno je 7 faktora (58% objašnjene varijanse), rezultati Paralelne analize sugerišu postojanje 6 faktora (54% objašnjene varijanse), dok se na osnovu Cattellovog Scree testa mogu izdvojiti 3 faktora (38% objašnjene varijanse). U saopštenju će biti diskutovane razlike između rešenja sa različitim brojem faktora. Na osnovu ajtemskog sadržaja doneta je odluka da se zadrži rešenje sa 3 faktora.

Izolovani faktori su imenovani kao: 1. Aktivan/pozitivan pristup prevladavanju stresa (primer stavke: „Preduzeo/la sam aktivnosti u cilju poboljšanja situacije"), 2. Pasivan/izbegavajući pristup (npr. „Odustao/la sam od pokušaja da se izborim sa tim"), i, 3. Traženje socijalne podrške (npr. „Dobio/la sam utehu i razumevanje od drugog"). Rezultati upućuju na to da je aktivno prevladavanje povezano sa pozitivnim afektom, dok je pasivno prevladavanje povezno sa negativnim afektom. U prvoj dimenziji, osim što je prisutna aktivna usmerenost na problem, identifikovan

je i pozitivan pristup problemima („Šalio/la sam se na račun toga") i sagledavanje istih iz drugačijeg, pozitivnijeg ugla („Pokušao/la sam da situaciju sagledam iz drugog, pozitivnijeg ugla"), dok je kod pasivnog prevladavanja dominantno prisutan negativan afekat koji je u određenim situacijama i ispoljen („Ispoljio/la sam svoja negativna osećanja"). Korelacije među faktorima su relativno niske i kreću se u rasponu od 0,05 do 0,36

Ključne reči: faktorska struktura, COPE, strategije prevaldavanja stresa

The factor structure of the Brief COPE scale

Brief Cope scale is often used in our culture, but in order to use it more efficently it is necessery to reduce 14 different coping strategies, each of which is presented with 2 items, to a smaller number of subscales with satisfactory metric characteristics. This paper represents an initial step in that direction.

In order to verify the factor structure the data was collected on a sample of 908 respondents of both sexes (51% women), of a different socioeconomic status, age from 20 to 79. Because of disagreement among the authors on the distribution of coping strategies (their number as well as their structure), we chose exploratory rather than confirmatory factor analysis. The exploratory factor analysis was applied, using principal axis factoring and was rotated using Oblimin Normalization. Several criteria were taken into account to determine the number of significant factors. According to Guttman – Kaiser 's criterion 7 factors were extracted (58% of the explained variance), the results of the parallel analysis suggest the existence of 6 factors (54% explained variance), while based on Cattell's Scree test 3 factors can be identified (38% explained variance). In the presentation we will discuss differences between solutions with different number of factors.

The extracted factors were named as 1. Active/positive coping (e.g. "I've been taking action to try to make the situation better"), 2. Passive/avoiding coping (e.g. "I've been giving up trying to deal with it") and Seeking social support (e.g. "I've been getting comfort and understanding from someone"). The results suggest that active coping is associated with positive affect, while passive coping is associated with negative affect. In the first dimension, besides the active problem solving, the positive approach to problems has been identified ("I've been making fun of the situation"), and looking at a situation from a positive perspective ("I've been trying to see it in a different light, to make it seem more positive"), while in the passive

coping, the negative affect is dominantly present and in some situations manifested ("I've been expressing my negative feelings"). Correlations between the factors are relatively low and range from 0.05 to 0.36.

Keywords: factor structure, COPE, coping strategies

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Change in self-reported personality in students of acting

Recently, the field of personality change has received an increasing amount of attention. Previously under-researched variables, such as the intention to change or taking on new social roles (in a working environment, education, family etc.) have been shown to be relevant for personality change. Following this line of research, our study aimed to determine whether the process of acting can bring about personality changes in students of acting and if yes, in which way. We hypothesized that there will be a significant difference between self-reported personality traits of students of acting at the beginning and the end of preparing for a role. Additionally, as potential moderator variables, we measured the reported personality traits of the roles the students were acting, as well as empathy, disintegration and years of formal acting education. The sample (N = 47) was composed of students of acting from the Faculty of Dramatic Arts (first- to fourth-year) and the Faculty of Modern Arts (first-year students only). Participant mean age was 20.2 (SD = 1.47), and there were 64% of females. The procedure included two waves of testing (T1 at the beginning and T2 at the end of the semester), and students' acting exercises and character immersion comprised the pseudo-experimental procedure. Students' personality traits (HEXACO-60, self-report version), empathy (Questionnaire of Cognitive and Affective Empathy, QCAE) and disintegration (DELTA9, 10-item version) were measured at both T1 and T2, while the personality of the role (HEXACO-60 observer version) was measured at T2. Responses to all instruments were given on a 5-point Likert scale. A series of repeated-measures T-tests showed significant differences in emotionality ($t(46) = 2.56$, $p = 0.014$) and conscientiousness ($t(46) = -2.39$, $p = 0.021$) between T1 and T2. Moreover, an index of absolute

personality change was significantly different from 0 for all traits (range .53 to .34, t(46) = 4.20, p < .001 for the lowest index). The average test-retest correlation for HEXACO traits was 0.57 which is lower than proposed by other similar researches. As for moderator variables, neither the personality of the role, nor empathy or disintegration explained the change in students' personality traits. The magnitude of personality change was the highest in fourth-year students, with no significant differences between the remaining three years of studying. Overall, our results seem to indicate some personality changes in students of acting. However, these changes cannot be unequivocally related to the process of preparing for a role. Further and methodologically stricter research is needed to unravel the role of acting in personality change.

Keywords: personality change, acting, HEXACO

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Povezanost bazičnih osobina ličnosti između dece i roditelja – porodična studija

Osnovni cilj ovog istraživanja bio je ispitivanje porodične sličnosti u osobinama ličnosti, odnosno povezanosti osobina ličnosti između mlađeg i starijeg deteta, između roditelja, kao i između oba deteta sa jedne strane i roditelja sa druge strane. U istraživanju su učestvovale 152 potpune porodice, koje obuhvataju dva deteta, oca i majku. Od ukupno 304 ispitane dece (65% ženskog pola), veći broj ispitanika je ženskog pola, i u slučaju starijeg (69.1%) i u slučaju mlađeg deteta (61.2%). Raspon godina starije dece se kretao od 19 do 62 godine (AS = 25.64, SD = 7.69), dok je raspon godina kod mlađe dece od 18 do 52 godine (AS = 21.53, SD = 6.59). Za potrebe ovog istraživanja je primenjen HEXACO-60 inventar ličnosti, koji obuhvata šest bazičnih dimenzija ličnosti: Poštenje-skromnost (α = .66 - .76), Emocionalnost (α = .67 - .82), Ekstraverzija (α = .65 - .79), Prijatnost (α = .72 - .74), Savesnost (α = .73 - .81) i Otvorenost ka iskustvu (α = .79 - .82). Starija i mlađa deca ostvaruju značajne i pozitivne korelacije na dimenzijama Poštenje-skromnost (r = .28, p < .01) i Prijatnost (r = .18, p < .01). Roditelji ostvaruju značajne i pozitivne korelacije na dimenzijama Poštenje-skromnost (r = .25, p < .01) i Otvorenost ka iskustvu (r = .19, p < .01), kao i negativnu i značajnu korelaciju na dimenziji Emocionalnost (r = -.22, p < .01). Starija deca ostvaruju pozitivne i značajne korelacije sa prosečnim skorom oba roditelja na

dimenzijama Poštenje-skromnost (r = .32, p < .01), Prijatnost (r = .30, p < .01) i Otvorenost ka iskustvu (r = .19, p < .01). Mlađa deca ostvaruju pozitivne i značajne korelacije sa prosečnim skorom oba roditelja, kao i starija deca, na dimenzijama Poštenje-skromnost (r = .31, p < .01), Prijatnost (r = .25, p < .01) i Otvorenost ka iskustvu (r = .32, p < .01), ali i u slučaju dimenzija Savesnost (r = .18, p < .01) i Emocionalnost (r = .22, p < .01). Dobijeni rezultati govore u prilog kulturne transmisije unutar porodice različitih osobina ličnosti, među kojima dominira Poštenje, kao dimenzija koja u najvećoj meri obuhvata sistem vrednosti i etičke standarde.

Ključne reči: porodični dizajn, porodična studija, bazične osobine ličnosti, HEXACO-60

Relationship between basic personality traits between children and parents - a family study

The main goal of this research was to examine the family similarity in personality. Specifically, the relationship of personality traits between a younger and older child, between parents and between both children on one side and parents on the other. The study involved 152 complete families, which include two siblings, a father, and a mother. Out of a total of 608 respondents, 350 were female (57.57%). The data set is organized so that the older sibling is in the first place in the data set, followed by the younger sibling. When it comes to siblings, a larger number of respondents are female (65%), both in the case of older (69.1%) and in the case of younger siblings (61.2%). The age of older children ranged from 19 to 62 years (AS = 25.64, SD = 7.69), while the age of younger children ranged from 18 to 52 years (AS = 21.53, SD = 6.59). For the purposes of this research, the HEXACO-60 personality inventory was applied, which operationalizes six basic dimensions of personality: Honesty-humility (α = .66 - .76), Emotionality (α = .67 - .82), Extraversion (α = .65 - .79), Pleasure (α = .72 - .74), Conscientiousness (α = .73 - .81) and Openness to experience (α = .79 - .82). Older and younger siblings achieve significant and positive correlations on the dimensions Honesty-humility (r = .28, p <.01) and Agreeableness (r = .18, p <.01). Parents achieve significant and positive correlations on the dimensions Honesty-humility (r = .25, p <.01) and Openness to experience (r = .19, p <.01), as well as negative and significant correlations on the dimension Emotionality (r = -.22, p <.01). Older siblings achieve positive and significant correlations with the average score of both parents on the dimensions Honesty-humility (r = .32, p <.01), Agreeableness (r = .30, p <.01) and Openness to experience (r = .19)., p <.01). Younger siblings achieve positive and significant correlations with the average score of both parents, as well as older siblings, on the dimensions Honesty-humility (r = .31, p <.01), Agreeableness (r = .25, p <.01) and Openness to experience (r = .32, p <.01), but also in the case of the dimensions Conscientiousness (r = .18, p <.01) and Emotionality (r = .22, p <.01). The

results indicate cultural transmissions within the family of different personality traits, especially Honesty as a dimension that largely encompasses value systems and ethical standards.

Keywords: family design, family study, basic personality traits, HEXACO-60

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Kvalitativna analiza self-koncepta kod blizanca

Cilj ovog istraživanja je kvalitativna analiza self-koncepta kod specifične populacije – populacije blizanaca. U istraživanju je učestvovalo 50 blizanačkih parova, uzorak je bio prigodan, a ispitanici su deo većeg uzorka iz Registra blizanaca Centra za bihejvioralnu genetiku. U radu je korišćen polustrukturisan intervju po modelu self-koncepta (ego percepcija – kako ispitanici vide sebe, ego ideal – kakvi bi ispitanici željeli da budu, i kako ispitanici misle da ih drugi vide). Intervjui su snimljeni i transkribovani, nakon čega su narativi blizanaca analizirani primenom tematske analize. Analiza je sprovedena u softverskom paketu MAXQDA.

Dobijeni podaci su kategorisani prema narativnim temama: kako vidiš sebe, kako tebe drugi vide i kakav/a bi željeo/la da budeš. Rezultati su pokazali da blizanci sebe vide kroz niz pozitivnih osobina, kao: vredne, sigurne, samosvesne, sposobne, prihvaćene, dobre, pouzdane i moralne osobe. Kao negativne osobine izdvajaju se: impulsivnost, nesigurnost, nepromišljenost, neorganizovanost. Prema kategoriji kako ih vide drugi, izdvavaju se sledeće teme: očekivana procena od strane bliskih ljudi koja je u skadu sa samopercepcijom i pozitivna procena od strane bliskih ljudi koja uključuje isticanje pozitivnih osobina. U odnosu na odgovore kakvi bi blizanci željeli da budu, podaci ukazuju na sledeće teme koje se izdvajaju: očekivano JA (dužnosti, obaveze i odgovornosti), idealno JA (istrajnost, uspešnost i emotivna stabilnost) i protreba za progresom, sa željom ili bez želje za napretkom u psihološkom ili fizičkom aspektu. Takođe, još jedna značajna tema koja se izdvaja i provlači nezavisno od pitanja je poređenje – kontekst blizanačke dijade. Naime, u odgovorima se može detektovati opažanje sebe kroz prizmu drugog blizanačkog para, opažanje od strane drugih kao da blizanci čine celinu i želja za promenom svojih osobina u pravcu pozitivnih osobina druge osobe iz blizačkog para.

Dobijeni podaci pokazuju da blizanci sebe vide više kroz niz pozitivnih nego negativnih osobina, što je u skladu sa pristrasnostima samoprocene. Takođe, procenuju da ih drugi opažaju kao što i sami očekuju ili pozitivnijie u odnosu na to kako sami sebe doživljavaju. Želja za progresom na daljem razvojnom putu je veća u odnosu na stagnaciju u fizičkom i psihološkom aspektu. Ono što je specifilnost i doprinos ovog istraživanja je rezultat da blizanci sebe opažaju u kontekstu dijadnog odnosa, što se može smatrati za refleksiju postojeće privrženosti.

Ključne reči: self-koncept, blizanci, bihejvioralna genetika, kvalitativna analiza

Qualitative Analysis of the Self-Concept in Twins

The aim of this research is a qualitative analysis of self-concept in a specific population—the population of twins. Fifty twin couples participated in the research; the sample was suitable. The respondents are part of a larger sample from the Register of Twins of the Center for Behavioral Genetics. For the purpose of this study, we used a semi-structured interview based on a self-concept model (ego perception - how respondents see themselves, ego ideal - what respondents would like to be, and how respondents think others see them). The interviews were recorded and transcribed, after which the narratives of the twins were analyzed using thematic analysis. The analysis was performed in the MAXQDA software package.

The obtained data are categorized according to narrative topics: how you see yourself, how others see you, and what you would like to be. The results showed that the twins see themselves through a number of positive qualities such as: hardworking, confident, self-aware, capable, accepted, good, reliable, and ethical. The negative traits are: impulsiveness, insecurity, recklessness, disorganization. According to the category 'as seen by others', the following topics are emphasized: expected assessment by close people, which is in line with self-perception, and positive assessment by close people, which includes emphasizing positive traits. In relation to what the twins would like to be, the data indicate the following topics: expected SELF (duties, obligations, and responsibilities), ideal SELF (perseverance, success, and emotional stability) and the need for progress, with or without the desire for progress in the psychological or physical aspect. Another important topic that stands out and runs independently of the question is the comparison—the context of the twin dyad. Namely, in the answers one can detect the perception of oneself through the prism of their counterpart, the perception by others as if the twins form a whole and the desire to change their traits in the direction of the positive aspects of the other person in the twin pair.

The study shows that the twins see themselves more through positive than negative traits, which is in line with the self-assessment bias. They also estimate that others perceive them as they expect or are more positive in relation to how they perceive themselves. The desire for progress on the development path is greater in relation to the stagnation in the physical and psychological aspect. The specific contribution of this research is the finding that the twins perceive themselves in the context of a dyad relationship, which can be considered as a reflection of the existing attachment.

Keywords: self-concept, twins, behavioral genetics, qualitative analysis

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Alcohol use, drug use, and perceived quality of life: The predictive role of Disintegration

Previous research has shown that basic personality traits are important correlates of various aspects of psychological adjustment, including alcohol use, drug use, and perception of quality of life. Recent research has shown that the Disintegration trait, in addition to basic personality traits, has an incremental contribution in explaining a broader set of maladaptive outcomes such as criminal behavior, development of psychopathological symptoms due to stressful circumstances, and irresponsible health-related behavior during COVID-19 crisis. Therefore, this study examined whether the Disintegration trait can explain the problematic use of alcohol and drugs and the perceived quality of life over and above basic personality traits. Research was conducted on a sample of 249 participants (73.5% females) aged 18 to 56 years ($M = 25.88$, $SD = 7.92$). Short versions of the Big Five Inventory (BFI-10) and DELTA (DELTA-20) were used to assess personality traits, problematic alcohol and drug use were assessed with Alcohol Use Disorders Identification Test (AUDIT) and Drug Use Disorders Identification Test (DUDIT), while quality of life was assessed using Flanagan's Quality of Life Scale (QOLS). Three hierarchical regression models with problematic alcohol use, problematic drug use, and perceived quality of life as criteria were tested. Regression models showed that basic personality traits, taken together with gender and age, explain about 20% of the variance of problematic alcohol use ($R^2adj = .20$; $F (7; 241) = 10.05$; $p < .001$), 17% of the variance of problematic

drug use (R^2adj = .17; F (7; 241) = 8.49; p <.001), and 29% of perceived quality of life variance (R^2adj = .29; F (7; 241) = 15.78; p <.001). The inclusion of the Disintegration trait improves the explanation of all three criteria by about 4% (ΔR^2 = .04, p <.001), 3% (ΔR^2 = .03, p <.001), and 1% (ΔR^2 = .01, p <.05), respectively. Conscientiousness (β = - .24, p <.01) and Disintegration (β = .24, p <.01) are the best predictors of problematic alcohol use, while Disintegration is the best predictor of problematic drug use (β = .19, p <. 01). Perceived quality of life is best explained by Extraversion (β = .29, p <.01) and Neuroticism (β = -.26, p <.01), and the independent contribution of Disintegration is, although significant, relatively small (β = -.13, p <.05). Thus, the results show that, in addition to basic personality traits, the disintegration of conative personality functions is an important component in explaining the problematic use of alcohol and drugs as maladaptive outcomes. The results are in line with previous findings demonstrating that the Disintegration trait encompasses the variance of individual differences outside the personality space shaped by basic traits, so the inclusion of this trait is necessary to provide a more comprehensive understanding of different, in particular maladaptive outcomes.

Keywords: Disintegration, Big Five, psychological adjustment

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Inkrementalni doprinos netolerancije na nejasnoću nad HEXACO osobinama ličnosti u predviđanju socijalne anksioznosti

Netolerancija na nejasnoću kao dispozicija koja uključuje averzivan stav prema nedostajućim i kontradiktornim informacijama može biti važan izvor individualnih razlika u socijalnoj anksioznosti kao osobini ličnosti. Kada su informacije o društvenoj situaciji i pravilima ponašanja dvosmislene, kontradiktorne ili nepoznate, to može pospešiti nesigurnost, a time i anksioznost osobe koja učestvuje u njoj. Štaviše, ako pojedinac ima naglašen averzivan stav prema nejasnoći (za razliku od pronalaska nečega izazovnog ili zanimljivog, tj. tolerancije na nejasnoću), to može dodatno pojačati doživljaj socijalne anksioznosti. U skladu s tim, osnovni cilj ovog istraživanja je ispitivanje da li netolerancija na nejasnoću ostvaruje dodatni doprinos u objašnjenju varijanse socijalne anksioznosti pored doprinosa važnih socio-demografskih karakteristika (pol i starost) i bazičnih dimenzija ličnosti (HEXACO model). Istraživanje je sprovedeno na velikom uzorku iz opšte populacije u Srbiji.

Preciznije, uzorak je obuhvatio 1255 učesnika (63% žena) iz 20 administrativnih okruga Srbije (Mstarost = 39,41, SDstarost = 13,05 godina). Od instrumenata korišćeni su: Kratki HEXACO inventar, Skala socijalne anksioznosti (SA2) i novoizgrađena sedmoajtemska Kratka skala netolerancije na nejasnoću (SAIS-7). Korišćena je hijerarhijska regresiona analiza. U prvi model uključeni su pol i starost koji objašnjavaju 2% varijanse socijalne anksioznosti (F(2,1204) = 12,57, p < .000). Pritom, samo je pol značajan prediktor socijalne anksioznosti (β = .135, p < .000). U drugom koraku dodate su bazične dimenzije ličnosti, a ovaj model objašnjava ukupno 28,1% varijanse (F(8, 1198) = 58,44, p <. 000), sa značajnim porastom objašnjene varijanse od 26% (F(6, 1198) = 72,24, p < .000). Sve osobine ličnosti, osim Otvorenosti, bile su značajni prediktori socijalne anksioznosti (Savesnost – β = - .157, p < .000; Saradljivost – β = - .062, p < .05; Ekstraverzija – β = - .326, p < .000; Emocionalnost – β = .218, p < .000; Iskrenost – β = - .053, p < .000). U završnom koraku uključena je netolerancija na nejasnoću i taj model ukupno objašnjava 30,8% (F(9, 1197) = 59,18, p < .000) sa značajnim inkrementalnim doprinosom netolerancije na nejasnoću od 2,7% (F(1, 1197) = 47,16, p < .000; β = .169, p < .000) u predviđanju socijalne anksioznosti. Nalazi pokazuju da HEXACO osobine ličnosti ostvaruju najveći doprinos u objašnjenju socijalne anksioznosti, ali i netolerancija na nejasnoću ima jedinstveni doprinos koji je znatno manji. Rezultati su u skladu sa prethodnim empirijskim podacima koji se tiču povezanosti socijalne anksioznosti i određenih osobina ličnosti. Osim toga, izdvajanje nezavisne uloge netolerancije na nejasnoću u predikciji socijalne anksioznosti ide u prilog važnosti određenih kognitivnih obrazaca za razumevanje i objašnjenje socijalne anksioznosti.

Ključne reči: inkrementalni doprinos netolerancije na nejasnoću, HEXACO osobine ličnosti, socijalna anksioznost

Incremental contribution of ambiguity intolerance over HEXACO traits in predicting social anxiety as a trait

Intolerance of ambiguity (IA) as a dispositional aversive attitude towards missing or conflicting information can play an important source in individual differences in social anxiety (SA) as a trait. When the information about the social situation, the persons who take part in it, and the rules of conduct are ambiguous, contradictory, or unknown - these circumstances can exacerbate the insecurity and thus the anxiety. Moreover, if the person has a particular aversive attitude towards ambiguity (as opposed to finding something challenging or interesting in it, i.e. tolerance of ambiguity) this could serve to further worsen the SA. Here, we investigated if IA can

explain additional variance in SA as a trait over and above the variance explained by important socio-demographic variables and basic personality traits (HEXACO model) in a large sample from a general population in Serbia.

Sample included 1255 participants (63% female) from 20 administrative districts of Serbia (M_{age} = 39.41, SD_{age} = 13.05 years). We used The Brief HEXACO Inventory (BHI–24), The Social Anxiety Scale (SA2), and a newly constructed 7-item Short Ambiguity Intolerance Scale (SAIS-7).

Hierarchical regression was used. In the first model, we included the gender and age which accounted for 2 % of variance ($F_{(2,1204)}$ = 12.57, $p < .000$).Gender was the only significant predictor of SA (β = .135, $p < .000$). In the second step, we included basic personality traits which explained 28.1% of variance ($F_{(8, 1198)}$ = 58.44, $p < .000$), with the significant increase in explained variance ($F_{(6, 1198)}$ = 72.24, $p < .000$). All personality traits apart from Openness were significant predictors of social anxiety (Conscientiousness – β = - .157, $p < .000$; Agreeableness – β = - .062, $p < .05$; Extraversion – β = - .326, $p < .000$; Emotionality – β = .218, $p < .000$; Honesty – β = - .053, $p < .000$). In the final step, AI was included which explained 30.8 % ($F_{(9, 1197)}$ = 59.18, $p < .000$) with the significant incremental contribution of AI ($F_{(1, 1197)}$ = 47.16, $p < .000$; β = .169, $p < .000$) in predicting SA.

The findings suggest that HEXACO traits have the biggest contribution in predicting SA, while IA has a unique contribution that is lesser in size. The results are in line with the previous findings on the association between personality traits and SA. Moreover, the independent contribution of IA in predicting SA does point to certain types of cognitions as important factors in accounting for and understanding SA.

PSIHOLOGIJA OBRAZOVANJA

EDUCATIONAL PSYCHOLOGY

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Pružanje podrške srednjoškolcima s posebnim potrebama u vrijeme pandemije COVID-19 iz perspektive stručnih suradnika

Cilj je rada prikazati na koji su način stručni suradnici pružali podršku učenicima srednjih škola u vrijeme trajanja pandemije COVID-19, s posebnih naglaskom na učenike s posebnim potrebama. Provjereno je pružanje direktne podrške učenicima od strane stručnih suradnika (individualna podrška učenicima s teškoćama u razvoju i darovitim učenicima) te dodatna komunikacija stručnih suradnika s nastavnicima vezana uz pružanje podrške istim kao i procjena dodatna podrške nastavnika učenicima s posebnim potrebama. Učenici s posebnim potrebama (daroviti i s teškoćama u razvoju) bili su identificiran na temelju procjena stručnih suradnika.

U istraživanju su sudjelovali stručni suradnici (N=192, 35.8% pedagoga i 30.1.% psihologa, 93% žena) iz cijele Hrvatske koji rade u strukovnim školama, gimnazijama i mješovitim srednjim školama. Istraživanje je provedeno u sklopu projekta „Nacionalno praćenje učinaka pandemije bolesti COVID-19 na sustav odgoja i obrazovanja Republike Hrvatske" kojeg provodi Institut za društvena istraživanja u Zagrebu, a financira Ministarstvo znanosti i obrazovanja. Za potrebe navedenog projekta kreirani su svi mjerni instrumenti (upitnici), a cijelo istraživanje provedeno je online.

Nacionalno je istraživanje, iz perspektive stručnih suradnika, pokazalo kako je većina škola bila pripremljena na drugi val pandemije bolesti COVID-19 (95% stručnih suradnika izjavljuju kako je njihova škola u priličnoj ili velikoj mjeri bila pripremljena za organizaciju nastave). U odnosu na razdoblje prije pandemije bolesti COVID-19 stručni suradnici su ostvarili podjednaku komunikaciju sa srednjoškolcima (36% rjeđe, 31% podjednako, a 33% češće), međutim rjeđe su se održavali sastanci i/ili radionice s učenicima (64%), a češće su morali pratiti izostanke i školski uspjeh učenika (40%).

U radu s učenicima s posebnim potrebama značajno se povećalo pružanje individualne podrške učenicima s teškoćama u razvoju (češće je bila potrebna podrška u 34% slučajeva) dok se potreba za češćom individualnom podrškom darovitim učenicima u ovom periodu pojavila samo u 6% slučajeva. Čak 32% stručnih suradnika procjenjuje da je darovitim učenicima rjeđe bila potrebna individualna podrška. Osim povećanja pružanja direktne podrške srednjoškolcima stručni

suradnici su i češće komunicirali s nastavnicima vezano uz pružanje podrške učenicima s teškoćama u razvoju (u 56% slučajeva), međutim samo u 12% slučajeva češće kada su u pitanju daroviti učenici.

Iz navedenog se može zaključiti kako se u razdoblju pandemije bolesti COVID-19 značajno povećao opseg pružanja podrške učenicima učenicima s teškoćama u razvoju. Rezultati će biti razmatrani i s obzirom na vrstu škole koju učenici pohađaju, profil stručnih suradnika te radni staž, a u sklopu teorija inkluzivnog odgoja i obrazovanja.

Ključne reči: pandemija bolesti COVID-19, podrška, posebne potrebe, srednjoškolci, stručni suradnici

Providing support to high school students with special needs during the COVID-19 pandemic from the perspective of professional associates

The aim of this paper is to show how professional associates provided support to high school students during the COVID-19 pandemic, with special emphasis on students with special needs. The direct support to students by professional associates (individual support to students with disabilities and gifted students) and additional communication of professional associates with teachers related to providing support to them as well as estimation of additional teacher support to students with special needs were checked. Students with special needs (gifted and with disabilities) were identified based on the assessments of professional associates.

Professional associates (N=192, 35.8% pedagogues and 30.1% psychologists, 93% women) from all over Croatia who work in vocational schools, gymnasiums and mixed secondary schools participated in the research .The research was conducted as part of the project "National monitoring of the effects of the COVID-19 disease pandemic on the education system of the Republic of Croatia" conducted by the Institute for Social Research in Zagreb and funded by the Ministry of Science and Education. For the needs of this project, all measuring instruments (questionnaires) were created, and the entire research was conducted online.

A national survey, from the perspective of professional associates, showed that most schools were prepared for the second wave of the COVID-19 pandemic (approximately 95% of professional associates stated that their school was to a large extent prepared for the organization of teaching). Compared to the period before the COVID-19 pandemic, professional associates achieved equal communication with high school students (36% less often, 31% equally, and 33% more often), but meetings and / or workshops with students were less frequent (64%), and more often they had to monitor student absences and school achievement (40%).

In working with students with special needs, the provision of individual support to students with disabilities significantly increased (support was needed more often in 34% of cases), while the need for more frequent individual support to gifted students appeared in only 6% of cases. As many as 32% of professional associates estimate that gifted students were less likely to need individual support. In addition to increasing the provision of direct support to high school students, professional associates also communicated more often with teachers regarding the provision of support to students with disabilities (in 56% of cases), but only in 12% of cases more often when it comes to gifted students.

Generally, it can be concluded that during the pandemic of the COVID-19 disease, the scope of providing support to students with disabilities were particularly affected. The results will also be considered with regard to the type of school that students attend, the profile of professional associates and their work experience, as well as part of theories of inclusive education.

Keywords: COVID-19 pandemic, high school students, professional associates, special needs, support

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School Psychologists Perception of Students

Introduction: The COVID 19 pandemic itself has caused anxiety, stress, grief, panic attacks and worries. Children from elementary and secondary school have been affected in many aspects: threats to their own wellbeing, family's and friend's health, schools were closed. During this period, an informal network #TOGETHERFORMENTALHEALTH was established in Macedonia, providing support to school psychologists. This survey is one of the network activities.

Problem statement: A study to assess the perception of school psychologists about the impact of online education during COVID 19 pandemic on student's mental health.

Research objective is to identify, according to school psychologists' perception, which mental health issues are the most dominant among students.

Method: To create survey, the free online software Google Form was used. Research instrument was based on CHILD & YOUTH MENTAL HEALTH GENERAL SCREENING QUESTIONNAIRE. In addition to these instrument, a set of questions for online education, family violence and cyber bullying was included (relevant literature notified that family violence and cyber bulling is increasing during social isolation and lock down). Unlike the original questionnaire where the respondent is answering the questions, in this survey psychologists were asked to answer questions keeping in mind all students from their school (reconstructed scale was from 0 to 10 where "0" - the statement does not apply to any students at all, and "10", applies to 100% of students). Cronbach's alpha of each sub scale was high (from 0, 75 to 0, 86). Respondents were 52 psychologists from elementary school.

Results: Considering mood, psychologists perceive students as less interest and satisfied in normal activities; less happy, but not depressed. They do not notice an intensification of anxiety manifested as a concern for the future. There has been a decrease in concentration and focus on completing tasks, difficulties in attending online classes, loss of interest in learning and a reduction in school success. Mostly

psychologists give answer "I do not know" when asked about family violence and cyber bulling.

It is important to point out that psychologist have perceive that younger children following classes with physical presence, did not manifest mental health disturbance.

Conclusion: Having in mind that current pandemic is serious treat, of concern is the fact that school psychologists do not have strategies to recognize mental health issues among children and due to it, to respond appropriately, and it is particularly important for students who may need extra support.

Ultimately, schools must introduce psycho-social intervention programs for on line and off line strategies to recognize mental health issues among children and their family during events that are life-threatening. This programs should be community based, they should include school as well as local community.

Keywords: students, mental health, school psychologists, COVID-19

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Correlations between the zone of actual and the zone of proximal development measured through preschool dynamic assessment and later school performance – the difference between four groups of children

The aim of this study is to explore the relationships between the zone of actual (ZAD) and the zone of proximal development (ZPD) on the one side, and school performance on the other. The study is longitudinal and the ZAD and ZPD were assessed by means of preschool dynamic assessment through the TIP-1 (Test for examining children in the first grade-1) within four groups of children. School performance was measured as the average mark in the fourth and eighth grades during primary school, the mark attained in language and mathematics as well as performance in the final trial test among 110 pupils from the Stevan Čolović primary school in Arilje. During preschool dynamic assessment additional instructions were formulated for each task on the TIP-1 test on two levels, motivational-affective and cognitive, which were available to the examiner in situations when a child was unable to solve the task independently. In that way, the data pertaining to the ZAD,

i.e. independent performance in the TIP-1, and the ZPD, which was measured on the basis of tasks solved in cooperation with a more competent adult in accordance with Vigotsky's sociocultural theory, were obtained for each child. Based on their ZAD and ZPD the children were then divided into four groups. For the low ZAD low ZPD group (N=31, 28,18%), ZAD correlates with the average mark in language in the fourth grade r=,381, p<,05 and with school performance in the fourth grade r=,369, p<,05. For the low ZAD high ZPD group (N=20, 18,18%), there were no statistically significant correlations. For the high ZAD high ZPD group (N=23, 20,91%), cognitive scaffolding correlates with the average mark in mathematics in the fourth grade r=-,459, p<,05 and with school performance in the first semester of the eighth grade r=-,423, p<,05; taking ZAD as the control variable cognitive scaffolding correlates with the average mark in mathematics r=-,468, p<,05. For the high ZAD high ZPD group (N=36, 32,73%), cognitive scaffolding correlates with performance in the language final trial test r=-,352, p<,05 and with the combined trial final test r=-,504, p<,01; taking ZAD as the control variable cognitive scaffolding correlates with the combined final trial test r=-,475, p<,01; ZAD correlates with the combined final trial test r=,343, p<,05. It can be concluded that when measured through preschool dynamic assessment ZAD and ZPD can be used as predictors of later school perfomance in the fourth and eighth grades and in the final trial test. Further, although the sample sizes in these four groups of children were small, differences can be noted between the four groups of children based on their ZAD and ZPD.

Keywords: the zone of proximal development, dynamic assessment, school performance, afffective scaffolding, cognitive scaffolding

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Provera dimenzionalnosti Skale implicitnih teorija inteligencije bifaktorskim modelom

Implicitne teorije inteligencije definišu se kao uverenja pojedinca o (ne)promenljivosti prirode inteligencije. Jedna od konceptualnih dilema odnosi se na pitanja dimenzionalnosti ovog konstrukta. Prema modelu Dvekove, implicitna uverenja o prirodi inteligencije predstavljaju unidimenzionalni, bipolarni konstrukt sa entitetskim (inteligencija se smatra stabilnom, urođenom i nepromenljivom karakteristikom) i inkrementalnim stanovištem (inteligencija se može razvijati

tokom života) kao suprotnim krajevima jednog kontinuuma. Sa druge strane, razultati novijih studija ukazuju na mnogo slabiju povezanost između ova dva faktora što podstiče sumnju u to da li ovaj kontrukt zaista treba tretirati kao unidimenzionalni, višedimenzionalni ili kao višedimanzionalni sa jednom nadređenom dimenzijom. Cilj ovog rada bio je da se ispitaju psihometrijska svojstva Skale implicitnih teorija inteligencije (ITIS) kod učenika srednjih škola. Uzorak je uključivao 495 učenika srednjih škola (44,6% muškog pola) sa teritorije Republike Srbije, prosečne starosti 16,7 godina. Primenjena je skala implicitnih teorija inteligencije (ITIS) koja procenjuje uverenja o prirodi inteligencije. Skala sadrži dva faktora, a to su inkrementalno stanovište (α = 78) i entitetsko stanovište (α = .59). Za potrebe sprovođenja analize izračunata je pozdanost i generalnog faktora koji obuhvata sve ajteme skale (α = .67). Konfirmatornom faktorskom analizom testirano je pet modela: jednofaktorski model, dvofaktorski model sa ortogonalnim dimenzijama, dvofaktorski model sa koreliranim dimenzijama, hijerarhijski model sa jednim generalnim faktorom drugog reda i dva faktora prvog reda i bifaktorski model sa generalnim faktorom i dva specifična faktora. Parametri procene fita ukazuju da bifaktorski model sa generalnim i dva specifična faktora najadekvatnije opisuje strukturu empirijskih podataka (CFI = .96; TLI = .95, RMSEA = .07 (.05 - .08); SRMR = .07; χ2 = 193.5; df = 63, p <.01). Nepostojanje razlike između modela koji sadrži generalni faktor i modela koji ne sadrži generalni faktor kao prediktor (F = 0.84, df = 491, p = .36) ukazuju na nisku upotrebnu vrednost bifaktorskog modela u slučaju ove skale iako je ovaj model pokazao najbolje parametre fita. Takođe u prilog niskoj upotrebnoj vrednosti bifaktorskog modela u prilog idu i vrednosti omega koeficijenta koji ukazuje na najveću pozdanost dvofaktorskog modela sa ortogonalnim dimenzijama (inkremetalno stanovište ω = .80; entitetsko stanovište ω = .62) kao i faktorska opterećenja na generalnom faktoru, u okviru bifaktorskog modela, koja su veoma niska za većinu stavki koja pripadaju faktoru entitetskog stanovišta. Rezultati ovog istraživanja potvrđuju nalaze novijih studija koje ukazuju na to da implicitne teorije inteligencije treba tretirati kao višedimenzionalni konstrukt.

Ključne reči: Ključne reči: KFA, bifaktorski model, ITIS, inkrementalno stanovište, entitetsko stanovište.

Using bifactor model to assess the dimensionality of the Scale of implicit theores of intelligence

Implicit theories of intelligence are defined as the individual's beliefs about the (in)variability of the nature of intelligence. One of the conceptual dilemmas refers to the dimensionality of this construct. According to Dweck's model, implicit theories about the nature of intelligence represent a unidimensional, bipolar

construct with entity (intelligence is considered a stable, innate, and unchanging characteristic) and incremental standpoints (intelligence can develop over a lifetime) as opposite ends of a continuum. On the other hand, the results of recent studies indicate a much weaker connection between these two factors, which raises doubts as to whether this constuct should really be treated as unidimensional, multidimensional or multidimensional with one superior dimension. The aim of this study was to examine the psychometric properties of the Implicit Theories of Intelligence Scale (ITIS) in a sample og high school students. The sample included 495 high school students (44.6% male) from the Republic of Serbia, with an average age of 16.7 years. Scale of implicit theories of intelligence (ITIS) that assesses beliefs about the nature of intelligence was applied. The scale contains two factors, the incremental standpoint ($\alpha = 78$) and the entity standpoint ($\alpha = .59$). For the purposes of this study, the reliability of the general factor that includes all items of the scale ($\alpha = .67$) was calculated. Five models were tested by confirmatory factor analysis: one-factor model, two-factor model with orthogonal dimensions, two-factor model with correlated dimensions, hierarchical model with one second-order general factor and two first-order factors, and bifactor model with general factor and two specific factors. Fit parameters indicate that the bifactor model with general and two specific factors most adequately describes the structure of empirical data (CFI = .96; TLI = .95, RMSEA = .07 (.05 - .08); SRMR = .07; $\chi2$ = 193.5; df = 63, p <.01). The absence of a difference between the model containing the general factor and the model without the general factor as a predictor (F = 0.84, df = 491, p = .36) indicates a low use value of the bifactor model in the case of this scale, although this model showed the best fit parameters. Also in favor of the low use value of the bifactor model are the values of the omega coefficient, which indicates the highest reliability of the two-factor model with orthogonal dimensions (incremetal standpoint $\omega = .80$; entity standpoint $\omega = .62$) as well as factor loadings on the general factor, within the bifactor model, which are very low for most items belonging to the entity standpoint factor. The results of this research confirm the findings of recent studies that suggest that implicit theories of intelligence should be treated as a multidimensional construct.

Keywords: Keywords: CFA, bifactor model, ITIS, incremental theories, entity theories.

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Povezanost pasivne prokrastinacije i osobina ličnosti

Prokrastinacija je lična odluka o tome da osobe odlože ili izbegavaju izvršavanje određenih, za njihov napredak važnih zadataka, što utiče kako na postignuće, tako i na lično psihičko blagostanje. Cilj ovog rada je bio da se utvrdi smer i jačina povezanosti prokrastinacije i osobina ličnosti i efekat osobina ličnosti na odlaganje. Uzorak su činile osobe iz Srbije, koje su mađarske nacionalnosti, starosti od 18-67 godina. U istraživanju je ukupno učestvovalo 337 odraslih osoba, 53 muškaraca i 284 žena. Za procenu dimenzija ličnosti korišćen je Inventar Velikih Pet (BFI, 44 ajtema), a za merenje prokrastinacije Takmanova Skala prokrastinacije (16 ajtema), koja je za ove svrhe prevedena sa engleskog na mađarski jezik.

Rezultati su pokazali da Ekstraverzija negativno korelira sa odlaganjem r = -.269, p .001, kao i Prijatnost r = -.235, p .001, Savesnost r = -.672, p .001 i Otvorenost r = -.147, p = .007. Emocionalna nestabilnost je pokazala pozitivnu povezanost prokrastinacijom, r = .241, p .001. Proveravajući vezu starosti i sklonosti ka odlaganjem takođe smo dobili negativnu korelaciju, r = -.258, p .001. Za predikciju prokrastinacije preko osobina ličnosti koristili smo multiplu regresionu analizu, koja je pokazala da one statistički značajno predviđaju prokrastinaciju, $F(5,331) = 56.476$, p < .0001, $R2 = .460$. Od pet osobina varijabla Savesnosti doprinosi značajno (negativno) predikciji, na nivou p < .001, dok je Otvorenost na granici značajnosti na nivou od p = .055.

Ovi rezultati su kadkad u celini, a kadkad delimično u skladu sa prethodnim istraživanjima, od kojih su neka pokazala da je prokrastinacija kao crta ličnosti negativno povezana sa Savesnošću, poneka da je veza pozitivna i sa Neuroticizmom, a između malo specifičnije akademske prokrastinacije i Prijatnosti, kao i Savesnosti je povezanost negativna. Ovaj rad je prvi koji se bavio Takmanovom Skalom prokrastinacije na mađarskom jeziku tako da doprinosi literaturi koja obrađuje tematiku odlaganja.

Ključne reči: ličnost, odlaganje, mađarski uzorak, Srbija

The relationship between passive procrastination and personality traits

Procrastination is a personal decision to delay or avoid performing certain tasks that are important for an individuals' progress, which affects both achievement and personal mental well-being. The aim of this study was to determine the direction and strength of the relationship between procrastination and personality traits and the effect of personality traits on procrastination. The sample consisted of participants from Serbia, who are of Hungarian nationality, aged between 18-67 years. A total of 337 adults, 53 men and 284 women participated in the study. The Big Five Inventory (BFI, 44 items) was used to assess personality dimensions, and the Tuckman Procrastination Scale (16 items), which was translated from English into Hungarian for the purposes of this study, was used to measure procrastination.

The results showed that Extraversion negatively correlated with procrastination r = -.269, p .001, as well as Agreeableness r = -.235, p .001, Conscientiousness r = -.672, p .001 and Openness r = -.147, p = .007. Emotional instability showed a positive association with procrastination, r = .241, p .001. Checking the relationship between age and the propensity to procrastinate, we also found a negative correlation, r = -.258, p .001. For the prediction of procrastination through personality traits, we used multiple regression analysis, which showed that they statistically significantly predict procrastination, F (5,331) = 56,476, p <.0001, R2 = .460. Of the five traits, the trait of Conscientiousness contributes significantly (negatively) to the prediction, at the level of p <.001, while Openness is at the limit of significance, p = .055.

These results are sometimes entirely, sometimes partially in line with previous research, some of which have shown that procrastination as a personality trait is negatively associated with Conscientiousness and that sometimes that connection is positive with Neuroticism; between the slightly more specific academic procrastination and Agreeableness, as well as Conscientiousness, the connection is negative. This paper is the first which uses the Tuckman's Scale of Procrastination in Hungarian language so it contributes to the existing literature, which deals with the subject of procrastination.

Keywords: personality, procrastination, Hungarian sample, Serbia

PSIHOLOGIJA OBRAZOVANJA: PERSPEKTIVA NASTAVNIKA

EDUCATIONAL PSYCHOLOGY: TEACHERS' PERSPECTIVE

Moderators: Jasmina Pekić & Olja Jovanović

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Changes in teaching and learning during the COVID-19 lockdown: A snapshot based on Twitter data from Serbia

This paper reports on a small-scale exploratory study conducted by way of a rapid response to an emerging crisis – the COVID-19 pandemic – and its impact on learning and teaching during the lockdown period. It draws on the Cultural-Historical Activity Theory (CHAT). Under such a framework, the context is of utmost importance for understanding human activity. Any change in the activity system, including change of the context, can produce tensions that arise between the new and the old elements of the activity. In order to better understand emerging changes in the activity system, analysing should not only involve the kinds of activities that people engage in but also who is engaging in the activity, what their goals and intentions are, what objects or products result from the activity, the rules and norms that define the activity, and the larger community in which the activity is taking place. Therefore, the goal of the paper is to describe changes in the activity system of teaching and learning, as well as tensions evoked by the first wave of the COVID-19 pandemic. Social media offers new and promising opportunities for researchers, serving as a space for individuals to express and share their experiences, attitudes and emotions regarding a variety of social phenomena in real-time. During five weeks period, starting from March 16th 2020, when the lockdown was introduced, education-related posts on Twitter were collected one day a week using MAXQDA software. The search for tweets, using the following search strings to retrieve results: nastav*, uče*, učitelj*, obrazov*, škol*, čas*, resulted in 1777 tweets. The tweets were analysed using qualitative content analysis. The descriptive analysis of the posts shows a descending trend in the frequency of the education-related Tweets, starting from 1402 in the first to 92 in the fifth week of the lockdown. The emotional tone of the education-related tweets was predominantly negative, with a steady increase in the percentage of tweets with negative connotation across the time (from 40.8% in the first to 66.7% in the fifth week). The posts were subjected to deductive qualitative content analysis, starting from CHAT framework. The preliminary analysis indicated that the use of new tools, platforms and learning strategies was the only aspect of change in the learning system which was characterized predominantly positive in the tweets we have analyzed. The negative tone of the tweets is mostly evoked by evaluations of learning content as too easy

or too demanding, teachers' competencies as inadequate, and learning experience as meaningless. The findings will be discussed in the context of CHAT.

Keywords: COVID-19 pandemic, education, social media analysis, cultural-historical activity theory

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Factor validity of Emotions in Teaching Inventory in the context of blended learning: a study on a sample of Serbian teachers

Teachers experience a wide range of emotions, most of which arise from management and disciplinary classroom interactions, while good regulation of emotions is considered important for the fulfillment of teaching goals. Academic emotions were traditionally studied in terms of positive and negative emotions, especially within the Control-value theory of achievement emotions, the most influential theory of emotions in an educational context. However, relevant literature suggests that more precise differentiation of academic emotions requires the inclusion of another dimension related to activation. This study aimed to examine the factor validity of the Serbian translation of Emotions In Teaching Inventory- revised (ETI-r) in the context of blended learning, which was the most widely used teaching method in primary schools in Serbia since the fall of 2020 – most learning activities take place online, but there is still a need for face-to-face instructional activities. ETI-r comprises 20 statements, 10 evaluating positive emotions (motivation, pride, confidence, satisfaction, and happiness), and 10 evaluating negative emotions (anxiety, embarrassment, frustration, boredom, and annoyance). The sample included 372 subject teachers from Serbian primary schools (84% female, average age 44.18 years). Principal axis factoring was applied in order to explore the latent structure of the ETI-r scale on the random subsample of 122 respondents. Based on Horn's parallel analysis, three factors of teachers' emotional experiences were identified: 1) Self-complacency (18% of total variance) – emotions arising from satisfaction due to competent fulfilling of the achievement standards; 2) Comfort (17% of total variance) – emotions arising more from relief and less from satisfaction due to fulfilling of achievement standards; 3) Tension (10% of total variance) – emotions arising from pressure regarding fulfilling of achievement

standards. This three-factor solution was further cross-validated using Confirmatory factor analysis with maximum likelihood estimator on the rest of the sample (250 respondents). Results of CFA, after residual covariance between items 15 and 16 was introduced, suggested acceptable fit ($\chi2=247.30$, $\chi2/df=2.15$, CFI=.92, RMSEA (90% CI)=.07(.06-.08), SRMR=.08). All things considered, Serbian translation of ETI-r was shown to be a valid measure of teacher emotions in the context of blended learning. Another significant finding is that the classification of academic emotions based on the general impression regarding achievement standards fulfillment determines both the valence and the activation of specific emotions. Namely, the impression of self-complacency includes positive activating emotions, while the experience of pressure regarding achievement standards includes negative activating emotions. Finally, the experience of relaxation concerning achievement standards includes emotions that have a positive valence but low activation potential.

Keywords: Emotions in Teaching Inventory, factor validity, blended learning

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Socioemotional competences of primary school teachers: differences between whole-class and subject teachers

Scientific evidence shows that teachers' socioemotional competences are an important factor for fostering students' competences through the learning process. Five competences are specially connected to teachers' success in the classroom: self-awareness, self-management, relationship skills, social awareness and responsible decision making. Aim of this research is examining differences in socioemotional competences between whole-class and subject teachers. Secondary, relationship of teachers' socioemotional competences with gender, age, and years of working in education will be investigated. Additionally, relation of fear of COVID-19 and teachers' socioemotional competences will be investigated. Research sample consisted of 817 teachers (15.2% male) from elementary schools in Serbia, age from 23 to 64 ($M = 45.56$, SD =9.35). Teacher social and emotional competences were assessed by Self-Assessing Social and Emotional Instruction and Competencies: A Tool for Teachers (American Institutes for Research) (Yoder, 2014).

Scale FCV-19S (Ahorsu et al., 2020) was used to measure level of primary school teachers' fear of COVID-19. Data was collected online from February to April 2021. Differences between group of whole-class teachers and subject teachers were obtained by MANCOVA. Research results show that whole-class teachers were more competent than subject teachers in self-awareness (F=4.922; p<.05), self-management (F=6.995; p<.05) and relationship skills (F=10.418; p<.05), whilst no differences were found regarding social awareness and responsible decision making. Gender, age, and years of working in education, was not related to any of primary school teachers' socioemotional competence. Fear of COVID-19 was not related to teachers' socioemotional competences. Research results were interpreted in the relation to various factors that differ whole-class from subject teachers (e.g. pedagogical aspects of preservice education, organization of teaching process, professional development, etc.).

Keywords: teachers, socioemotional competences, primary school

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High school mathematics teachers' methods, of teaching, assessment and motivating students: a qualitative study

Mathematics is one of the first STEM subjects that students encounter in school. Continuous learning of mathematics throughout primary education, through various high school and vocational programs during secondary education, shows the importance of mathematics for acquiring the competencies needed to cope with everyday life and to perform in many professions and disciplines. It is therefore important that students become proficient in basic mathematical reasoning. However, the results of PISA research (eg Braš Roth, Markočić Dekanić and Markuš Sandrić, 2017) in the field of mathematical literacy show that Croatian students can perform clearly described procedures and apply simple strategies, but cannot integrate knowledge and connect it with real life situations. To better understand factors underlying these results, we conducted a study aimed at examining high school mathematics teachers' methods of teaching, assessing students' knowledge, and motivating students. The study was qualitative and based on the semi-structured interview method. Six mathematics teachers from general and language

grammar schools in Zagreb participated in the study (five women and one man; age range: 32-62 years). The criterion of saturation (when descriptions of different participants began to repeat themselves), was used to establish the sample size. Participants' responses show that teachers most often use the method of direct frontal teaching, and that they usually assign homework, although some teachers do not regularly check students' solutions and understanding of the assigned mathematical problems. Teachers try to encourage students to find ways to solve mathematical problems on their own, but some of teachers do it when they have enough time for it, and some as a primary way of working. As a rule, low students' motivation and fear of mathematics are among the largest obstacles in teachers' work, and according to our participants, most students do not understand material in-depth. When assessing students' knowledge, all teachers use summative assessment, in which they score both the solution and the process of solving mathematical problems. They also use formative assessment through checking homework and asking questions in class to try to examine students' understanding of the material. Overall, we can conclude that mathematics' teachers in our sample usually manage to a lesser extent to encourage a deeper understanding of the material, connection with everyday life and integration of knowledge, due to low student motivation and excessive workload prescribed by the Ministry of Science and Education. These findings, in addition to shedding light on the reasons why students adopt inert knowledge and routine expertise rather than adaptive expertise, necessary for successful application of knowledge and development of mathematical literacy, help explain the findings of a broader set of studies on typical students' errors in learning mathematics.

Keywords: mathematics; teaching methods; motivation; knowledge evaluation

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Uverenja vaspitača i nastavnika o kreativnosti: od individualizma do aktivizma

Implicitne teorije kreativnosti čini skup uverenja o prirodi i razvoju kreativnosti koji utiče na to kako će kreativnost biti percipirana i kako će biti podržana u realnim uslovima. U tom smislu, uverenja nastavnika o kreativnosti predstavljaju značajan

aspekt njihovog odnosa prema kreativnosti učenika. U saopštenju se predstavljaju rezultati ispitivanja uverenja vaspitača i nastavnika o kreativnosti i njenom ispoljavanju u obrazovnom kontekstu. Cilj studije bio je da se identifikuju uverenja vaspitača i nastavnika koji rade na različitim nivoima formalnog obrazovanja. U ispitivanju su učestvovali vaspitači iz predškolskih ustanova, nastavnici osnovne škole, nastavnici srednje škole i univerzitetski nastavnici (N=645). Među ispitanicima su preovladavale žene (77,7%), dok je prosečna starost ispitanika bila 42 godine. Primenjen je Upitnik za ispitivanje implicitnih teorija o kreativnosti sa otvorenim i zatvorenim pitanjima. Analizirani su odgovori na pitanja o konceptu i ispoljavanju kreativnosti na svim nivoima vaspitanja i obrazovanja. Prikupljeni podaci obrađeni su primenom tematske analize sa unapred definisanim kodnim sistemom u okviru 4P Modela kreativnosti. Kvantitativna analiza je obuhvatila testiranje razlika u uverenjima vaspitača i tri grupe nastavnika. Utvrđeno je da su vaspitači i nastavnici dominantno definisa kreativnost kao kreativnu osobu (ličnost, sposobnosti, motivacija, znanje, talenat), dok su manifestacije kreativnosti češće viđene kao kreativni procesi (kognitivni, ekspresivni, praktični, imaginativni). Određivanje kreativnosti kao svojstva osobe nazvano je implicitni individualizam, a opažanje kreativnosti kao procesa implicitni aktivizam, što je bilo uporedivo sa naučnim teorijama kreativnosti. Dihotomija koja se pojavljuje u naučnim teorijama, gde dominira individualističko tumačenje kreativnosti odraslih i procesno tumačenje kreativnosti dece, kod nastavnika se javlja kao razlika između konceptualizacije i percepcije kreativnosti u obrazovnom procesu. Dobijeni rezultati diskutovani su u kontekstu potrebe za povezivanjem procesnog opažanja ispoljavanja kreativnosti sa individualističkim definicijama kreativnosti radi pružanja adekvatne obrazovne podrške kreativnosti. Obrazovna podrška opravdana je opažanjem kreativnosti kao procesa na koje se može uticati, ali ostaje nejasno da li i kada će ta podrška doprineti razvoju kreativne osobe. Zaključeno je da vaspitači i nastavnici treba da se upoznaju sa sopstvenim uverenjima u cilju izbegavanja njihovih ograničavajućih efekata na kreativnost njihovih učenika i studenata.

Ključne reči: kreativnost, nastavnici, uverenja, definicija, opažanje

Teachers' beliefs about creativity: From individualism to activism

Implicit theories of creativity are a set of beliefs about the nature and nurture of creativity that affect how creativity will be perceived and how it will be supported in real life conditions. In this sense, teachers' beliefs about creativity are relevant aspects of the way they relate to creativity of their students. Here are presented results of a study into teachers' beliefs on creativity and its manifestation in education settings. The goal of the study was to identify beliefs of teachers working at different levels of formal education. Teachers who participated in the study came

from preschool institutions, primary school, secondary school, and higher education (N=645). Majority of participants were women (77.7%), while the average age of the participants was 42 years. It was administered The Implicit Theories of Creativity Questionnaire with multiple open-ended and closed questions. We analyzed teachers' answers to questions regarding their definition of creativity and its manifestation at all levels of schooling. Collected data were analysed by means of thematic analysis with a predefined coding system within the framework of the 4P' Model of creativity. Quantitative analysis included testing differences in beliefs of four groups of teachers. It was found that teachers from all levels of schooling dominantly defined creativity as a creative person (personality, ability, motivation, knowledge, talent), while manifestations of creativity were more frequently seen as a creative process (cognitive, expressive, practical, imaginative). Defining creativity as a creative person was called implicit individualism, and perceiving creativity as a creative process was called implicit activism, which was comparable to scientific theories of creativity. The dichotomy that appears in scientific theories, where the individualistic interpretation of adult creativity and the process interpretation of children's creativity dominate, appears in teachers' beliefs as the difference between conceptualization and perception of creativity in the educational process. The obtained results were discussed in the context of the need to connect the process perception of creativity with individualistic definition of creativity in order to provide adequate educational support for creativity. Educational support is justified by the perception of creativity as a process that can be influenced, but it remains unclear whether and when this support will contribute to the development of a creative person. It was concluded that teachers need to learn about their own beliefs in order to avoid their limiting effects on students' creativity.

Keywords: creativity, teachers, beliefs, definition, perception

RAZVOJNA PSIHOLOGIJA

DEVELOPMENTAL PSYCHOLOGY

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Prilagođavanje starih osoba na vanredno stanje tokom pandemije virusa COVID-19

Glavna razvojna kriza u periodu starosti tiče se gubitka autonomije, snage i osećaja kontrole nad životom. U uslovima pandemije virusa COVID-19 stare osobe su bile izložene dodatnim situacionim izazovima za prilagođavanje. Cilj istraživanja je bio da se ispita prilagođavanje starih (više od 65 godina) na situaciju vanrednog stanja koje je trajalo skoro dva meseca u prvoj polovini 2020. godine (od 15.3. do 6.5. 2020). U pitanju je kvalitativno istraživanje u kome je korišćena metoda polustruktuiranog intervjua za ispitivanje promena načina života tokom pandemije, emocionalnih reakcija i strategija prevladavanja stresa. Intervju su obavili obučeni studenti psihologije tokom aprila 2020. Nakon sprovedenog ispitivanja, ispitivač je imao zadatak da oceni stepen prilagođenosti stare osobe na situaciju. Za potrebe analize u ovom istraživanju izdvojeno je 12 intervjua prema sledećim kriterijumima: zastupljenost muškaraca i žena, zastupljenost starih koji žive samostalno i starih koji žive sa drugim ukućanima. Svi ispitivači su od ranije poznavali ispitanike. Metod korišćen za obradu podataka je tematska analiza, sprovedena u programu QDA Minor. Teme koje su izdvojene iz intervjua su sledeće: promene u zdravstvenom stanju, promene u kretanju i u socijalnim odnosima, socijalna podrška, emotivne reakcije na mogućnost oboljevanja i na uvedene mere, strategije prevladavanja stresa.

Rezultati ukazuju da su svi ispitanici koji su učestvovali u ovom istraživanju, prema proceni istraživača, dobro ili vrlo dobro adaptirani. Registrovano je da postoje razlike u percepciji ograničenja kretanja i teškoće u prilagođavanju na ovo ograničenje u zavisnosti od fizičkih mogućnosti ispitanika - ispitanici koji su se ranije manje kretali su lakše podneli ograničenja. Razlike su registrovane i u vezi sa mestom življenja - ispitanici koji su imali priliku da šetaju u svojim dvorištima procenjivali su da su u boljim uslovima od onih koji žive u stanovima. Nadalje, svi ispitanici su izveštavali o značaju socijalne podrške, instrumentalne i emotivne, kao resursa u procesu prilagođavanja na mere ograničenja. Emotivne reakcije na samo postojanje virusa bile su negativne, od straha i panike, do tuge, tegobe i doživljaja zatvorenosti; dok su reakcije na uvedene mere varirale od ljutnje, preko prihvatanja, do osećaja osramoćenosti i poniženosti. Ispitanici su izveštavali i o izraženom tugovanju usled

nemogućnosti da vide svoje bližnje i provode vreme sa njima, a u susretu sa navedenim emocijama koristili su se različitim strategijama prevladavanja. Samo dva ispitanika su izvestila o fizičkim, dok nijedan ispitanik nije izvestio o većim zdravstvenim promenama. Ispitanici koji nisu doživeli značajnu reorganizaciju u strukturisanju svog vremena pre i nakon uvođenja mera doživeli su manje stresa, ne računajući nemogućnost kretanja i prekinut fizički kontakt sa bližnjima koji je za sve bio visoko stresan. Rezultati se diskutuju u kontekstu relevantnih teorijskih i istraživačkih podataka.

Ključne reči: pandemija, COVID-19, starije osobe, adaptacija

Adaptation on the elderly to the state of emergency during the COVID-19 pandemic

The main developmental crisis in old age concerns the loss of autonomy, strength and a sense of control over life. In the context of the COVID-19 pandemic, the elderly were exposed to additional challenges for adaptation. The aim of the research was to examine the adjustment of the elderly (over 65 years of age) to the state of emergency situation that lasted for almost two months in the first half of 2020 (from March 15 to May 6, 2020). Present qualitative study used the method of a semi-structured interview to examine lifestyle changes during a pandemic, emotional reactions, and coping strategies. The interview was conducted by trained psychology students during April 2020The interviewers had the task to assess the degree of adjustment of the elderly person to the situation. For the purposes of analysis in this study, 12 interviews were selected according to the following criteria: representation of men and women, representation of the elderly living alone and the elderly living with other household members. All the interviewers knew the respondents from before. The method used for data analysis is thematic analysis, conducted in the QDA Minor program. Topics highlighted from the interviews are the following: changes in health, changes in movement and social relations, social support, emotional reactions to the possibility of illness and to the introduced measures, strategies for overcoming stress.

The results indicate that all respondents, according to the interviewers, were well or very well adapted. It has been registered that there are differences in the perception of movement restrictions and difficulties in adjusting to this restriction depending on the physical abilities of the respondents - respondents who used to move less were easier to bear the restrictions. Differences were also registered in relation to the place of residence - respondents who had the opportunity to walk in their backyards estimated that they were in better conditions than those living in apartments. Furthermore, all respondents reported on the importance of social

support, instrumental and emotional, as a resource in the process of adjusting to restrictive measures. Emotional reactions to the very existence of the virus were negative, from fear and panic, to sadness, distress, and feelings of confinement; while reactions to the measures introduced ranged from anger, through acceptance, to feelings of embarrassment and humiliation. Respondents also reported severe grief due to the inability to see their loved ones. Only two respondents reported physical, while none of the respondents reported health changes. Respondents who did not experience a significant reorganization in structuring their time before and after the introduction of the measures experienced less stress, not counting the inability to move and interrupted physical contact with loved ones, which was highly stressful. The results are discussed in the context of relevant theoretical and research data.

Keywords: pandemic, COVID-19, elderly, adaptation

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Zadovoljstvo roditeljskom ulogom kao značajan faktor rezilijentnosti u starosti

Cilj istraživanja je ispitati povezanost zadovoljstva roditeljskom ulogom , kao najčešći izraz generativnih težnji na spremnost prihvatanja promena u poznim godinama.

Uzorak je slučajan i ispitanici su stanovnici Vrbasa i Novog Sada . Ograničen je na 64 osobe zbog pandemije korona virusom.Bilo je 12 osoba muškog pola (PS-66) i 52 osobe ženskog pola (PS-63). Tri dimenzije zadovoljstva roditeljskom ulogom su ispitane petostepenom skalom. Generativnost ispitana adaptiranom Loyola skalom generativnosti a uspešno starenje skalom samoprocene uspešnog starenja.

Jednofaktorska analiza ANOVA je pokazala da ne postoji statistički značajna razlika u zavisnosti od obrazovanja, starosti i pola u nivou samoprocene uspešnog starenja, generativnosti i na nivou sve tri dimenzije roditeljske uloge. Na sve tri dimenzije roditeljstva (zadovoljstvo sobom kao roditeljem, odnosima sa decom i decom) ispitanici su sebe ocenili kao visoko zadovoljne. Opisuju sebe kao relativno generativne, a i osobe koje uspešno stare. Postoji statistički značajna razlika u

odgovorima u zavisnosti od bračnog statusa za varijable zadovoljstva decom (F (2,62)= 3.719, p= . 030) i zadovoljstva odnosima sa decom (F (2,62)= 7.212, p= .002). LSD post-hok pokazuje da oni koji su razvedeni iskazuju statistički značajno niže zadovoljstvo decom i odnosima sa decom od onih koji su u braku, razvedeni i udovci-e.

Na osnovu rezultata možemo konstatovati da su za osećanje sposobnosti da se prilagode promenama u starosti značajan faktor nisu godine starosti već kakav su odnos izgradili sa decom. Značajan je doživljaj sebe kao zadovoljnih roditeljskom ulogom. U životnom ciklusu ispitanika našeg uzorka deca su glavnom otišla iz doma i oni nastoje sačuvati korektne odnose koji ih čine ispunjenim i otpornim na biološke i psihološke promene u starosti. Naši ispitanici su izrazili zadovoljstvo odnosima sa decom, decom i roditeljskom ulogom a i opisali sebe kao osobe produktivne, proaktivne u društvenom pogledu, ličnosti koje ostavljaju trag za sobom. Sve pomenuto kumulativno utiče na doživljaj naših ispitanika kao sposobnih da se lakše nosi sa promenama koje donosi starost.Bračni status se pokazao kao značajan faktor u izražavanju stepena zadovoljstva roditeljstvom, jer partneri koji su u braku izražavaju veće zadovoljstvo nego koji su razvedeni, samci.Preporuke za dalje istraživanje bi mogle biti da ispitamo u kom stepenu su roditelji koji su zadovoljniji roditeljskom ulogom spemniji da se suočavaju sa promenama u starosti.

Ključne reči: uspešno starenje, zadovoljstvo roditeljstvom, generativnost

Satisfaction with parental role as a significant factor of resilience in old age

The aim of the research is to examine the connection between satisfaction with the parental role, as the most common expression of generative aspirations for readiness to accept changes in later years.

The sample is random and the respondents are residents of Vrbas and Novi Sad. It was limited to 64 people due to the coronary virus pandemic. There were 12 males (PS-66) and 52 females (PS-63). Three dimensions of parental role satisfaction were examined on a five-point scale. Generativeness examined by the adapted Loyola generative scale and successful aging by the successful aging self - assessment scale.

One-factor analysis of ANOVA showed that there is no statistically significant difference depending on education, age and gender in the level of self-assessment of successful aging, generativeness and at the level of all three dimensions of parental role. In all three dimensions of parenting (satisfaction with oneself as a parent, relationships with children and children), the respondents rated themselves as highly satisfied. They describe themselves as relatively generative, and people

who age successfully. There is a statistically significant difference in responses depending on marital status for the child satisfaction variables (F (2.62) = 3.719, p =. 030) and child satisfaction (F (2.62) = 7.212, p = .002) . LSD post-hawk shows that those who are divorced show statistically significantly lower satisfaction with children and relationships with children than those who are married, divorced and widowed.

Based on the results, we can conclude that the important factor for feeling the ability to adapt to changes in age is not the age, but what kind of relationship they have built with children. It is significant to experience oneself as satisfied with the parental role. In the life cycle of the respondents in our sample, the children mostly left home and they try to maintain correct relationships that make them fulfilled and resistant to biological and psychological changes in old age. Our respondents expressed satisfaction with the relationships with children, children and the role of parents, and also described themselves as productive, socially proactive people, people who leave a trace behind. All of the above cumulatively affects the perception of our respondents as able to cope more easily with the changes brought by age. Marital status has proven to be a significant factor in expressing satisfaction with parenthood, because married partners express greater satisfaction than divorced, single people. for further research, we could examine the extent to which parents who are more satisfied with their parental role are more willing to face changes in age.

Keywords: successful aging, parental satisfaction, generativeness

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Parental Psychopathic Traits and Its Interaction with Children's Psychopathy Features as Predictors of Perceived Parenting Behavior Five Years Later

The current study investigated parental psychopathic personality and its interaction with children's psychopathy features as predictors of parenting practices five years later. Data were used from the prospective longitudinal ECLAT study including 175 children (MFirst assessment=5.28 years; 80 males and 95 females). At Time 1 parents

rated their psychopathy traits using the Self-Report Psychopathy-Short Form (SRP-SF), whereas kindergarten-teachers rated the child's psychopathy features using the Child Problematic Traits Inventory (CPTI). Five years later, parents rated their parenting practices. Overall, parents' own psychopathy was a stronger predictor of different negative parenting behaviors than the child's personality, with parental callous affect having the strongest associations with parenting behaviors among parental psychopathy dimensions. Similarly, child callous-unemotional traits were the strongest predictor of future parenting. However, out of the 36 possible interactions tested between parental and child psychopathy features predicting future parenting behaviors, only three were significant. Specifically, child Impulsive/need for stimulation appeared to be the most important psychopathy dimension and interestingly, with all parental psychopathy traits interacting with this feature. Overall, these results tend to indicate that, in the presence of parental psychopathy traits, child psychopathy features may have a limited effect on parenting practices, with children high on impulsivity/need for stimulation experiencing the greatest risk for negative and abusive parenting.

Keywords: parenting; parental and child psychopathy; parent-child interaction; longitudinal

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Razlike u procesu sekundarne separacije i individuacije kod adolescenata u Srbiji u odnosu na pol i red rođenja

Proces sekundarne separacije i individuacije podrazumeva redefinisanje postojećih odnosa adolescenata sa roditeljima, i usmeravanje ka postizanju nezavisnosti i autonomije. On podrazumeva psihičku maturaciju, doživljaj nezavisnosti, uz održavanje pozitivnog i bliskog odnosa sa roditeljima. Razrešenje procesa sekundarne separacije i individuacije predstavlja jedan od osnovnih razvojnih zadataka adolescencije, a uspeh u rešavanju doprinosi boljem mentalnom zdravlju, kvalitetnijim interpersonalnim odnosima i formiranju identiteta. Imajući u vidu značaj ovog procesa za dalji razvoj adolescenta i mlade odrasle osobe, ovo istraživanje se bavi ispitivanjem polnih razlika u procesu sekundarne separacije i individuacije kod srpskih adolescenata, kao i ispitivanjem razlika u ovom procesu u odnosu na red

rođenja. Ukupan uzorak sastojao se od 346 ispitanika (muškog pola 49), prosečne starosti od 18,34 godina, sa teritorije Vojvodine, koji su tokom 2020. godine popunjavali u onlajn formatu Test za procenu separacije–individuacije za adolescente (The Separation-Individuation Test of Adolescence, SITA - Levine, Green, & Millon, 1986; adaptacija Smojver-Ažić, 1998) u okviru koga se na našem uzorku izdvaja pet faktora: zdrava nezavisnost; negiranje potrebe za drugima; sputanost zbog roditeljske kontrole; čežnja za detinjstvom i separaciona anksioznost. Kako bi se ispitale polne razlike, od ukupnog ženskog uzorka randomizacijom je odabrano 49 devojaka, kako bi se ujednačile grupe po polu (ne postoje značajne polne razlike u uzrastu poduzorka, t(97)=.664, p=.509). Rezultati t-testa za nezavisne uzorke pokazuju da statistički značajne polne razlike postoje samo na faktoru separaciona anksioznost (t(97)=-4.189, p=.00) u korist devojaka. Kako bi se ispitalo da li postoje razlike u procesu sekundarne separacije i individuacije u odnosu na red rođenja, uzorak je podeljen u dve grupe: grupa adolescenata koji su prvorođeni (N=200) i grupa adolescenata koji su rođeni drugi ili treći po redu (N=146). Rezultati pokazuju da se prvorođeni i drugorođeni adolescenti statistički značajno razlikuju samo kada je u pitanju faktor sputanost zbog roditeljske kontrole (t(344)=2.416, p=.017) i to u korist prvorođenih. Isti rezultati dobiju se i kada se pol uvede kao kovarijetet. Dobijene razlike mogu ukazivati na različit vaspitni stil roditelja momaka i devojaka, kao i prvorođene i drugorođene dece. Socijalizacija i vaspitanje unutar porodičnog sistema devojaka usmereno je primarno na razvoj bliskosti i doživljaja obaveze ka porodičnom sistemu, sa često jasnijim pravilima i povećanim stepenom kontrole. Slično, vaspitni stil prvorođene dece češće je usmeren ka razvoju odgovornosti i poštovanju pravila. Različiti vaspitni stilovi mogu uticati na sam proces sekundarne separacije i individuacije, gde prvorođeni adolescenti i devojke mogu imati poteškoće u ovom procesu usled doživljaja sputanosti u periodu kada teže samostalnosti i individuaciji.

Ključne reči: separacija, individuacija, adolescencija, separaciona anksioznost, red rođenja

Differences in the process of secondary separation and individuation in Serbian adolescents in relation to gender and birth order

The process of secondary separation and individuation implies redefining the existing relations of the adolescents with their parents, and directing them towards achieving independence and autonomy. It implies psychological maturation, the experience of independence, while maintaining a positive and close relationship with parents. Successful resolution of the process of secondary separation and

individuation contributes to better mental health, better interpersonal relationships and identity formation. Having in mind the importance of this process for the further development of adolescents and young adults, this research examines gender differences in the process of secondary separation and individuation in Serbian adolescents, as well as differences in this process in relation to order of birth. The total sample consisted of 346 participants (male 49), average age 18.34 years, from the territory of Vojvodina, who in 2020 filled in via online format Separation-individuation test for adolescents (SITA, Levine, Green, & Millon, 1986; adaptation Smojver-Ažić, 1998) where five factors were extracted in our sample: healthy separation; need denial; engulfment anxiety; nurturance-symbiosis, and separation anxiety. In order to examine gender differences, 49 girls were randomly selected from the total female sample, in order to equalize the groups by gender (there are no significant gender differences in the age of the subsample, t(97)=.664, p=.509). The results of the t-test for independent samples show that statistically significant gender differences exist only in separation anxiety (t(97)=-4.189, p=.00) in favor of girls. In order to examine whether there are differences in the process of secondary separation and individuation in relation to the order of birth, the sample was divided into two groups: the group of adolescents who were first-born (N=200) and the group of adolescents second or third-born (N=146). The results show that first-born and second and third-born adolescents differ statistically significantly only when it comes to the score on the engulfment anxiety due to parental control (t(344)=2.416, p=.017) in favor of first-borns. Same results are obtained when gender is introduced as a covariate. The obtained differences may indicate different parental styles of boys and girls, as well as first and second-born children. Socialization and upbringing of girls within the family system is focused primarily on the development of closeness and experience of commitment to the family, with often clearer rules and increased control. Similarly, the parental style of first-born children is more often directed towards the development of responsibility and respect for rules. Different parental styles can influence the process of secondary separation and individuation, where first-born adolescents and girls may have difficulties in this process due to the experience of restraint in the period when they strive for independence and individuation.

Keywords: separation, individuation, adolescence, separation anxiety, birth order
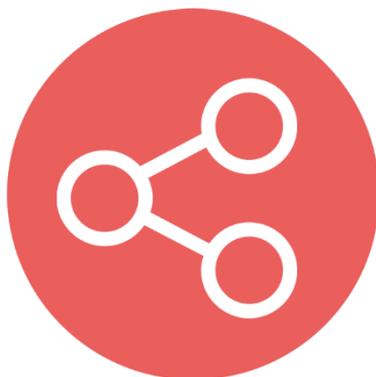
SOCIJALNA PSIHOLOGIJA

SOCIAL PSYCHOLOGY

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COVID-19 vaccination and previous vaccination behaviour: Are old explanatoins still valid?

Vaccination against the novel Coronavirus remains an important topic for scientists as well as officials in the second half of 2021, and will continue to be so until the collective immunity threshold is reached, which entails 67% of the population receiving the vaccine. We were interested in finding whether COVID vaccination can be explained in the same way as general vaccine intentions, or if it is a special case. In previous studies, authors linked COVID vaccination to previous vaccination behaviour, indicating that subjects who had voluntarily been vaccinated in the past were more likely to be vaccinated against the Coronavirus. In addition to previous vaccine behaviour, socioeconomic status and belief in conspiracy theories were examined as predictors of intention to receive the COVID-19 vaccine. In this paper, we wanted to examine the level of COVID-19 vaccine intentions among Serbian respondents, as well as the previously mentioned predictors of these vaccine intentions. Our study was conducted via an anonymous online questionnaire during February 2021, and included 300 Serbian participants over the age of 18. The sample was predominantly female (80%) and of higher education (67%). As a measure of previous vaccination behaviour we asked respondents whether they have previously received or wanted to receive the vaccine against the H1N1 virus ("swine flu") as well as the seasonal flu shot. Vaccine conspiracy beliefs were tested with the 5 item Vaccine conspiracy beliefs scale by Shapiro et al., with the C. Alpha being .95. We measured COVID-19 vaccination intentions asking whether participants already have received the vaccine against Coronavirus, or if they in intend to if they have not. Our results showed that 19% of the respondents have received the COVID vaccine, and 50.6% of the remaining participants intended to. Previous vaccination behaviour had a significant but small correlation with COVID vaccination ($r = .20$, $p = .00$). Vaccine conspiracy beliefs were not only the strongest tested correlate of COVID-19 vaccination ($r = .50$, $p = .00$), but also it's only significant predictor ($\beta = -.48$, $t = -9.73$, $p = .00$), explaining 25% of the variance ($F_{(2, 283)} = 47.51$, $p = .000$, $R2 = .25$). There were no significant differences in previous vaccination behaviour across age groups, but older participants were more willing to get the COVID vaccine ($F_{(2, 283)} = 34.64$, $p = .00$).Our results indicate that previous vaccine behaviour related to seasonal and swine flu and Coronavirus vaccination are separate constructs, which cannot be explained in the same way. It is possible that people see the Coronavirus

as far more serious and pervasive than previously known diseases, and that they cannot count on conventional treatments and resources available to people with higher SES to be as effective in treating COVID as they are for seasonal or swine flu. However, belief in conspiracy theories seems to be a universal strong predictor of vaccination.

Keywords: covid-19, vaccination, conspiracy beliefs

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Protective behaviours during the pandemic: the importance of self-protection and solidarity with others

As an initial response to the spread of the coronavirus, a number of protective measures were announced, such as physical distancing and wearing masks. Recently, vaccines became available as another way to prevent the spread of the virus. Both adherence to protective measures and vaccination can reflect desire to protect oneself from infection. They can also be a sign of compassion and solidarity with others, especially among those who are not at risk of becoming seriously ill.

Therefore, the aim of this study was to explore the importance of self-protection (i.e. the concern of being affected) and solidarity in the prediction of adherence to protective measures and vaccination intentions while controlling for gender and age. Additionally, we have investigated the moderating effect of the perceived risk of severe illness from the coronavirus in the relation between the aforementioned predictors and outcomes.

A total of 945 adults (50.6% women) participated in the study. The mean age was M = 44.96 (SD = 15.40), ranging from 18 to 74. Participants were recruited from the general public of Croatia using the CAWI (computer-assisted web interviewing) method during January of 2021. The sample was a stratified probabilistic sample with gender, age, level of education, size of the place of residence, and region of the country as predetermined strata. All measures were developed for the purpose of this study.

The first regression model with an adherence to protective measures as an outcome variable explained 38.2% of the variance. Results indicate that women (β = .14; t = 5.13; p < .001), those more concerned of being infected (β = .27; t = 7.51; p < .001) and

those who show more solidarity during pandemic (β = .44; t = 12.76; p < .001) were more prone to adhere to protective measures. The effect of the solidarity was stronger for those who do not consider themselves to be in a risk group (β = -.17; t = -4.95; p < .001). The second regression model with vaccination intentions as an outcome explained 25.9% of the variance. Men (β = -.10; t = -3.20; p < .01), older participants (β = .16; t = 4.79; p < .001), those more concerned of being infected (β = .20; t = 5.03; p < .001) and those who show more solidarity during pandemic (β = .34; t = 9.01; p < .001) had a greater intention to vaccinate. There was no significant moderation effect of the perceived risk for oneself.

To summarize, the results suggest that both importance of self-protection and solidarity with others play an important role in protective behaviours during the pandemic. However, solidarity with others seems to be especially important. This study findings may be of help in public health campaign in order to motivate people to persist in protective behaviors during different stages of pandemic.

Keywords: adherence to protective measures, vaccination intentions, importance of self-protection, solidarity with others during the pandemic

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Dark Tetrad traits and perceived threats as predictors of prejudices towards homosexuals

Integrated Threat Theory is one of proposed theories of prejudices which states that prejudices are a result of perceiving outgroup as realistic (e.g., economic threat or threat to national security) or symbolic threat to one's ingroup (e.g., threat to groups values and tradition). The first aim of this research was to explore whether Integrated Threat Theory can be applied to predicting classical (manifested in rejecting particular outgroup, believing in ingroup's superiority etc.) and modern prejudices (manifested as denial of continuing discrimination or believing that particular outgroup has more rights than members of ingroup) towards homosexuals. Furthermore, Integrated Threat Theory postulates that some personality traits can influence viewing other groups as threatening. The second aim of this research was to explore direct effects of Dark Tetrad traits (Machiavellianism, psychopathy, narcissism, and sadism) on prejudice as well as indirect via perceived threats.

The sample consisted of 278 participants (69% female, age M = 31.31, SD = 10.42). Following instruments were used: Levenson Self-Report Psychopathy Scale (LSRP), Mach IV, Narcissistic Admiration and Rivalry Questionnaire (NARQ), Short Sadistic Impulse Scale (SSIS), as well as Massey's Scale of classical and modern prejudices toward homosexuals. Perception of realistic and symbolic threats by homosexuals was assessed via ad hoc constructed items by Zingora and Graf (2019).

The results showed that perception of homosexuals as realistic and symbolic threats predicts both classical (realistic threat β = .40, p < .001; symbolic threat β = .51, p < .001, R2 = .81) and modern prejudices (realistic threat β = .31, p < .01; symbolic threat β = .29, p < .01, R2 = .31) towards homosexuals, suggesting that Integrated Threat Theory can be used to explain prejudices toward homosexuals. Mediation analysis showed significant direct effect of Machiavellianism (95% CI = [-.090, -.001]) on classical prejudice and significant direct effect of Narcissistic Admiration (95% CI = [.01, .13]) on modern prejudice. Furthermore, only Primary Psychopathy had indirect effect on classical prejudice via realistic threats (95% CI = [.01, 14]), while both Primary Psychopathy (95% CI = [.010, .180]) and Sadism (95% CI = [.06, .32]) showed significant indirect effects via symbolic threats. Similar patterns of indirect effects were observed for modern prejudices: only Primary Psychopathy (95% CI = [.002, .068]) showed significant indirect effect via perception of homosexual as realistic threat, while both Primary Psychopathy (95% CI = [.001, .068]) and Sadism (95% CI = [.01, .12]) showed indirect effect via perception of homosexuals as symbolic threat. Our results suggest that Dark Tetrad traits contribute to perception of homosexuals as both symbolic and realistic threats, which, in turn, leads to prejudice.

Keywords: prejudice, homosexuals, dark traits, integrated threat theory

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Intergroup empathy as a mediator of gender differences in attitudes towards refugee children

Since 2016 a number of refugee children have been enrolled in schools in Croatia, and their social relations with domicile peers represent an important aspect of integration into a new society. Considering integration is a two-way process, including host-society and refugees alike, attitudes of domicile children towards refugees can either facilitate or impede this process. Existing research on children's prejudice often finds gender differences in intergroup attitudes and behaviors, with girls reporting less prejudice than boys. While the effect of gender is frequently reported, the underlying mechanisms are an understudied topic. One possible mediator of this effect is intergroup empathy, an intergroup emotion that is usually higher among girls and has already been identified as an important predictor of children's attitudes.

Therefore, the aim of this study was to assess the role of intergroup empathy in the relationship between gender and domicile children's attitude towards refugee children. We conducted a study in one elementary school in Croatia with no prior experience in refugee children integration. Our sample included 108 boys and 117 girls aged 8 to 15 (M = 10.60, SD = 2.263). Participants responded to questions about their overall opinion on refugee children, social distance scale, as well as age-appropriate version of The Index of Empathy for Children and Adolescents.

In line with prior research, boys and girls differed significantly in intergroup empathy and attitudes towards refugee children. Girls reported higher levels of empathy (t(223) = -4.73, p < 0.001), more positive overall attitude (t(222) = -3.27, p < 0.001) and less social distance toward refugees (t(164) = -4.65, p < 0.001). To further examine this gender difference, we conducted two mediation analyses, with intergroup empathy as a potential mediator in these models. Overall model using gender and intergroup empathy as predictors of attitude was statistically significant (R2 = 0.13, F(3,218) = 11.31, p < 0.001). Empathy proved to be a partial mediator of the gender effects. This pattern of relations was replicated when social distance was used as a criterion variable as well. Taken together, the results indicate that gender differences in domicile children's attitudes towards refugee children can at least partially be explained by differences in emotions, i.e. by girls showing more intergroup empathy than boys. The results will be discussed in terms of their implications for future work with domicile children and development of school intervention programs aimed at improvement of their attitudes towards refugee peers.

Keywords: attitudes towards refuges, gender difference, intergroup empathy

SOCIJALNA I PSIHOLOGIJA SPORTA

SOCIAL AND SPORT PSYCHOLOGY

Moderators: Đorđe Čekrlija & Jovana Trbojević Jocić

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Položaj religioznosti, etničke vezanosti i etničke otvorenosti u prostoru ličnosti definisanim osobinama ličnosti Alternativnog Petofaktorskog Modela

Alternativni petofaktorski model ličnosti (AFFM) predstavlja validan teorijski okvir za razmatranje ličnosti, dok osobine ličnosti iz ovog modela pokazuju dobru prediktivnu moć za veliki broj psiholoških varijabli iz domena ličnosti ili pozitivne psihologije. Ipak, konstrukti socijalne psihologije koji se tiču religioznosti ili stavova prema etničkim grupama su rijetko analizirani u okviru ovog modela ličnosti. Cilj ove studije je da istraži veze osobina ličnosti Alternativnog petofaktorskog modela ličnosti (Neuroticizam, Ekstraverzija, Traganje za Senzacijama, Agresivnost i Aktivitet) sa religioznosti i stavovima prema vlastitoj (etnička vezanost) i drugim etničkim grupama (etnička otvorenost).

Istraživanje je sprovedeno pomoću online verzije upitnika i uključilo je 236 ispitanika (135 žena), prosječne starosti 27.03 godina (SD=10.56). Osobine ličnosti su procijenjene upitnikom ZKA-PQ-SF (Zuckerman, Kuhlman-Aluja Personality Questionnaire-Short Form), dok su religiouznost, etnička vezanost i etnička otvorenost procijenjene 19-ajtemskim upitnikom EV-EO-R (Etnička Vezanost-Etnička Otvorenost-Religioznost). Podaci su analizirani multiplom regresionom analizom.

Rezultati pokazuju značajne relacije između alternativnih pet osobina ličnosti i: religioznosti (R=.060, F(5,230)=2.927, p=<05), etničke vezanosti (R=.089, F(5,230)=4.477, p<.001) i etničke otvorenosti (R=.089, F(5,230)=4.182, p=<.001). Značajni prediktori religioznosti su Ekstraverzija (β=.20, p<.01, ρ=.168) i Aktivitet (β=.15, p<.05, ρ=.130), dok su Agresivnost (β=.26, p<.001, ρ=. 208) i Ekstraverzija (β=.20, p<.05, ρ=.155) značajni prediktori etničke vezanosti. Pored toga, Agresivnost (β=-.22, p<.01, ρ=-.180), Ekstraverzija (β=.22, p<.01, ρ=.189) i Neuroticizam (β=.20, p<.05, ρ=.155) su bili značajni prediktori etničke otvorenosti.

Može se zaključiti da je Agresivnost najznačajnija osobina ličnosti u predikciji stavova prema etničkim grupama. Ekstraverzija je takođe značajan prediktor za sve zavisne varijable, ali sa manjim doprinosom u objašnjenju varijanse religioznosti i etničke vezanosti. Rezultati koji pokazuju pozitivne veze Agresivnosti sa stavovima prema vlastitoj i drugim grupama su u saglasnosti sa Eysenckovim nalazima o odnosima osobina ličnosti i konzervativizma. Ukupni nalazi ohrabruju dalje razmatranje sličnih

konstrukata iz socijalne psihologije u okviru Alternativnog petofaktorskog modela ličnosti.

Ključne reči: Alternativni petofaktorski model ličnosti, religioznosti, etnička vezanost, etnička otvorenost

The location of religiousness, ethnic attachment and ethnic openness in personality space defined by Alternative Five Factor personality traits

Alternative Five Factor Model (AFFM) represents the valid theoretical framework for the exploration of personality, while the alternative five personality traits show good predictive power for many psychological variables from the personality context or positive psychology. Still, constructs from social psychology related to the religiosity or attitudes toward ethnic groups have been seldomly examined using this personality model. The aim of this study is to explore the AFFM personality traits' (Neuroticism, Extraversion, Sensation Seeking, Aggression and Activity) links with religiousness and attitudes towards our own (ethnic attachment) and other ethnic groups (ethnic openness).

The study was conducted using the online version of the questionnaire and included 236 participants (135 female), with an average age of 27.03 (SD=10.56) years old. Personality traits were estimated using the ZKA-PQ-SF (Zuckerman-Kuhlman-Aluja Personality Questionnaire-Short Form) while religiousness, ethnic attachment and ethnic openness were assessed using 19-items EA-EO-R (Ethnic Attachment-Ethnic Openness-Religiosity) questionnaire. The data was analyzed using the multivariate regression analysis.

The results show a significant relationship between alternative five personality traits and: Religiousness (R=.060, $F_{(5, 230)}$=2.927, p=<05), ethnic attacment (R=.089, $F_{(5, 230)}$=4.477, p<.001) and ethnic openness (R=.089, $F_{(5, 230)}$=4.182, p=<.001). Significant predictors of Religiousness were Extraversion (β=.20, p<.01, ρ=.168) and Activity (β=.15, p<.05, ρ=.130), while Aggressiveness (β=.26, p<.001, ρ=.208) and Extraversion (β=.20, p<.05, ρ=.155) were significant predictors of ethnic attacment. Also, Aggressiveness (β=-.22, p<.01, ρ=-.180), Extraversion (β=.22, p<.01, ρ=.189) and Neuroticism (β=.20, p<.05,ρ=.155) were significant predictors of ethnic openness.

It can be concluded that Aggressiveness was the most significant personality trait in predicting attitudes toward ethnic groups. Extraversion was also a significant predictor for all dependent variables, but with smaller contribution in explaining the variance of religiousness and ethic attachment. Results that describe Aggressiveness's positive association with attitudes toward own ethnic group and

negative association toward others are in line with Eysenck's findings on the relationship between personality traits and conservativism. The overall findings encourage further exploration of similar constructs from social psychology within the Alternative Five Factor Model.

Keywords: Alternative Five Personality Model, religiousness, ethnic attachment, ethnic openness

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Psychometric properties of the Serbian adaptation of the Explicit Aggressive Beliefs and Attitudes Scale

Aggressive beliefs and attitudes are reasoning mechanisms that enable more aggressive individuals to justify and rationalize their aggressive behavior. Explicit Aggressive Beliefs and Attitudes Scale (ABAS) was constructed with a six-factor structure to reflect different aggressive biases: Victimization by powerful other, Derogation of target, Retribution, Hostile attribution, Potency, Social discounting. Validation of the ABAS-short form 8-item scale in the Serbian language showed questionable construct validity and limited informativity, while the validation of the 30-item version in Serbian was not conducted yet. This research aimed to test the assumed six-factor structure of the ABAS, to further explore construct (convergent) validity in relations with Dark Tetrad traits, and to test the reliability of the scale.

Following the back-translation procedure, ABAS was adapted to Serbian by Bojana M. Dinić and Jovana Mandarić. The sample consisted of 194 participants from the general population aged 18 to 59 years (60% female). Results of confirmatory factor analysis showed good fit indices for both original six-factor (DWLS$\chi 2$(390) = 426.06, p = .101, CFI = .992, TLI = .991, RMSEA = .022, 90%CI .000 - .035, SRMR = .073) and hierarchical model (DWLS$\chi 2$(399) = 543.75, p < .001, CFI = .969, TLI = .966, RMSEA = .043, 90%CI .034 - .052, SRMR = .081), but six-factor model has significantly better fit. Correlations between the scales are significant, except between Retribution and Social discounting and between Hostile attribution and Social discounting (r ranged from .07 to .54). Cronbach's alpha coefficients ranged from .60 (Social discounting) to .90 (Victimization by powerful other). The results show that the Retribution subscale which refers to the tendency to logically prioritize vengeance and retaliation rather than conciliation and compromise is the dominant correlate of all

Dark Tetrad traits (Primary and Secondary psychopathy, Machiavellianism, Narcissism, and Sadism), followed by the Hostile attribution and Potency. Victimization and Derogation of target obtained small and positive correlations with Primary psychopathy, Machiavellianism, and Sadism, while Social discounting showed small positive correlations with Secondary psychopathy, Narcissism, and Sadism.

We could conclude that Serbian adaptation of the ABAS could be a useful tool for assessing the explicit aggressive beliefs and attitudes, but it is noticeable that some subscales (e.g., Retribution and Potency) showed moderate to high correlations (around .50) with some of the Dark Tetrad traits, meaning that it is hard to distinguish traits from attitudes. Further research should include improvement of reliability of the Social discounting subscale.

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Fizičko i seksualno nasilje u sportu u Srbiji: učestalost i razlike u odnosu na vrstu sporta i nivo bavljenja sportom

Bavljenje sportom često se spominje u kontekstu faktora koji doprinosi mentalnom i fizičkom zdravlju, te razvoju socioemocionalnih veština. Međutim, pored pozitivnih ishoda, bavljenje sportom može imati negativne posledice po razvoj sportista. Jedna od tema koja tek poslednjih deset godina budi pažnju praktiračara i istraživača je nasilje unutar sporta, koje se ne odnosi na očekivanu grubost i agresivnost koje su neretko sastavni element određenih takmičarskih sportova. Ovo istraživanje bavi se ispitivanjem učestalosti fizičkog, psihičkog i seksualnog nasilja u sportu u Srbiji. Uzorak se sastojao od 84 sportista (13 muškog pola) od koji se 42 bavi estetskim sportom (ritmičkom gimnastikom, vodenim sportovima, plesom) i 42 neestetskim sportom (rukomet, košarka, odbojka, kajak, veslanje), prosečne starosti 18.9 godina, od kojih se 41 bavi sportom na poluprofesionalnom, 20 na profesionalnom i 23 na

rekreativnom nivou. Tokom 2021. godine popunjavali su onlajn upitnik gde su pored sociodemografskih podataka bila uključena pitanja koja se odnose na iskustvo fizičkog, psihičkog i seksualnog nasilja u sportu, kao i ko su bili vršioci takvog ponašanja. Ispitivanje je bilo anonimno i svaki oblik nasilja bio je posebno opisan u samom pitanju, gde su ispitanici odgovarali sa da, ne i nisam siguran/na da sam iskusio/la takvo ponašanje. 17.9% sportista izveštava da je doživelo neki oblik fizičkog nasilja u sportu, dok 4.8% sportista nije sigurno da li je doživelo ovaj oblik nasilja. Kada je u pitanju iskustvo doživljenog psihičkog nasilja u sportu, sportisti izveštavaju da taj oblik nasilja nisu doživeli, dok 31% sportista izveštava da su doživeli neki oblik seksualnog nasilja u sportu, a 14.3% nije sigurno da li su imali to iskustvo. Kako bi se ispitalo da li postoje statistički značajne razlike u iskustvu doživljenog fizičkog, psihičkog i seksualnog nasilja u odnosu na vrstu sporta i nivo bavljenja sportom sproveden je hi-kvadrat test. Rezultati pokazuju da ne postoje statistički značajne razlike u učestalosti iskustva fizičkog nasilja ($\chi2(2,84)=5.513$, p=.064) i seksualnog nasilja ($\chi2(2,84)=2.167$, p=.338) između sportista koji se bave estetskim i neestetskim sportom. Učestalost fizičkog ($\chi2(4,84)=6.532$, p=.163) tj. seksualnog nasilja ($\chi2(4,84)=4.447$, p=.349) nije statistički značajno različita u odnosu na nivo bavljenja sportom. Sportisti su navodili da trener najčešće vrši fizičko (9 slučajeva) i seksualno nasilje (22 slučaja), a zatim drugi sportisti poput saigrača i protivnika (6 slučajeva fizičkog nasilja i 9 slučajeva seksualnog nasilja). Nasilje u sportu zastupljeno je u različitim vrstama sporta i na različitim nivoima bavljenja sportom, što ukazuje na široku rasprostranjenost ponašanja koja nepovoljno utiču na celokupan razvoj pojedinca - sportiste. Iako sprovedeno na malom uzorku sportista, rezultati istraživanja predstavljaju prvi korak u istraživanju procesa nasilja u sportu i pozivaju na veći stepen budnosti u cilju prevencije nasilja u sportu.

Ključne reči: fizičko nasilje, seksualno nasilje, sport, estetski sportovi, neestetski sportovi, trener

Physical and sexual violence in sport in Serbia: frequency and differences in relation to the type of sport and level of participation in sport

Sport is considered as factor that contribute to mental and physical health, and the development of socio-emotional skills. However, in addition to positive outcomes, sports can have negative consequences for the development of athletes. One of the topics that has been attracting the attention of practitioners and researchers for the last ten years is violence within sports, which does not refer to the expected roughness and aggression, which are often an integral element of certain competitive sports. This research examines the frequency of physical, psychological

and sexual violence in sports in Serbia. The sample consisted of 84 athletes (13 males), 42 engaged in aesthetic (rhythmic gymnastics, water sports, dance) and 42 in non-aesthetic sports (handball, basketball, volleyball, canoe, rowing), average age of 18.9 years, of which 41 are involved in sports on a semi-professional, 20 on a professional, and 23 on a recreational level. During 2021, they filled out an online questionnaire which, in addition to socio-demographic data, included questions related to the experience of physical, psychological and sexual violence in sports, as well as who were the perpetrators of such behavior. The survey was anonymous and each form of violence was specifically described in the question itself. Results show that 17.9% of athletes report experiencing some form of physical violence in sport, while 4.8% are not sure if they have had that experience. Athletes report that they have not experienced psychological violence in sports, while 31% report that they have experienced some form of sexual violence in sports, and 14.3% are not sure if they have had that experience. In order to examine differences in the experience of physical and sexual violence in relation to the type of sport and the level of sport participation, a chi-square test was conducted. The results show that there are no statistically significant differences in the frequency of experience of physical violence ($\chi 2(2.84)=5.513$, p=.064) and sexual violence ($\chi 2(2.84)=2.167$, p=.338) between athletes who engaged in aesthetic and non-aesthetic sports. Frequency of physical ($\chi 2(4.84)=6.532$, p=.163) ie. sexual violence ($\chi 2(4.84)=4.447$, p=.349) do not statistically significantly differ in relation to the level of sport participation. Athletes stated that the coach most often commits physical (9 cases) and sexual violence (22 cases), followed by other athletes such as teammates and opponents (6 cases of physical and 9 cases of sexual violence). Violence in sports is present in different types of sports and at different levels of sport participation, which indicates the widespread prevalence of behaviors that adversely affect the overall development of the individual - the athlete. Although conducted on a small sample of athletes, the results of the research represent the first step in researching the process of violence in sport and prevention of violence in sport.

Keywords: physical violence, sexual violence, sports, aesthetic sports, non-aesthetic sports, coach

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Osnovne psihološke potrebe i motivacija za bavljenje sportom kao prediktori FLOW doživljaja u sportu

Flow doživljaj, opisivan često kao uronjenost u zadatak ili ,,biti u zoni", predstavlja jedan od značajnih procesa u sportu koji sportisti opisuju kao intenzivno emocionalno, fizičko i kognitivno iskustvo koje nastupa prilikom vrhunca same sportske izvedbe kada postoji i visok stepen kontrole same izvedbe, ali i doživljaj prepuštenosti i automatskog odvijanja akcija. Iz ugla Teorije samoodređenja, zadovoljene osnovne psihološke potrebe (za kompetentnošću, povezanošću i autonomijom) imaju ulogu u razvoju visoko samodeterminišućih oblika motivacije koji su povezani sa kognitivnim, afektivnim i bihejvioralnim ishodima u sportu. Ovo istraživanje ispituje povezanost osnovnih psiholoških potreba, motivacije za bavljenje sportom sa flow doživljajem u sportu. Uzorak se sastojao od 84 sportista (13 muškog pola) koji se bave kolektivnim i individualnim sportovima (npr. rukomet, košarka, odbojka, kajak, veslanje, ples, ritmička gimnastika), prosečne starosti 18.9 godina, od kojih se 41 bavi sportom na poluprofesionalnom, 20 na profesionalnom i 23 na rekreativnom nivou. Istraživanje je sprovedeno tokom početka 2021. godine, a podaci su prikupljeni putem onlajn forme upitnika. Primenjeni su sledeći instrumenti: upitnik za procenu motivacije za bavljenje sportom (The Sport Motivation Scale-II, Pelletier, et al., 2013, adaptirano prema: Trbojević, 2018) koji izdvaja 4 vrste motivacije: unutrašnja-integrisana, identifikovana, spoljašnja-introjektovana i amotivacija; upitnik za procenu zadovoljenja osnovnih psiholoških potreba u sportu (The Basic Needs Satisfaction in Sport Scale-BNSSS, Ng et al., 2011 adaptirano prema: Trbojević, 2018) koji izdvaja potrebu za kompetentnošću, povezanošću i autonomijom; i upitnik za procenu flow doživljaja (Core Flow Scales, Martin & Jackson, 2008). Rezultati jednosmerne hijerarhijske regresione analize pokazuju da sve četiri vrste motivacije i tri psihološke potrebe čine značajan prediktorski set flow doživljaja (F(7,84)=8.557, p=.00) koji objašnjava 43.8% varijanse. Kao značajni individualni prediktori izdvajaju se unutrašnja-integrisana motivacija (β=.312, p=.010) i potreba za kompetentnošću (β=.381, p=.001). Prema Čiksentmihalju, flow doživljaj u sportu može se posmatrati, između ostalog, kroz uravnoteženost između izazova i sposobnosti; jasan cilj, fokusiranost i doživljaj kontrole, što je blisko postavkama Teorije samoodređenja da zadovoljenje osnovnih potreba doprinosi razvoju motivacije koja zatim utiče na kognitivne, afektivne i bihejvioralne ishode. Potreba

za kompetetnoću odnosi se na doživljaj sportiste da može da savlada sportske zadatke i izazove pred sobom, i uverenje da poseduje potrebne sportske veštine, dok unutrašnja motivacija predstavlja motiv i želju sportiste da uživa u procesu učenja, napredovanja i motiv za usavršavanjem uz savladavanje izazova.

Ključne reči: flow doživljaj, motivacija za bavljenje sportom, osnovne psihološke potrebe, unutrašnja motivacija, potreba za kompetentnošću, sport

Basic psychological needs and motivation for sports as predictors of FLOW experience in sports

Flow experience, often described as immersion in a task or "being in a zone", is one of the significant processes in sports that athletes describe as intense emotional, physical and cognitive experience that occurs at the peak of sports performance when there is a high degree of control of performance, but also the experience of indulgence and automatic action. Self-Determination Theory postulates that satisfied basic psychological needs (for competence, relatedness and autonomy) have a role in the development of self-determining forms of motivation that are related to cognitive, affective and behavioral outcomes in sports. This research examines the connection between basic psychological needs, motivation for sports and the flow experience in sports. The sample consisted of 84 athletes (13 males) engaged in collective and individual sports (e.g. handball, basketball, volleyball, canoe, rowing, dancing, rhythmic gymnastics), with an average age of 18.9 years, of which 41 at semi-professional, 20 at professional, and 23 at a recreational level. The research was conducted during the beginning of 2021, data were collected online. The following instruments were used: The Sport Motivation Scale-II (Pelletier, et al., 2013, adapted by: Trbojević, 2018) which distinguishes 4 types of motivation: internal-integrated, identified, external-introjected and amotivation; The Basic Needs Satisfaction in Sport Scale-BNSSS (Ng et al., 2011 adapted by: Trbojević, 2018) which highlights the need for competence, relatedness and autonomy; and a Core Flow Scales (Martin & Jackson, 2008). The results of regression analysis show that all four types of motivation and three psychological needs represent significant predictor set of flow experiences (F(7.84)=8.557, p=.00) which explains 43.8% of the variance. As significant individual predictors internal-integrated motivation (β=.312, p=.010) and the need for competence (β=.381, p=.001) were singled out. According to Csikszentmihalyi, the flow experience in sports can be observed, among other things, through the balance between challenges and abilities; clear goal, focus and experience of control, which is close to the postulates of the Self-Determination Theory where satisfaction of basic needs contributes to the development of motivation which then affects cognitive, affective and behavioral outcomes. The need for competence refers to the athlete's experience of being able to master

sports tasks and challenges in front of him, and the belief that he has the necessary sports skills, while intrinsic motivation refers to athlete's desire to enjoy learning, progress and motivation to master challenges.

POSTER SEKCIJA

POSTER SECTION

Moderator: Marina Oros

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Predictors of social competence in primary school aged children

Social competencies are developed through interactions between children and their environment However, there are characteristics of a child which can foster or impede the development of social competence. Research shows that cognitive and emotional skills (such as self-regulation and self-efficacy) foster, while emotional and behavior problems impede the development of social competence.

The aim of this study was to examine the relations of self-regulation, risk for psychopathology, self-efficacy with social competence in primary school aged children. We also aimed to examine whether self-regulation, risk for psychopathology, and self-efficacy predicted social competence. A total of 320 students from fifth to eight grade of primary schools participated in the study. Instruments that were used are: Social competence with peers questionnaire (Spence, 1995), Questionnaire on self-regulation (Novak & Clayton, 2001), Pediatric Symptom Checklist PSC-35 (Jellinek & Murphy, 1988), and Self-efficacy questionnaire – Children, SEQ-C (Muris, 2001). The results have shown a significant positive correlation of social competence with emotional ($r = .25$, $p<0.01$), behavioral ($r = .24$, $p<0.01$), and cognitive ($r = .29$, $p<0.01$) self-regulation, as well as with social ($r = .61$, $p<0.01$), academic ($r = .31$, $p<0.01$), and emotional ($r = .31$, $p<0.01$) self-efficacy, and a significant negative correlation between social competence and risk for psychopathology ($r = -.42$, $p<0.01$). Furthermore, hierarchical regression analysis has shown that better emotional ($\beta = .20$, $p<.01$) and cognitive ($\beta = .18$, $p<.05$) self-regulation, as well as social ($\beta = .67$, $p<.01$) self-efficacy predicted better social competence, while risk for psychopathology predicted poorer social competence ($\beta = -.29$, $p<.01$). The model explained 45% of total variance of social competence. The results confirm the importance of both cognitive and emotional skills in the development of social competence in children. Also, the results suggest that psychopathological symptoms in children may further impede their social competence, which poses additional risks for their social and emotional development.

Our results suggest that, in order to facilitate the development of social competence, efforts should be focused on improving self-regulation and self-

efficacy. Also, they suggest that it is crucial to provide support for their mental health, as emotional and behavioral problems may be significant obstacles in the development of social competence.

Keywords: social competence, self-regulation, self-efficacy, risk for psychopathology

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Ponašanje i stavovi mladih korisnika društvenih mreža

Istraživanja o stavovima i ponašanju mladih na društvenim mrežama na našem području su nekonzistentna i rijetka uprkos činjenici da je ova uzrasna kategorija vulnerabilna za pojavu ovisnosti o društvenim mrežama.

Cilj istraživanja je bio dobiti osnovne informacije o mladima, njihovom boravku i iskustvima na društvenim mrežama i stavovima o tome, a praktični cilj je dobijanje smjernica budućeg rada na prevenciji bihevioralnih ovisnosti i zaštiti mentalnog zdravlja mlade populacije.

Istraživanje je provedeno od marta do juna 2021. godine od strane Odjela za bihevioralne ovisnosti Zavoda za bolesti ovisnosti Zeničko-dobojskog kantona. Uzorak za istraživanje je bio prigodni, sa gotovo podjednakim brojem muških (60) i ženskih ispitanika (61) razvrstanih u tri uzrasne kategorije od 14 do 19 godina. Njima je ponuđeno da anonimno popune Anketni upitnik o društvenim mrežama, njihovom ponašanju na mreži, iskustvima i stavovima.

Rezultati pokazuju da najveći broj mladih svakodnevno posjećuje društvene mreže, te svi imaju otvorene vlastite profile na društvenim mrežama, kao i svi njihovi prijatelji. Na društvenim mrežama polovina ispitanih provodi dnevno više od tri sata, a 88,1% je upozoravano od strane roditelja o predugom boravku na društvenim mrežama.

82,6% izvještava o percepciji nekog vida negativnih posljedica ovog ponašanja, a sa ponašanjem se nastavlja uprkos svjesnosti o negativnom aspektu istog, što se smatra najvažnijom dijagnostičkom smjernicom u procjeni rizika od razvoja ovisničkog ponašanja.

Negativne komentare i ismijavanje kao vid cyber-nasilja je doživjelo 23,1% ispitanih mladih osoba. Da društvene mreže na ljude loše utiču smatra 92,6% ispitanih i žele promjeniti svoje navike (90,1%).

Nije nađena statistički značajna razlika između muških i ženskih ispitanika po navedenim česticama, kao ni između tri uzrasne kategorije.

Ključne reči: ovisnost o društvenim mrežama, bihevioralne ovisnosti

Behavior and attitudes of young users of social networks

Research on the attitudes and behavior of young people on social networks in our area is rare despite the fact that this age category is sensitive to the occurrence of addiction to social networks.

The aim of the research was to get basic information about young people, their use and experiences on social networks and attitudes about them. The practical goal of this research is to obtain guidelines for future work on the prevention of behavioral addiction and the protection of the mental health of the young population.

The research was conducted from March to June 2021 by the Department of Behavioral Addictions of the Institute for Addiction Diseases of Zenica-Doboj Canton. It is a convenience sample for research, obtained by the "snowball" method, and has 121 subjects, with almost equal numbers of male (60) and female subjects (61), classified into three age categories from 14 to 19 years. They were asked to fill out an anonymous questionnaire about social networks, their online behavior, experiences and attitudes.

The results show that the largest number of young people visit social networks every day, and they all have their own profiles open on social networks, as do all their friends. On social networks, half of the respondents spend more than three hours a day, and 88.1% were warned by their parents about staying too long on social networks.

 82.6% report the perception of some kind of negative consequences of this behavior, and the behavior continues despite awareness of the negative aspect of it, which is considered the most important diagnostic guideline in assessing the risk of developing addictive behavior.

23.1% of young people surveyed experienced negative comments and ridicule as a form of cyber-violence. 92.6% of respondents believe that social networks have a bad effect on people and want to change their habits (90.1%).

No statistically significant difference was found between male and female subjects by these particles, nor between the three age categories.

Keywords: social network addiction, behavioral addiction

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Strategies of coping with stress and substance abuse

Stress has long been known to increase vulnerability to addiction. A substantial literature shows the significant association between acute and chronic stress and the motivation to abuse addictive substances. There are some theories which view drug use and abuse as a coping strategy to deal with stress, to reduce tension, to self medicate, and to decrease withdrawal-related distress. From perspective of coping with stress it is assumed that people often use drugs as a coping response to stress, where it is used to improve positive affect or reduction uncomfortable feelings. According to the classic theory of coping with stress, there are various forms of coping strategies. It should be emphasized that these strategies take different forms and are not always defined as functional. The purpose of the study was to discover the correlations of the rate of substance abuse with different functional or dysfunctional stress coping strategies. We hypothesized that a higher rate of substance abuse was positively associated with more functional forms of coping with stress and negatively with less functional forms of coping with stress. The study involved 323 adult participants (random sampling from general population) with mean age of 38,15 years. They completed two questionnaires. The Brief COPE questionnaire, identifying 14 different coping strategies, was used to assess different ways of coping with stress. The substance abuse rate was identified by a sub-dimension of the Individual Problems and Strengths Scale, which assesses the rate of substance abuse (alcohol, illegal drugs or prescribed medication) in the last month in a participant. The results show that a higher rate of substance abuse is statistically significantly positively correlated with coping strategies such as self-blame (ρ=.165, p<.01), denial (ρ=.168, p<.01), substance use (ρ=.591, p<.01), humour (ρ=.111, p<.01), self-distraction (ρ=.098, p<.05), and negatively with positive reframing (ρ=-.096, p<.05), active coping (ρ=-.086, p<.05), planning (ρ=-.115, p<.01) and religiosity (ρ=-133, p<.01). There were, however, no statistically significant

correlations between the substance abuse rate and the use of emotional support, the use of instrumental support, venting and acceptance. The results show a trend that individuals who abuse substances use less functional coping strategies more often. Substance use can also be a way of coping with stress, but it is a non-functional strategy due to which an individual has fewer options for using other functional coping strategies and thus less chance of successfully coping with stress.

Keywords: distress, process of coping, substance abuse, well-being

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The mediation role of Behavior Motivation Systems in the relationship between social anxiety and alcohol consumption

Earlier studies which examined the mediating role of the Behavior Motivation Systems on the relationship between social anxiety and alcohol consumption predominantly focused on the mediating role of Behavioral Inhibition System (BIS) while the effects of the Behavior Approach System (BAS) have been scarcely investigated. Due to these discrepancies, the aim of this study was to look into the complex relationship between social anxiety and alcohol consumption whilst examining whether both, BIS and BAS mediate this association. A total of 301 students of various faculties of the University of J. J. Strossmayer in Osijek, Croatia, of which 135 males and 166 females, age between 18 and 26 (M=20.18; SD=1.41), took part in this study. To determine the level of social anxiety of subjects A brief version of the Fear of Negative Evaluation Scale (Leary, 1983) was used. The intensity of Behavioral Motivational Systems was defined by Carver and White's (1994) BIS/BAS scales while alcohol consumption was measured with Alcohol Use Disorders Identification Test (WHO, 1993). To test mediation effects of Behavior Motivational Systems on the relationship between social anxiety and alcohol consumption a bootstrapping method was performed using SPSS Process Macro. The results of the indirect effect show that the relationship between social anxiety and alcohol consumption has been mediated by BIS (b= -.04, BootstrapCI95 = -.07 and -.02). On the other hand, testing the mediation role of the three facets of BAS, Reward Responsiveness, Fun Seeking and Drive, in the relationship between social anxiety

and alcohol consumption the findings indicate that only Fun Seeking had the mediation effect (b= -.01, BootstrapCI95 = -.02 and -.00).) on the examined relationship. Therefore, the findings explain how individual differences in incentive sensitivity define alcohol consumption for socially anxious people.

Keywords: social anxiety, alcohol consumption, BIS, BAS

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Contribution of physical activity and stress to explanation of emotional well-being during the Covid-19 pandemic

A pandemic of coronavirus disease was declared in February 2020 in Croatia, and series of strict measures were brought, like physical and social distancing. Most businesses and facilities were closed, gatherings were forbidden, and many people worked from home. Consequently, there has been a change in people's lifestyles during home confinement. In general, these conditions have brought changes in physical activity and well-being. The main goal of this research was to explore the relation of emotional well-being and physical activity and stress.

This research was conducted in the period from the middle to the end of May 2020, during the first wave of coronavirus pandemic in Croatia. The research was conducted on 580 participants (409 females), aged 18 to 69 years. Participants completed an online questionnaire comprised demographics, Body mass index (BMI), change of body mass (since the beginning of the epidemic in Croatia), physical activity (International Physical Activity Questionnaire – Short Form, IPAQ-SF), health survey (Short Form Health Survey, SF-36) and level of stress (measuring with one question). Regarding respondents BMI, there was a range from 15.78 to 44.64. Most participants have a normal or healthy weight (55.2%), almost a third is overweight (30%), about 13 percentage is obese (12.8%), and the least of them is underweight (2.1%). Physical activity was assessed using the frequency and duration of walking, physical activity of moderate-intensity, physical activity of vigorous-intensity, and sedentary behaviour. With emotional well-being as a criterion, change of body mass (β = -.097, p = .01), physical activity (β = .106, p = .02), and level of stress (β = -.353, p < .00) explained 21.4% variance of criterion ($F_{(9, 570)}$ = 17.20, p < .00). A measure of body mass was not a significant predictor. The level of stress independently explains 11.6% of the total percentage of explained variance. Results

showed a mediation effect of perceived stress on the association between gender and emotional well-being, wherein male participants with lower levels of stress have greater emotional well-being.

Data shows that those participants with minor or no changes in body mass, those who were more physically active and perceived less stress have better adapted to the new crisis of coronavirus. Physical activity is an important factor, but perceived stress was a more significant predictor of people's emotional well-being during home confinement.

Keywords: emotional well-being, physical activity, stress, Covid-19 pandemic

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Efekat iskustva na uspješnost u Strupovom zadatku

Strupov efekat je kognitivni fenomen koji se odnosi na to da je lakše izgovoriti boju kojom je napisana neka riječ ukoliko se ta boja semantički slaže sa napisanom rječju (*MacLeod*, 1991). Nesaglasnost između naziva boje i boje kojom je riječ napisana dovodi do visokog procenata grešaka i odloženog vremena reagovanja. Uzrok ovog efekta je u interferenciji između dva procesa – čitanja i prepoznavanja boje. Jedno od objašnjenja Strupovog efekta se zasniva na ulozi pažnje u obradi podataka i razlikovanju automatizovanih i kontrolisanih procesa. Automatski procesi su brzi i ne zahtijevaju pažnju u odnosu na kontrolisane koji su spori i uključuju pažnju. U Strupovom zadatku se čitanje javlja kao automatizovan proces, dok je imenovanje boje kontrolisan (*MacLeod*, 1991). Međutim, postoji određen broj istraživanja koja pokazuju da je Strupov efekat podložan uticaju sugestije (Raz, Kirsch, Polalard, & Nitkin-Kaner, 2006), vježbe (Ellis, Woodley-Zanthos, Dulaney, & Palmer, 1989), kao i da je povezan sa kreativnim mišljenjem (Groborz & Necka, 2003; Huejun & Haijuon, 2018). Na osnovu ovih nalaza koji govore o mogućnosti mijenjanja kognitivnog funkcionisanja, cilj ovog istraživanja je bio ispitivanje razlike u uspješnosti izvođenja Strupovog zadatka između umjetnika koji koriste boju kao sredstvo izražavanja i populacije koja se ne bavi takvim vidom djelatnosti. Uzorak je činilo 60 studenata

Univerziteta u Banjoj Luci. Varirana su dva faktora – kongruentnost (kongruentni boja i značenje riječi i nekongruentni boja i značenje riječi) i studijski program (likovna akademija i psihologija). Korišten je klasični Strupov zadatak u kom su ispitanici trebali da odaberu boju stimulusa (riječi) koja im je prikazana. Korišteno je pet boja: crvena, zelena, plava, ljubičasta i smeđa. Ispitanici su davali odgovore pritiskom odgovarajuće tipke na tastaturi. Svaka od pet korištenih tipki je bila obilježena naljepnicom odgovarajuće boje. Svaki ispitanik je prošao kroz 40 izlaganja uz dodatnih pet izlaganja za vježbu. Praćeno je vrijeme reakcije i tačnost u odgovaranju. Dvofaktorska analiza varijanse primjenjena samo za tačne odgovore pokazuje efekat kongruentnosti ($F(1,2375)=29.108$, $p<.001$, $\eta^2=.011$) i efekat studijskog programa ($F(1,2375)=51.854$, $p<.001$, $\eta^2=.020$) na brzinu reagovanja. Dobijena je i statistički značajna dvofaktorska interakcija između kongruentnosti i studijskog programa ($F(1,2375)=8.510$, $p<.01$, $\eta^2=.003$). Kod studenata likovne akademije je bilo kraće vrijeme reagovanja na nekongruentne stimuluse u odnosu na studente psihologije, što implicira postojanje manje interferencije između procesa čitanja i imenovanja boje. Kada je u pitanju broj grešaka, značajan efekat je dobijen samo za kongruentnost ($F(1,2400)=16.651$, $p<.001$, $\eta^2=.006$). Kod nekongruentnih stimulusa su ispitanici pravili veći broj grešaka. Dobijeni rezultati pokazuju da postoji mogućnost oblikovanja kognitivne kontrole na osnovu iskustva i vježbe.

Ključne reči: Stupov efekat, iskustvo, kongruentnost, nekongruentnost

Effect of experience on performance in Stroop task

The Stroop effect is a cognitive phenomenon that refers to the fact that it is easier to pronounce the color in which a word is written if that color semantically agrees with the written word (MacLeod, 1991). The discrepancy between the name of the color and the color in which the word is written leads to a high percentage of errors and delayed reaction time. The cause of this effect is the interference between two processes - reading and color recognition. One explanation of the Stroop effect is based on the role of attention in information processing and the distinction between automated and controlled processes. Automatic processes are fast and do not require attention compared to controlled ones that are slow and involve attention. In Stroop task, reading appears as an automated process, while color naming is controlled (MacLeod, 1991). However, there are a number of studies showing that the Stroop effect is susceptible to suggestion (Raz, Kirsch, Polalard, & Nitkin-Kaner, 2006), exercise (Ellis, Woodley-Zanthos, Dulaney, & Palmer, 1989), and that is associated with creative thinking (Groborz & Necka, 2003; Huejun & Haijuon, 2018). Based on these findings, which speak to the possibility of changing cognitive functioning, the aim of this study was to examine the difference in the performance of Stroop task between artists who use color as a ways of expression and the

population that does not engage in this type of activity. The sample consisted of 60 students from the University of Banja Luka. Two factors were varied - congruence (congruent color and meaning of words and incongruent color and meaning of words) and study program (Art Academy and Psychology). The classic Stroop task was used in which the subjects had to choose the color of the stimulus (word) that was shown to them. Five colors were used: red, green, blue, purple, and brown. Participants gave answers by pressing the appropriate key on the keyboard. Each of the five keys used was marked with a sticker of the appropriate color. Each participant had 40 trials with an additional five trials for exercise. Reaction time and response accuracy were measured. A two-factor analysis of variance applied only to correct answers shows the effect of congruence ($F(1,2375)=29.108$, $p<.001$, $\eta^2=.011$) and the study program ($F(1,2375)=51.854$, $p<.001$, $\eta^2=.020$) on the reaction time. A statistically significant two-factor interaction between congruence and the study program was also obtained ($F(1.2375) = 8.510$, $p <.01$, $\eta^2 = .003$). The students of the Art Academy had a shorter reaction time to incongruent stimuli compared to the students of Psychology, which implies the less interference between the processes of reading and naming color. When it comes to the number of errors, a significant effect was obtained only for congruence ($F(1,2400)=16.651$, $p<.001$, $\eta^2=.006$). In non-congruent stimuli, the subjects made a larger number of errors. The obtained results show that there is a possibility of shaping cognitive control based on experience and exercise.

Keywords: Stroop effect, experience, congruence, incongruence

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Merenje i sklonost pristrasnosti pojednostavljivanja

Sklonost ljudi da prilikom rasuđivanja preferiraju jednostavna naspram složenih objašnjenja, zanemarujući eksplanatornu moć takvog objašnjenja, naziva se pristrasnost pojednostaviljivanja (PP). Normativno, preferencija jednostavnijih modela često se podudara sa većom verovatnoćom da model objašnjava podatke, naročito u domenima percepcije, učenja, pamćenja i rezonovanja. Međutim, pri

rezonovanju važno je odvagnuti između verovatnoće i obuhvatnosti modela za dati skup opservacija. Cilj pilotskog eksperimenta je bio da se konstruišu i provere stimulusi kojima se ispituje PP. Ispitanicima (N = 200, 73% žena) prikazano je 5 hipotetičkih situacija, a njihov zadatak je bio da, među ponuđenim odgovorima, odluče šta je uzrokovalo pojave opisane u tim situacijama. Preciznije, ispitanici su birali jednu od šest mogućnosti koje su obuhvatale tri prosta uzroka sastavljena od po jednog elementa (ponuđenog odgovora), i tri složena tj. tri kombinacije dva elementa. Pristrasnost pojednostavljivanja je registrovana na nivou celog uzorka, na svakom od pet stimulusa (8.820< χ^2 <144.500, df = 1, p < .01). Tokom sprovođenja procedure uočeno je da je moguće razlikovati tri grupe kvalitativno različitih odgovora koje ispitanici daju i to: dva potpuna odgovora (po jedan jednostavan i složen), dva jednostavna nepotpuna i dva složena redundantna. Razlike u odgovorima mogu poslužiti kao indikatori određenih stilova mišljenja koje ispitanik koristi. Cilj druge studije bilo je utvrđivanje povezanosti PP i tipa odgovora koje ispitanici daju sa inhibicijom heurističkih odgovora i sklonošću ka analitičkom mišljenju (CRT), zatim sa stavovima o stilu mišljenja koji podrazumeva veliki broj pokušaja rešavanja problema (AOT) i sa procenom dubokoumnosti pseudodubokoumnih verbalizama (PDV). Ispitanici (N=87 ispitanika, 82% ženskog pola) su u ovoj studiji popunjavali skale AOT, CRT i PDV, a potom su rešavali 10 hipotetičkih situacija analognih onim u studiji 1. Rezultati pokazuju da je na osnovu kombinacije CRT, AOT i PDV moguće predvideti 13.1% varijanse PP (F(3,83)=4.168, p<.01) i to sa AOT kao jedinim značajnim prediktorom (β=.231, t=2.097 p<.05), zatim 35.7% varijanse potpunih odgovora (F(3,83)=15.362, p<.01), 25.6% varijanse nepotpunih (F(3,83)=9.522, p<.01) kao i 17.5% varijanse redundantnih odgovora (F(3,83)=5.852, p<.01). Registrovana je pozitivna korelacija potpunih odgovora sa AOT (β=.330, t=3.479 p<.01) i CRT (β=.361, t=3.323 p<.01), dok su nepotpuni odgovori u negativnoj vezi sa AOT (β=-.345, t=3.390 p<.01), a redundantni sa CRT (β=-.318, t=5.584 p<.05). Na osnovu rezultata može se uočiti tendencija ispitanika koji su skloniji analitičkom i aktivnom mišljenju otvorenog uma da daju odgovore boljeg kvaliteta na vinjetama PP, kao i tendencija ispitanika koji daju odgovore lošijeg kvaliteta da budu skloniji upotrebi heurističkog i mišljenja zatvorenog tipa. Prema tome, može se zaključiti da se PP uklapa u širi kontekst kognitivnih stilova koji mogu doprineti njenom ispoljavanju.

Ključne reči: pristrasnost pojednostavljivanja, kognitivna refleksija, aktivno mišljenje otvorenog uma, pseudodubokoumni verbalizmi

Measuring and the tendecy to simplicity bias

Simplicity bias (SB) is the human tendency to prefer simple over complex explanations when reasoning, ignoring the explanatory power of that explanation. Preferences for simpler explanations often match higher prior probability of a model. However, when reasoning it's of great importance to decide between the probability and the ability of a model to account for as much data as possible. The aim of the pilot study was to construct and test the stimuli for measuring SB. Participants (N=200, 73% female) were shown five hypothetical situations and asked to judge what caused the phenomena described in these situations by choosing a simple or complex explanation. More precisely, participants chose one of the six possibilities, which included three simple causes composed of one element each (answer offered) and three complex ones, i.e., three combinations of two elements. SB was registered in the whole sample, on each of the stimuli ($8.820<\chi2<144.500$, df=1, p<.01). During the pilot study conduction three qualitatively different groups of offered answers were noticed: two complete answers (CA, one simple, one complex), that explain all the given data; two incomplete answers (IA, both simple), that omit to explain a part of the data and two redundant answers (RA, both complex), that explain a part of the given data twice. Those various types of answers may indicate different cognitive styles in participants. Specifically, it is assumed that SB may be related to the disposition to reflect on a question and resist reporting the first response that comes to mind, also to positive beliefs towards open-mided thinking and to receptivity for pseudoprofound bullshit. Study 2 aimed to determine whether there is a relation between SB and Cognitive Reflection Test (CRT), Actively Open-minded Thinking Beliefs scale (AOT) and Pseudoprofound Bullshit Receptivity scale (PPB). Participants in study 2 (N=87, 82% female) firstly completed CRT, AOT and PPB scales, and then were shown 10 hypothetical situations similar to those in the pilot study. The results show that the linear combination of CRT, AOT and PPB can predict 13.1% of the SB variance ($F(3,83)=4.168$, p<.01), with AOT as the only significant predictor ($\beta=.231$, t=2.097 p<.05), 35.7% of the CA variance ($F(3,83)=15.362$, p<.01), 25.6% of the IA variance ($F(3,83)=9.522$, p<.01) as well as 17.5% of the RA variance ($F(3,83)=5.852$, p<.01). Positive correlations between CA and both AOT ($\beta=.330$, t=3.479 p<.01) and CRT ($\beta=.361$, t=3.323 p<.01) are registered, while IA is negatively correlated with AOT ($\beta=-.345$, t=3.390 p<.01), as well as RA with CRT ($\beta=-.318$, t=5.584 p<.05). The results indicate that the people who have the tendency for open-minded and analytical thinking choose higher quality responses on SB stimuli, while lower quality responses are related to heuristical thinking. Hence, it is possible to conclude that SB fits the broader context of cognitive styles, that reversibly can contribute to its manifestation.

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Gender effects in students' emotion regulation strategies and inter-personal emotion management

Studies on emotion regulation (ER) suggested that adequate self-regulation is important for well-being. E.g., strategies focused on antecedents of emotion seemed to show stronger relationships to positive well-being outcomes than strategies focused on suppressing emotions. However, the current views propose that successful ER is not determined simply by the specific strategies used, but rather by the flexibility in using them depending on context. Due to the vital role of socialization (often gender-biased) in ER development, some authors stress that gender differences in ER might be particularly prevalent in the context of flexible ER choice, but this question needs to be studied further. The other line of research found a certain level of consistency in people's propensity to use particular types of strategies in regulating their own emotions and the emotions of others. This study viewed this consistency as a potential indicator of lower ER flexibility.

The aims were: 1) examining the levels of consistency in the tendency to use a particular type of strategies to regulate one's own and other people's emotions; 2) exploring gender differences in the relationships between the intra-personal and inter-personal comparable ER strategies.

We analyzed the responses of N=222 of students from different faculties (age: 18-27; M=22.6, SD=1.86; 55% females). Regulating one's own emotions was assessed using The Emotion Regulation Questionnaire (two subscales). The strategies in managing other people's emotions were assessed using The Interpersonal Emotion Management Scale (four subscales).

The results showed low to moderate levels of consistency in ER: the intrapersonal antecedent-focused strategy was related to antecedent-focused (but not response-focused) interpersonal strategies (r=.23, p=.01 - r=.38, p<.001 for females; r=.40,

p<.001 - r=.59, p<.001 for males). Similarly, an intrapersonal response-focused strategy was related to interpersonal response-focused (but not antecedent-focused) strategies (r=.26, p=.003 in females, r=.35, p<.001 in males).

Using Fisher's Z test to examine gender differences in correlations between intra- and interpersonal strategies, we did not detect significant gender effects on correlations between response-focused strategies. However, we found that intra- and interpersonal strategies of cognitive change were more strongly correlated in males (r=.58, p<.001) than females (r=.23, p<.001), and the difference were statistically significant (p=.002). That could be interpreted as less flexible ER in males, but at the same time, it might reflect a higher transfer of skills in applying the strategy that proved constructive and effective in a wide array of situations. In order to elucidate these different positions, and to address limitations of general tendency measures, we discuss the ways to incorporate context-sensitive elements together with contextually relevant well-being criteria in research designs for future studies.

Keywords: emotion regulation strategies, interpersonal emotion management, consistency, flexibility in emotion regulation

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Profili ličnosti kao prediktori preventivnih zdravstvenih ponašanja tokom pandemije COVID-19

Tokom pandemije COVID-19 značajan faktor u sprečavanju širenja virusa su bile propisane epidemiološke mere. Prethodna istraživanja ukazuju na značajnost tipova ličnosti u predikciji zdravstveno odgovornog ponašanja. Cilj ovog istraživanja bio je ispitivanje prediktivne moći profila ličnosti u predikciji pridržavanja preventivnih zdravstvenih ponašanja tokom pandemije COVID-19. U istraživanju su korišćeni otvoreni podaci dostupni na OSF platformi (Willroth et al., 2021). Podaci su prikupljeni tokom avgusta 2020. godine na američkom uzorku ispitanika. Uzorak je činilo 405 ispitanika (51% ženskog pola), a starost ispitanika kretala se u rasponu od 20 do 81 godine (AS = 44; SD = 13). Za procenu dimenzija ličnosti korišćena je skraćena verzija inventara Velikih pet (BFI-2-XS; Soto & John, 2017). Zdravstveno ponašanje je operacionalizovano putem deset stavki koje procenjuju koliko često se osobe pridržavaju propisanih epidemioloških mera (nošenje maske, fizička distanca, samo-izolacija, dezinfekcija površina i pranje ruku). Kako bi se ekstrahovali profili ličnosti

sprovedena je analiza latentnih profila (LPA), a da bi se ispitala prediktivna moć latentnih profila u predikciji pridržavanja propisanih epidemioloških mera primenjena je hijerarhijska regresiona analiza. Analize podataka sprovedene su u statističkim programima R (R Core Team, 2020) i jamovi (The jamovi project, 2021). Rezultati analize latentnih profila sugerišu rešenje od tri latentna profila/klase ispitanika, pri čemu su sadržaji klasa slični strukturi tipova ličnosti (npr., rezilijentni tip, hipokontrolisani tip i hiperkontrolisani tip) ekstrahovanim u prethodnim istraživanjima (Asendorpf et al., 2001). Takođe, rezultati regresione analize ukazuju na statistički značajan doprinos latentnih profila/klasa u predikciji zdravstvenog ponašnja tokom pandemije COVID-19, pri čemu se ispitanici koji pripadaju latentnoj klasi za koju je karakteristično povišenje na ekstraverziji, prijatnosti, savesnosti, otvorenosti, kao i sniženje na negativnoj emocionalnosti, više pridržavaju propisanih epidemioloških mera. Dakle, različite konfiguracije osobina ličnosti pružaju sveobuhvatniji uvid u ponašanje individua u kontekstu zdravstveno odgovornog ponašanja (pridržavanje u odnosu na nepridržavanje propisanih epidemioloških mera). Značaj ovog istraživanja se ogleda u tome što rezultati mogu biti korisni za kreiranje i implementaciju preventivnih zdravstvenih mera u budućnosti.

Ključne reči: latentni profili, prediktivna moć, zdravstveno ponašanje, pandemija COVID-19

Personality profiles as predictors of preventive health behaviours during the COVID-19 pandemic

During the COVID-19 pandemic, epidemiological measures had a significant role in preventing the spread of the virus. Previous research point out the importance of personality types in the prediction of health-related behaviours. The aim of this study was to assess whether personality types predict compliance with COVID-19 preventive behaviours. In this research open data from the OSF platform (Willroth et al., 2021) were used. Data were collected in August 2020. Sample comprised 405 US participants (51% females) and participants's ages ranged from 20 to 81 years (AS = 44; SD = 13). Personality traits were assessed using the extra-short form of the Big Five Inventory (BFI-2-XS; Soto & John, 2017). To assess preventive health behaviours, on a ten item scale participants rated how often they engaged in recommended health behaviours (mask-wearing, social distancing, self-isolation, sanitizing surfaces, and hand-washing). Latent profile analysis (LPA) was used for the identification of distinct latent classes/profiles of individuals, and hierarchical regression analysis was conducted for assessing the predictive power of personality types in a prediction of preventive health behaviours. Data analysis was conducted in R (R Core Team, 2020) and jamovi (The jamovi project, 2021) statistical software. The results of latent profile analysis suggested the extraction of three latent

profiles/classes whose structures are similar to the structures of personality types (e.g., resilient type, undercontrolled type and overcontrolled type) extracted in previous research (Asendorpf et al., 2001). Moreover, the results of hierarchical regression analysis revealed statistically significant unique contributions of latent profiles in a prediction of preventive health behaviours during the COVID-19 pandemic, suggesting that participants who scored high on extraversion, agreeableness, conscientiousness, open-mindedness, and scored low on negative emotionality were more prone to comply with epidemiological measures. Therefore, different configurations of personality traits can offer a comprehensive insight into the individual's propensity to engage in health-related behaviours (i.d., compliance with epidemiological measures v. non-compliance with epidemiological measures). The present study contributed to the current understanding of how personality types can have an impact on creating and implementing preventive health measures in the future.

Keywords: latent profiles, predictive power, health behaviors, COVID-19 pandemic

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Pozitivan razvoj mladih i uspjeh u obrazovanju

Istraživanje je provedeno u okviru velikog međunarodnog projekta Positive youth development in a crossnational perspective. Jedan od najčešće istraživanih modela pozitivnog razvoja mladih je model koji pozitivni razvoj mladih definira kroz pet čimbenika pozitivnog razvoja nazvanih 5C, a to su: percipirana kompetentnost (eng. competence), samopouzdanje (eng. confidence), snažan karakter (eng. character), socijalna povezanost (eng. connection) i brižnost (eng. caring). Cilj ovog istraživanja bio je ispitati odnos čimbenika pozitivnog razvoja mladih (percipirana kompetencija, samopouzdanje, snažan karakter, brižnost i socijalna povezanost), ovladavanja obvezama i uspjeha u obrazovanju. Ovladavanje obvezama odnosi se na: 1.iniciranje promjena u broju i tipu aktivnosti koje osoba obavlja na svome poslu ili u školovanju, zatim 2. oprez u odabiru društva i prijatelja na poslu, u školi ili na fakultetu i konačno, 3. promjena perspektive koju osoba ima prema svome poslu ili školovanju tako da ih nastoji gledati kao više osobne ili značajne. U tu svrhu, 727 sudionika (srednjoškolaca i studenata preddiplomskog studija) od 15 do 27 godina (M= 18.41, SD= 2.29) ispunili

su skraćenu verziju Upitnika pozitivnih karakteristika mladih (Five Cs of PYD-SF, Geldhof i sur., 2014) te Upitnik ovladavanja obvezama (eng. Job Crafting, Slemp i Vella-Brodrick, 2013). Informacija o uspjehu u obrazovanju dobivena je na način da se studente i učenike pitalo koje ocjene najčešće dobivaju u školi/na fakultetu. Statističkom analizom utvrđeno da su značajni prediktori uspjeha u obrazovanju percipirana kompetentnost (β=.15, p<.01) i ovladavanje obvezama (β=.16, p<.01), a uz to, ovladavanje obvezama parcijalni medijator u odnosu percipirane kompetentnosti i uspjeha u obrazovanju (z= 4.13, p<.01). Ovo istraživanje pokazuje važnost poticanja percipirane kompetentnosti i ovladavanja obvezama na srednjoškolskoj i visokoškolskoj obrazovnoj razini.

Ključne reči: pozitivan razvoj mladih, ovladavanje obvezama, uspjeh u obrazovanju

Positive youth development and educational achievement

The research was conducted within the large international project Positive youth development in a crossnational perspective. One of the most frequently researched models of positive youth development is the model that defines positive youth development through five factors of positive development called 5Cs, namely: competence, confidence, character, connection and caring. The aim of this research was to examine the relationship between the factors of positive youth development (perceived competence, self-confidence, strong character, caring and social connection), job crafting and educational achievement. Job crafting refers to: 1. initiating changes in the number and type of activities that a person performs at work or school, then 2. caution in choosing friends at work, school or college and finally, 3. changing the perspective a person has towards their job or education by trying to view them as more personal or significant. For this purpose, 727 participants (high school students and undergraduate students) aged 15 to 27 (M = 18.41, SD = 2.29) completed an abbreviated version of the Questionnaire of Positive Youth Development (Five Cs of PYD-SF, Geldhof et al., 2014) and the Job Crafting Questionnaire. (Job Crafting, Slemp and Vella-Brodrick, 2013). Information on educational achievement was obtained by asking students what grades they most often receive in school /college. Statistical analysis found that significant predictors of achievement are competence (β=.15, p<.01) and job crafting (β=.16, p<.01), and in addition, job crafting is a partial mediator in relation between competence and educational achievement (z= 4.13, p<.01). This research seeks to emphasize the importance of supporting the competence and job crafting at the secondary and higher education levels.

Keywords: Positive youth development, job crafting, educational achievement

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Attributions of Success and Failure in Math Achievement – Differences between Adaptive and Non-Adaptive Perfectionists

Styles of attributional thinking may influence students' behavior and, indirectly, academic performance and achievement in the classroom. However, specific differences among students can moderate these attributions.

This study's aim was to explore the differences in attributions of success and failure in mathemathics achievement between adaptive and non-adaptive perfectionist adolescents attending gymnasium and vocational schools.

A total of 409 high-school level students (58,7% male; average age= 16,7 years) participated and filled in the Positive and Negative Perfectionism Scale (PNPS); the School Success and Failure Attribution Scale, measuring the locus (internal/external) and (un)stability of attributions, adapted for mathematics classes; as well as a set of demografic (gender, age) questions. Students were categorised in Adaptive, Non-adaptive perfectionists and Non-perfectionists groups using median and quartile range scores on PNP Scale.

Results show a specific profile of Non-adaptive perfectionists with significant differences in comparison to other two groups on all but one (Luck, i.e. external unstable) attribution of success and failure in mathematics. Non-adaptive perfectionist attribute their failure in mathematics achievement by Lack of ability (internal stable) and Coincidence (external unstable), while attributing their success to Teacher favouring them (external stable). Compared to Adaptive and Non-perfectionists, Non-adaptive perfectionists at least attribute their failure to external stable causes (such as teaching environment, the School dimension), while also use Ability the least (internal stable) and as well as Effort (internal unstable) as causes of their achievement success. At the same time, Adaptive perfectionist use Effort the most among other groups as the cause of their success.

The results demonstrate maladaptive attribution use among Non-adaptive perfectionists that could further influence students' academic performance in mathematics. Results also indicate the need for interventions that focus on internal (Ability and Effort) attributions of success and address the Non-adaptive perfectionists students.

Keywords: (non)adaptive perfectionism, math achievement, success and failure attributions

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Aktivno starenje u domovima za smeštaj i negu starih lica tokom pandemije Covid-19

Pozadina: U odgovoru na pandemiju COVID-19, kao zaštitna mera, uvedena su ograničenja u kretanju i socijalnim kontaktima osobama koje su starije od 65 godina, dok su oni koji žive u domovima za smeštaj i negu starih lica, većinu svog vremena proveli u izolaciji. Ove mere su rezultirale manjim učešćem u društvu i izraženim osećajem usamljenosti. Zanimalo nas je, kako je i u kojoj meri, bilo (ne)moguće aktivno stariti u domovima za smeštaj i negu starih lica tokom COVID-19 pandemic.

Ciljevi: Cilj ove studije bio je utvrditi nivo aktivnog starenja kod starijih odraslih osoba u kontekstu izolacije tokom pandemije COVID-19 i istražiti da li socijalno-demografske karakteristike i tipovi stanovanja (dom za smeštaj i negu starih lica / sopstvena kuća) prave razliku, kada je reč o aktivnom starenju starijih odraslih tokom pandemije COVID-19.

Metode: Studija je sprovedena na uzorku od 200 učesnika starijih od 60 godina sa prebivalištem u Novom Sadu i Banjaluci. Koristili smo Skalu aktivnog starenja nazvanu UJACAS, koja se sastoji od 17 pitanja i četiri dimenzije: Ciljevi, Sposobnosti, Prilike i Aktivnosti (Rantanen, Portegijs, Kokko i sar., 2018)

Rezultati: Aktivno starenje stanovnika domova za smeštaj i negu starih lica je vrlo nisko. Najniže skorove postižu na skali aktivnost, potom prilika. Odgovori ispitanika u domenima ciljevi i sposobnosti, takođe, su niži od očekivanih. Starija lica koja žive u domovima penzionera u ruralnim oblastima imaju niži stepen aktivnog starenja u poređenju sa drugima koji žive u ruralnom okruženju. Socio-demografske promenljive, pol, starost, obrazovanje i mesečni prihodi ne utiču na nivo aktivnog starenja.

Zaključci: Ova studija ima važne kliničke i javno-zdravstvene implikacije. Utvrdili smo da je smanjen nivo aktivnog starenja kod starijih osoba tokom pandemije što zahteva stvaranje i sprovođenje preventivnih strategija kako u oblasti zdravstvene zaštite, tako i na nivou zajednice.

Ključne reči: Starije odrasle osobe, Aktivno starenje, Dom za smeštaj i negu starih lica, pandemija Covid-19

Active aging in nursing homes in the Covid - 19 Pandemic

Background: In response to the COVID-19 pandemic, as a protective measure, restrictions were imposed on the movement and social contact of persons over the age of 65, while those residing in retirement homes spent most of their time in isolation. These measures resulted in lower social participation and a pronounced sense of loneliness. We were interested in how and at whichlevel, it was (im)possible to actively age in the retirement homes during the COVID-19 pandemic.

Objectives: The aim of this study was to determine the level of active ageing in older adults within the context of isolation due to the COVID-19 pandemic and to investigate whether socio-demographic features and types of housing (retirement home/own house) make a difference when it comes to active ageing in older adults during the COVID-19 pandemic.

Methods: The study was conducted on a sample of 200 participants over the age of 60 residing in Novi Sad and Banja Luka. We used active ageing scale called UJACAS (Assessment Notes for the University of Jyvaskyla Active Ageing Scale; Rantanen, Portegijs, Kokko i sar., 2018), which consists of 17 questions and four dimensions: Goals, Abilities, Opportunities and Activities.

Results: Active ageing in the retirement homes residents is very low. The lowest results were made on the opportunity subscale. Responses of the participants in the area of aims and abilities are also lower than expected. The elderly, who live in the retirement homes in rural areas have a lower degree of active ageing compared to

others who live in rural environment. Socio-demographic variables, sex, age, education and monthly incomes do not affect the level of active ageing.

Conclusions: This study has important clinical and public health implications. We determined that a decreased level of active ageing in elderly persons during the pandemic which calls for creating and implementing prevention strategies in the field of health care and also on the community level.

Keywords: Older adults, Active aging, Nursing homes, Covid-19 pandemic

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Regulating emotions and some indicators of adjustment among high school students

Emotion regulation (ER) is an ability to change the intensity, duration, or frequency of one's own and/or other people's emotions. Previous studies evidenced the effects of ER on different indicators of adjustment. This study intends to continue this line of research, considering the findings of two widely investigated strategies: reappraisal and suppressing emotional expression and their differential relations to positive and negative (respectively) indicators of adjustment. This study focuses on high school students because of their new developmental tasks, accompanied by more intensive emotional experiences than before, yet still in the process of developing ER skills and critical thinking with regard to particular strategies. Moreover, many adolescents start engaging in some risky behavior in order to handle some emotions like anger or fear.

Risky and harmful behaviors such as smoking can undoubtedly impair the well-being of an individual in the long run (due to numerous harmful effects on physical and mental health), but in the short term, adolescents who smoke perceive this form of behavior as functional in some way. The relationship between ER and smoking has not been studied in the recent literature in this area, and this was the impetus for conducting this study. Based on previous findings on constructive vs. detrimental effects of some emotion regulation strategies, we might hypothesize that cognitive reappraisal could decrease, and suppression could increase the likelihood of persons engaging in risky behaviors. Life satisfaction is a relevant variable that can provide a

broader picture of success in coping with developmental challenges and tasks in adolescents.

The first aim was to examine two ER strategies as predictors of some negative (smoking) as well as positive (life satisfaction) indicators of adolescents' adjustment. The second aim was to explore whether using these ER strategies differed with age or gender.

The data from 297 (age range 16-20, M = 17.33; SD = 0.834; 54.2% girls) high school students (a convenient sample) were analyzed. Two ER strategies, cognitive reappraisal and expressive suppression were measured by the Emotion regulation questionnaire, while global life satisfaction was measured by a general item in Personal Well-being Index.

The results of regression analysis indicated that cognitive reappraisal was a positive predictor of adolescents' life satisfaction. The results also showed it was a negative predictor of smoking, while age was a positive predictor of that behavior. No gender differences in using two ER strategies investigated were found. Concerning age, older participants reported suppressing expressions of emotions somewhat more than younger ones. However, the age effect in using cognitive reappraisal strategy was not found in this study. Potential benefits of enhancing cognitive reappraisal skills in adolescents are discussed.

Keywords: adolescents, emotion regulation, adjustment, smoking, life satisfaction

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Emotional intelligence and moral reasoning in university students

The aim of this study was to investigate the relationship between different emotional intelligence abilities, operationalized according to the model of Mayer and Salovey, and moral reasoning. More specifically, we wanted to test if moral reasoning could be predicted based on different measures of emotional intelligence, and some demographic variables (age, gender and study year). The research was conducted on the convenient sample of N = 331 students of different faculties of University of Osijek (Faculty of Civil Engineering, Faculty of Law and Faculty of Education). Emotional Analysis Test was used to measure abilities of understanding

emotions (third level of Mayer and Salovey's model), Emotion Management Test was used to measure abilities of emotion management (forth level) and Emotional Competence Questionnaire intended to measure self-perception of emotional abilities. Moral reasoning was estimated with Test of Moral Reasoning. Paper-pencil method was used for data collection and data were collected during regular classes. The results showed that of all emotional intelligence variables only results of Emotional Analysis Test were significantly correlated with moral reasoning ($r = 0.19$, $p < 0.01$). Results of hierarchical regression analysis showed that this variable was also a significant predictor of moral reasoning ($\beta = 0.20$, $p < 0.01$). Gender, age or study year were not significant predictors of moral reasoning. According to the results, abilities of understanding emotions represent the relevant factor in explanation of moral reasoning in university students. It is surprising that age nor study year didn't contribute to explanation of moral reasoning, as education in previous research proved to be one of the most important factors in development of moral reasoning. One of the explanations could be that specific experiences while studying are relevant rather than studying per se.

Keywords: moral reasoning, emotional intelligence, university students

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Veza dimenzija religioznosti i etnocentrizma

Istraživanja relacije religioznosti sa predrasudama i etnocentrizmom ukazuju na generalnu tendenciju da pojedinci koji pokazuju veću sklonost ka doslovnom i nepreispitujućem tumačenju religije su takođe skloniji preferiranju socijalnih grupa koje percipiraju kao svoje i odbacivanju vanjskih grupa. U kontekstu ispitivanja veze sa etnocentrizmom, u odnosu na slabije diferencirane i najčešće korištene koncepte intrinzičke, ekstrinzičke i preispitujuće (eng. quest) religioznosti, kasnije konstruisani teorijski i empirijski pristupi religioznosti, poput Modela postkritičkih uvjerenja (PCB) i Posvećenost-refleksivnost Circumplex modela (CRC), pokazali su veću diferenciranost i širu mogućnost objašnjavanja socijalnih motiva kroz religijsku prizmu. PCB model religioznost dijeli u dvije dimenzije – prisustvo i odsustvo transcedencije i doslovna ili simbolička interpretacija religijskih sadržaja, dok su dvije dimenzije CRC modela posvećenost religiji i reflektivnost u odnosu na religiju. Zavisno od stepena prisustva ovih dimenzija, osobe se dijele u dodatne poddimenzije

ovih modela. U ovom istraživanju cilj je bio provjeriti prediktivnu moć prethodno navedenih modela religijskih orjentacija na uzorku ispitanika u Bosni i Hercegovini, pored već, u istraživanjima češće korišćenih prediktora (koncepta ekstinzičke, intrinzičke i preispitujuće religioznosti). Na uzorku od 404 ispitanika (N = 404; 57, 9% žena), korišćenjem linearne regresione analize prvo je ispitana prediktivnost intrinzičke, ekstrinzičke i preispitujuće religioznosti i pri tom je modelom objašnjeno ukupno 12% varijanse etnocentrizma, a značajni prediktori su intrinzička (β = .25; p <.001) i ekstrinzička (β = .24; p = .002), što ne čudi s obzirom da su u domaćim istraživanjima ove dvije religioznosti vrlo rijetko diferencirane i suprotstavljene. PCB model religioznosti je ispitan drugi, pri čemu je objašnjeno ukupno 18% varijanse etnocentrizma. Od četiri dimenzije ovog modela, značajni prediktori bili su ortodoksna religioznost (β = .37; p <.001) koja podrazumijeva prisustvo transcedentalnih religijskih uvjerenja i doslovnu interpretaciju religijskih sadržaja i skepticizam (β= .28; p = .01) koji oslikava odsustvo transedencije i doslovnu interpretaciju religijskih sadržaja. Treći model, u kome su korištene dimenzije CRC modela objasnio je 24% varijanse, pri čemu su značajni prediktori bili religioznost zbog kazne (β = .21; p = .01) i religioznost zbog nagrade (β = .20; p = .007), koje pripadaju dimenziji posvećeno-nereflektivne religioznosti prema CRC modelu i oslikavaju odsustvo sklonosti ka preispitivanju i visok nivo posvećenosti religioznosti. Rezultati ove studije djelimično repliciraju dobijane nalaze u domaćim i inostranim istraživanjima ali i ukazuju na važnost uključivanja novijih modela religioznosti koji daju jasniju sliku odnosa religijskih orjentacija sa etnocentrizmom. U diskusiji se pored navedenog razmatra problem adaptacije instrumenata i prirode specifičnih religijskih orjentacija u našoj kulturi i govornom području.

Ključne reči: religioznost, dimenzije religioznosti, etnocentrizam

Relationship between religiosity dimensions and ethnocentrism

Research on the relationship between religiosity and ethnocentrism indicates a general tendency that individuals who show a greater tendency for a literal and unquestioning interpretation of religion are also more likely to prefer social groups they perceive as their own and to reject external groups. By examining the correlation with ethnocentrism, in relation to weaker differential and most frequently used concepts of intrinsic, extrinsic and quest religiosity, later constructed theoretical and empirical approaches to religiosity, such as Post Critical Belief (PCB) and Commitment – Reflectivity Circumplex CRC), showed greater differentiation and a wider possibility of explaining social motives through a religious prism. In this research, the aim was to test the predictive power of the previous mentioned new models of religious orientation on a sample of participants from Bosnia and Herzegovina, in addition to more commonly used predictors

(intrinsic, extrinsic and quest religiosity). In a sample of 404 participants (N = 404; 57.9% of women), using a linear regression analysis, the predictivity of intrinsic, extrinsic and quest religiosities was first examined, and the model explained a total of 12% of the variance of ethnocentrism. significant predictor were intrinsic (B = .25; p <.001) and extrinsic (B = .24; p = .002) religiosity, which is not surprising given that in domestic research these two religiosity dimensions are very rarely differentiated and opposed. The PCB model of religiosity was examined second, with a total of 18% of the variance of ethnocentrism explained. Significant predictors were orthodoxy (B = .37; p <.001) which implies the presence of transcendental religious beliefs and a literary interpretation of religious content and skepticism (B = .28; p = .01) which indicates the absence of transcendence and literary interpretation of religious content. The third, CRC model of religiosity, explained 24% of the variance. The significant predictors were punishment (B = .21; p = .01) and gain (B = .20; p = .007), both from Committed-Unreflective religiosity domain of CRC model. The results of this study partially replicate the findings found in domestic and foreign research, but also show the importance of testing the newer models of religiosity in the context of some already examined correlates of religious orientations such as ethnocentrism. In the discussion we interpret the results and we also consider if the translation and adaptation of the used instruments is adequate.

Keywords: religiosity, dimensions of religiosity, ethnocentrism

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Relations between attachment, strategies for regulating one's own and others' emotions, and relationship satisfaction

The research objective was to investigate the relations between two attachment dimensions, strategies for regulating own, and managing others' emotions and satisfaction in a love relationship in male and female young adults. In total, N=128 participants noted that they were currently in a romantic relationship (but only one of the partners participated in this study) (75 female, 51 male, and two non-binary). Due to insufficient sample size of the third category, only answers of female and male participants were analyzed (age: range 18-29, M=22.9, SD=2.47; duration of the

current relationship: 6 months–11 years and one month; M=30.3 months, SD=25.93). The two attachment dimensions (avoidance and anxiety) were measured using the Experiences in Close Relationships Inventory, two self-regulation emotion strategies (reappraisal and suppression) were measured using the Emotion Regulation Questionnaire, four strategies for regulating others' emotions were measured using the Interpersonal Emotion, Management Scale, while relationship satisfaction was measured using The Quality of Marriage Index.

The results of this study showed somewhat different patterns of correlations in male and female participants after the duration of the current relationship was controlled for (partial correlations). The relationship satisfaction in male participants was lower for the ones with pronounced attachment avoidance dimension (r=-.42; p=.002) and those who tend to suppress their partner's emotions (r=-.29; p=.039), while it is higher for the ones who tend to react to their partner's emotions with reappraisal attempts (r=29; p=.038). For female participants, the relationship satisfaction was related only to their attachment dimensions: avoidance (r=-41; p<.001) and anxiety (r=-.53; p<.001). In both males and females, the attachment avoidance dimension was related to the tendency to suppress one's own emotions (r=.35; p=.013 for males, r=.41; p<.001 for females). Males' attachment anxiety dimension relates to a more pronounced tendency to manage their partner's emotions by modifying relevant situations (r=.30; p=.037), while females' attachment anxiety relates to a higher tendency to suppress their own emotions (r=.23; p=.047). Male participants showed quite higher congruency in employing particular group of regulation strategies (e.g. strategies focused on antecedent of emotions) then female participants. The results are discussed concerning possible skills transfer, flexibility in using strategies, and methodological limitations and specifics of this study.

Keywords: attachment dimensions, intrapersonal emotion regulation, interpersonal emotion regulation, relationship satisfaction

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Does Team Collective Efficacy Attenuate Negative Coaching Behaviour and Mediate the Effect of Legitimacy of Unsportsmanlike Conduct on Negative Coaching Behaviour?

Negative coaching behaviour can often go under the radar, especially in the case of team success. It can also be reinforced with the unsportsmanlike conduct of team members. On the other hand, team efficiency may absorb negative coaching behaviour and mediate the effect of the legitimacy of unsportsmanlike conduct on negative coaching behaviour.

Thus, this research aimed to explore the mediating role of collective efficacy in the relationship between unsportsmanlike conduct of handball players and negative coaching behaviour.

One hundred and seventy handball players aged 18 to 35 years (Mage = 21.45 years, SD = 3.21 years; 61 male, 109 female) completed online questionnaires measuring Perceived Legitimacy of Unsportsmanlike Behaviour, Negative Coaching Behaviour, and Observational Collective Efficacy.

Mediation analysis showed that higher collective efficacy predicted less negative coach behaviour and mediated the relationship between the legitimacy of serious fouls and negative coach behaviour, b = .17 [.01, .45]. Higher scores on the perceived legitimacy of serious fouls predicted lower collective efficacy, b = -.56 [-1.01, -.11], which then predicted more negative coaching behaviour, b = -.31 [-.56, -.06]. The mediation role of collective efficacy in the relationship between less serious fouls and negative coach behaviour as well as between legitimacy of verbal aggression and negative coach behaviour was not significant. Direct effects found showed that higher legitimacy of serious fouls, b = .72 [.03 1.47], and higher legitimacy of verbal aggression, b = .66 [.20, 1.11], predicted negative coach behaviour, while higher legitimacy of less serious fouls marginally predicted negative coach behaviour b = .23 [-.02, 0.48].

The findings suggest that collective efficacy may determine the path between the legitimacy of severe fouls and negative coach behaviour. On the other hand, the results indicated that other mechanisms than collective efficiency might mediate the effect of the legitimacy of less severe and less aggressive unsportsmanlike conduct, such as the legitimacy of less serious fouls and verbal aggression, on negative coach behaviour.

The results are discussed within the theoretical and empirical challenges to detect constructs that can attenuate negative coaching behaviour and adverse effects of team and individual factors that may spark it.

Keywords: Negative Coaching Behaviour, Collective Efficacy, Unsportsmanlike Conduct, Handball

TRANSFEROV PODSKUP

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Prikazivanje LGBT populacije u domaćim serijama- analiza sadržaja

Cilj rada je da se kroz analizu sadržaja ispita da li postoje promene u pojavljivanju LGBT populacije u domaćim serijama emitovanim u proteklih deset godina i da li postoje tipični stereotipi u njihovom prikazivanju. Konkretna istraživačka pitanja bila su: kako se prikazuje LGBT populacija u domaćim serijama emitovanim u periodu od 2010. do 2020. godinei da li postoje razlike u broju scena, trajanju, načinu prikazivanja i intenzitetu scena u kojima se pojavljuju ili spominju pripadnici LGBT populacije u ovom periodu. Vremenski okvir je zbog detaljnije analize podeljen u tri vremenska perioda (2010–2013, 2014–2017, 2018–2020). Metodom slučajnog izbora sa spiska serija emitovanih u Srbiji, izabrano je po 10 serija za svaki od tri vremenska perioda (nasumično izabrani redni brojevi serija sa spiska), a zatim novim slučajnim izborom, po pet epizoda svake od tih serija (ukupno 150 epizoda). Kao jedinice analize izdvojene su sve scene u kojima se jasno, otvoreno govori o LGBT populaciji ili likovima (pojavljivanje LGBT likova, eksplicitne scenesa ovim likovima, scene razgovora o LGBT populaciji, isl). Prema načinu prikazivanja scene su klasifikovane u pet kategorija: 1 -veoma negativno (npr. scena nasiljaili izražene diskriminacienad LGBT likovima), 2 -negativno (neodobravanje okoline), 3 -neutralno, 4 -pozitivno,i 5 -veoma pozitivno (npr. scene u kojima je izraženoodobravanje okoline). Kao nivoi eksplicitnosti scena koje prikazuju LGBT populaciju izdvojene su: neutralne scene (prosto pominjanje LGBT populacije, pojavljivanje LGBT lika ili razgovor o tome bez evaluacije), umereno eksplicitne scene (npr. scene izjavljivanja ljubavi, ljubljenja dva LGBT lika), i intenzivne scene (scene seksualne konotacije ili seksualnog akta LGBT likova).

Procenu scena, kategorija i nivoa varijabli, vršila su sva četiri istraživača, uz visok stepen saglasnosti između procenjivača. Rezultati su pokazali da se kroz tri vremenska perioda broj prikazanih scena menjao (F(2) = 135.39, p< .001) i da je najveći u poslednjem periodu. Trajanje scena se nije značajno razlikovalo po periodima. Kada se radi o načinu prikazivanja, ova populacija je u proseku prikazana neutralno (M = 3.2, SD = 1.23), a najčešći način prikazivanja je umereno pozitivan (u 40% scena). Način prikazivanja se nije značajno menjao tokom vremena (F(9) = 1.983, p> .05). Razlike u eksplicitnosti prikazanih scena po periodima nisu statistički značajne ($\chi^2(4)$ = 7.51, p>.05). Najčešće su neutralne scene (68% od svih scena sa

LGBT likovima). Najzastupljenija subpopulacija prikazana u pomenutim scenama je gej populacija (60%).

Serije su deo televizijskog masovnog medija koji ima moć uticaja na ljudsku percepciju realnosti i svakodnevnice. Uzevši u obzir uočljiv porast broja LGBT scena počevši od 2018. godine, možemo pretpostaviti da s jedne strane postoji želja da se utiče na smanjenje negativnih stereotipija i izopštavanja LGBT populacije iz šireg društva, a s druge strane da verovatno postoji veća i šira prihvaćenost LGBT populacije u našoj kulturi i državi, sa pokušajem organizovanog približavanja evropskim vrednostima.

Ključne reči: analiza sadržaja, domaće serije, LGBT populacija

Portrayal of the LGBT population in domestic TV series

The goal of this research was to examine whether there are changes in the appearance of the LGBT population in domestic series in the past ten years, and if there are typical stereotypes in their portrayal, through content analysis.

Specific research questions were: how the LGBT population is portrayed in domestic tv series broadcasted between 2010 and 2020, and whether there are differences in the number or duration of scenes, presentation and intensity of scenes in which members of the LGBT population appear or are mentioned during this period. The time frame was divided into three periods (2010–2013, 2014–2017, 2018–2021).

Using random selection method, 10 series were randomly selected for each time period, five episodes per each series (150 episodes in total). Scenes in which the LGBT population or characters are clearly and openly spoken about (the appearance or sceneswith LGBT characters, scenes portraying conversations about the LGBT population, etc.) were used as units of analysis. According to the way the LGBT population was presented, scenes were classified from 1 - very negative (e.g. scenes of violence or discrimination of LGBT characters), 2 - negative (social disapproval), 3 - neutral, 4 - positive, to 5 - very positive (scenes of social approval). The levels of explicitness of scenes depicting the LGBT population included:neutral scenes (simply mentioning the LGBT population, the appearance of an LGBT character or talking about it without evaluation), moderately explicit scenes (e.g., scenes of declaring love, two LGBT characterskissing), and intense scenes (scenes of sexual connotation or sexual act of LGBT characters). Estimation of scenes, categories and variable levels, was done by all team members, with a high level of agreement.

The highest number of LGBT-related scenes was found in the last period (F(2)=135.39, p<.001). However, the duration of the scenes did not differ significantly

between periods. When it comes to the way of presentation, on average this population is presented neutrally (M=3.2, SD=1.23), but the most common way of presentation is moderately positive (in 40% of scenes). The way of presentation did not vary over time (F(9)=1.983, p>.05), nor did the explicitness of the presented scenes (χ^2(4)=7.51, p>.05). The most commonsceneswere neutral (68% of all scenes with LGBT characters). The most represented subpopulation in those scenes was the gay population (60%).

Series are a part of the television mass media that have power to influence human perception of reality and everyday life. Taking into account the noticeable increase in the number of LGBT scenes starting from 2018, we can assume that on the one hand there is a desire to influence the reduction of negative stereotypes and exclusion of the LGBT population from the wider society, and on the other hand there is probably a greater and wider acceptance of the LGBT population in our culture and country with an attempt to get closer to European values.

Keywords: content analysis, domestic series, LGBT population

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Vaspitni stilovi roditelja i problemi u ponašanju kao determinante iskustva ostracizovanosti kod adolescenata

Ostracizovanost predstavlja ignorisanje i isključivanje osobe iz zajedničkih aktivnosti neke grupe. Loše socijalne kompetencije i problemi u ponašanju mogu predstavljati faktore rizika za ostracizovanost u referentnoj grupi. Budući da istraživanja dosledno pokazuju da roditeljski vaspitni postupci oblikuju različite detetove kompetencije u odnosu sa vršnjacima, u ovom radu je ispitivan doprinos vaspitnih stilova majke i oca, kao i internalizovanih i eksternalizovanih problema, ostracizovanosti deteta u vršnjačkoj grupi. Pretpostavljeno je da vaspitni stilovi roditelja determinišu ostracizovanost deteta i direktno i posredno preko internalizovanih i eksternalizovanih problema.

U istraživanju je učestvovalo 107 punoletnih srednjoškolaca (72 ženskog pola) koji su popunjavali upitnike Procena vaspitnih stilova (Kodžopeljić, 2009), Skrining internalizovanih problema mladih (Renshaw & Cook, 2018), Skrining eksternalizovanih problema mladih (Renshaw & Cook, 2018) i Skalu iskustva

ostracizma kod adolescenata (Gilman, Carter-Sowell, DeWall & Adams, 2013). Ispitanici su zasebno procenjivali vaspitne stilove majke i oca, te je dobijena procena toplog-hladnog i popustljivog-ograničavajućeg stila za svakog roditelja.

Višestruka regresiona analiza je pokazala da hladan (β=.52, t=3.33, p=.001) i popustljiv vaspitni stil majke (β=.28, t=1.98, p=.05) daju doprinos predikciji ostracizovanosti deteta, dok vaspitni stilovi oca nisu dali unikatni doprinos predikciji (ceo model R2=.25, F(4,89)=7.32, p=.001). Utvrđeno je i da ostracizovanost deteta predviđaju intenalizovani problemi (β=.33, t=2.95, p=.004), ali ne i eksternalizovani problemi deteta (β=-.17, t=-1.52, p=.13; ceo model R2=.08, F(4,104)=4.35, p=.02). U analizama medijacije ispitivana je hipoteza o medijatorskom efektu internalizovanih i eksternalizovanih problema na relaciju vaspitnih stilova roditelja i ostracizovanosti deteta u vršnjačkoj grupi. Dobijen je statistički značajan medijatorski efekat internalizovanih problema deteta na odnos između toplog-hladnog vaspitnog stila majke i ostracizovanosti deteta (B=-.079, CI 95%=[-.198, -.006]), dok efekat eksternalizovanih problema nije bio statistički značajan (B=.037, CI 95%=[-.011, .131]). Eksternalizovani i internalizovani problem nisu ostvarili značajan medijatorski efekat na odnos ostracizovanosti deteta i ostalih vaspitnih stilova majke i oca.

Rezultati ove studije potvrđuju ranije nalaze koji sugerišu da vaspitni stil roditelja oblikuje socijalne kompetencije deteta koje mogu odrediti njegovo iskustvo ostracizovanosti u vršnjačkoj grupi. Rezulati pokazuju da je naročito značajan vaspitni stil majke i to prvenstveno afektivna dimenzija odnosa majke i deteta. Hladan odnos majke može podstaći internalizovane probleme kod deteta, koji su povezani sa iskustvom ostracizovanosti. Ipak, budući da se radi o transverzalnom nacrtu, pretpostavke o kauzalnom smeru odnosa treba da budu dodatno proverene.

Ključne reči: ostracizam, vaspitni stilovi, internalizovani problemi, eksternalizovani problemi

Parental styles and behavioral problems as determinants of the experience of ostracism in adolescents

Ostracism is ignoring and excluding a person from the joint activities of a certain group. Poor social competencies and behavioral problems may be risk factors for being ostracized in the reference group. Since research consistently shows that parental upbringing practices shape a variety of child's competencies in peer relations, this paper examines the contribution of mother's and father's parenting styles, as well as internalized and externalized problems, to the ostracism in the peer group. It is assumed that the parenting styles determine the ostracization of the

child both directly and indirectly through the internalized and externalized problems.

Research involved 107 high school students of legal age (72 females). Students filled out the following questionnaires: Assessment of Parenting Styles (Kodžopeljić, 2009), Youth Internalized Problems Screeners (Renshaw & Cook, 2018), Youth Externalizing Problems Screeners (Renshaw & Cook, 2018) and Ostracism Experience Scale for Adolescents (Gilman, Carter-Sowell, DeWall & Adams, 2013). Respondents have assessed mother's and father's parenting styles separately, and the obtained results were a warm-cold and a compliant-limiting style assessment for each parent.

Multiple regression analysis showed that the cold (β=.52, t=3.33, p=.001) and compliant parenting style of a mother (β=.28, t=1.98, p=.05) both contribute to the prediction of the child's ostracization, while the father's parenting styles did not give a unique contribution to this prediction (model summary R^2=.25, $F_{(4,89)}$=7.32, p=.001). It was also found that the internalized problems predict child's ostracization (β=.33, t=2.95, p=.004), but externalized problems don't (β=-.17, t=-1.52, p=.13; model summary R^2=.08, $F_{(4,104)}$=4.35, p=.02). In the mediation analysis, the hypothesis examined stated the mediator effect of internalized and externalized problems on the relation between parenting styles and child's ostracization in the peer group. A statistically significant mediator effect of the child's internalized problems on the relationship between the mother's warm-cold parenting style and the child's ostracization was obtained (B=-.079, CI 95%=[-.198, -.006]), while the effect of externalized problems was not statistically significant (B=.037, CI 95%=[-.011, .131]). Neither externalized nor internalized problems had a significant mediating effect on the relation between the child's ostracization and other parenting styles of mother and father.

Results of this study confirm earlier findings that suggest that parenting styles shape social competencies of the child, which can determine child's experience of ostracism among peers. Results show that there's a special importance of mother's parenting style, primarily the affective dimension of the mother-child relationship. Mother's cold upbringing practices can trigger internalized problems in a child. Furthermore, these problems are related to the child's experience of ostracism. However, given that the draft of this study was transversal, the assumptions about causal direction of these relations need to be further examined.

Keywords: ostracism, parenting styles, internalized problems, externalized problems

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Validacija paradigme Sajberlopte za indukovanje ostracizma

Pojam ostracizam podrazumeva ignorisanje i isključivanje individue ili grupe od strane drugih i istraživanja sugerišu da ljudi reaguju snažnim negativnim emocijama na ovakva iskustva. U nastojanju da se eksperimentalno ispitaju reakcije na ostracizam, osmišljena je metoda za indukciju doživljaja ostracizovanosti koja je nazvana Sajberlopta. Sajberlopta je virtuelna igra dodavanja lopte u kojoj ispitanici veruju da igraju sa dve ili više osoba, koje su ustvari kompjuterski kontrolisani karakteri čije ponašanje je manipulisano tako da ispitanik bude ili uključen ili isključen iz dodavanja.

Cilj ovog istraživanja je bio validacija paradigme Sajberlopte, pri čemu su praćene negativne emocije i doživljaj frustracije kao reakcije na ostracizovanost, uz ispitivanje individualnih razlika u načinu reagovanja u vidu potrebe za pripadanjem, narcizma i osetljivosti na odbacivanje.

Ispitanici su bile 64 osobe od 18-30 godina (66% žensko) koje su učestvovale u onlajn eksperimentu u kom je polovina ispitanika dobila ostracizovanu, a polovina neostracizovanu verziju Sajberlopte. Mereni su potreba za pripadanjem, narcizam, osetljivosti na odbacivanje, kao i negativne emocije i frustracija (pretest i posttest).

Utvrđeno da je ostracizovanost u Sajberlopti dovela do povećanja frustracije ($F_{(1,61)}$ = 6.61, p = .01, η^2 = .098), ali ne i na negativnog afekta ($F_{(1,61)}$ = .45, p = .50, η^2 = .007). Međutim, nijedna od merenih osobina ličnosti (potreba za pripadanjem, narcizam, osetljivost na odbacivanje) nije ostvarila značajan moderatorski efekat na uticaj ostracizovanosti na doživljaj negativnih emocija i frustracije (za interakcijski efekat ostracizma i osobina ličnosti ($\Delta R^2 s \leq .01$, $Fs_{(1,59)} \leq 1.18$, $ps \leq .28$).

Rezultati sugerišu da ostracizovanost dovodi do doživljaja frustriranosti, ali ne i negativnih emocija, što je u suprotnosti sa prethodnim istraživanjima. Nalaz o frustraciji kao reakciji na ostracizovanost posredno objašnjava rezultate drugih istraživanja koja povezuju ostracizam sa agresijom, što je u skladu sa teorijom frustracija-agresija. Rezultate koji sugerišu da ostracizovanost nisu pratile negativne emocije, kao i nepostojanje moderatorskog efekta osobina ličnosti treba sagledati iz perspektive metodoloških ograničenja istraživanja, kao što je mali uzorak i druga ograničenja paradigme Sajberlopte.

Ključne reči: ostracizam, negativan afekat, frustracija, osetljivost na odbacivanje, potreba za pripadanjem, narcizam

Validation of the Cyberball paradigm for ostracism induction

Term ostracism defaults to ignoring and excluding some individual or group by others.

Studies suggest that people, in these situations, react with strong negative emotions. In an effort to experimentally examine reactions to ostracism, a procedure, named Cyberball, was devised to induce the experience of ostracism. Cyberball is a virtual game of passing the ball in which subjects believe that they are playing with two or more players, which are in fact computer controlled characters whose behavior is manipulated, so that subject can be engaged or disengaged in passing the ball.

The aim of this experiment was validation of Cyberball paradigm, whereby we followed negative emotions and the experience of frustration, with an examination of individual differences in reaction types in the form of the need to belong, narcissism and rejection sensitivity.

There were 64 subjects with an age range of 18-30 (66% women), who participated in the online experiment; in which half of the participants received ostracized, and half non-ostracized version of Cyberball. The need to belong, narcissism, rejection sensitivity, as well as negative emotions and frustration (pretest and posttest) were measured.

We established that Cyberball ostracism led to increased frustration ($F_{(1,61)} = 6.61$, p= .01, $\eta 2 = .098$), but it didn't effect negative affect ($F_{(1,61)} = .45$, p = .50, $\eta 2 = .007$). However, none of the measured personality traits did achieve significant moderator effect on the impact of ostracization , on the experience of negative emotions and of frustration (for the interaction effect of ostracism and personality traits ($\Delta R 2 s \leq .01$, $Fs_{(1,59)} \leq 1.18$, $ps \leq .28$)).

Results suggest that ostacization leads to the experience of frustration, but not to negative emotions, which is contrary to the previous research. Result of frustration as a reaction to ostracism indirectly explains the results of other research linking ostracism with aggression, which is consistent with frustration-aggression theory. Results which suggest that ostracism hadn't been followed by negative emotions, as well as the absence of moderating effect of personality traits should be viewed from the perspective of methodological limitations of the research, for example: a small sample size and other limitations of Cyberball paradigm.

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Autostereotipi u srpskim dnevnim novinama tokom karantina

Autostereotipi predstavljaju uprošćena, kruta shvatanja, koja se gaje prema pripadnicima vlastite društvene grupe. Oni se delom formiraju pod uticajem medija, a krizni događaji, poput pandemije i vanrednog stanja, mogu predstavljati prelomne periode kada se određeni stereotipi menjaju, ublažavaju ili pojačavaju. Prema Teoriji socijalnog identiteta, pripadnost određenoj grupi dovodi do stvaranja socijalnog identiteta i osećaja pripadnosti, pa nosioci određenog socijalnog identiteta imaju tendenciju da svojoj grupi daju pozitivne evaluacije, dok će prema drugima često gajiti predrasude. U prethodnom istraživanju krajem 90-ih godina, srpski autostereotip sastavljen je isključivo od pozitivnih i veoma izraženih osobina (etnički narcizam), od kojih su najčešći: gostoljubivi, hrabri i iskreni. U sličnoj studiji o etničkoj distanci i autostereotipima na teritoriji BiH, dobijeno je da Srbi sebe opažaju kao: ponosne, hrabre, čiste, i iskrene, ali ponekad naivne.

Cilj ovog istraživanja bio je utvrđivanje najčešćih autostereotipa o Srbima koji su iznošeni u srpskim tabloidima za vreme vanrednog stanja. Populaciju za analizu sadržaja su činili članci u najtiražnijim srpskim tabloidima, objavljeni u periodu mesec dana nakon proglašenja vanrednog stanja. Konačan uzorak obuhvatao je članke iz 12 celih novinskih brojeva publikacija Blic, Alo, Kurir i Informer, iz dva radna dana (utorak i četvrtak) i jednog dana vikenda (subota). Jedinice analize su bili pridevi ili atribucioni iskazi, koji su grupisani u 11 logičkih kategorija stereotipa.

Dobijeno je značajno više pozitivnih nego negativnih atributa pri opisu Srba (t(11)=3.403, p < 0,001). Najčešći autostereotipi su heroji (24,05%), i humani (21,52%), dok su najčešći negativni atributi bili nedisciplinovani (12,66%) i tvrdoglavi (2,53%). Nije nađena značajna razlika u broju autostereotipa u zavisnosti od novinske publikacije.

Rezultati o prevalenciji pozitivnih autostereotipa u skladu su sa Tajfelovom teorijom socijalnog identiteta, kao i prethodnim istraživanjima. Može se primetiti da je hrabrost jedan od najdominantnijih atributa koji se stabilno pojavljuje u srpskim

autostereotipima. Bitan autostereotip u našoj studiji je i humanost ili spremnost da se pomogne drugima, što se može povezati sa stanjem pandemije. Negativni atributi su očigledno sada bili vezani za pandemiju, kao i shvatanje pravila i ograničenja, pa su se tako u fokusu našli nedisciplinovanost i tvrdoglavost. Zanimljivo je da se i nedisciplinovanost i tvrdoglavost mogu svesti na neku vrstu odlučnosti u održanju sopstvenih stavova, i kao takvi nisu uvek prikazani kao stvarno negativni atributi.

U narednom periodu bilo bi dobro ponoviti istraživanje, kako bi se pratile potencijalne promene u autostereotipu sa razvojem pandemije. Pored toga, mogle bi se i ispitati slične pojave u programima televizija sa nacionalnom frekvencijom, kako bi se dalje proverile eventualne tendencije u medijskom kreiranju socijalnog identiteta Srba u javnom mnjenju.

Ključne reči: analiza sadržaja, dnevne novine, nacionalni autostereotipi, socijalni identitet

Autostereotypes in Serbian daily newspapers during lockdown

Autostereotypes are simplified, rigid conceptions about one's own social group. They are partially formed by media, but crisis events such as the pandemic or lockdowns can serve as turning points in which certain stereotypes are modified, lessened or intensified. According to the Theory of Social Identity, group membership creates a social identity and a sense of belonging, which leads to a tendency towards a more positive evaluation of one's own group, along with a tendency to foster prejudice against other groups. Previous research conducted in the late 90's indicated that the Serbian autostereotype was comprised exclusively of positive and very prevalent traits (ethnic narcissism), of which the most common were hospitable, brave and honest. In a similar study about ethnic distance and autostereotypes in BiH, it was found that Serbs percieve themselves as proud, brave, clean and honest, but sometimes naive.

 The present study aims to explore the most common autostereotypes about Serbs presented in Serbian tabloids during the lockdown. Content analysis involved the population of articles published in the most circulated tabloids, in the period of one month after the start of the lockdown. The sample contained 12 newspaper issues of Blic, Alo, Kurir and Informer, gathered during two work days (Tuesday and Thursday) and one day of the weekend (Saturday). The units of analyses included attributes or attribution statements, which were grouped into 11 logical categories of stereotypes.

 There were significantly more positive than negative attributes describing Serbs in newspapers (t(11)=3.403, p<.001). The most prevalent positive attributes found

were heroes (24,05%), and humane (21,52%), while the most common negative were undisciplined (12,66%), and stubborn (2,53%). There was no statistically significant difference in the number of positive or negative autostereotypes, based on newspaper publication.

Results of the prevalence of positive autostereotypes are aligned with Theory of Social Identity and previous research. It can be noted that bravery is one of the dominant attributes which steadily appears in Serbian autostereotypes. An important autostereotype in our study seems to be humane, or a readiness to help others in need, which can be attributed to the state of pandemic. Moreover, negative attributes were clearly related to the pandemic and based around rules and restrictions, and as such focused on attributes such as undisciplined and stubborn. Interestingly, these attributes can also be understood as a upholding one's own opinions, and as such not always percieved as completely negative attributes.

In the following period it could be of interest to repeat this research, with the aim of following potential changes in the autostereotype during the pandemic. Additionaly, similar tendencies in national tv programmes could also be of interest, with the potential to gain insight into media portrayal of the Serbian social identity in the eyes of the public.

Keywords: content analysis, daily newspapers, national autostereotypes, social identity

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Generalna sklonost k donošenju rizičnih odluka i nepoštivanje protivepidemioloških mjera

Uslijed pojave i brzog širenja virusa COVID-19, svijet se našao u situaciji gdje se morao prilagoditi na novonastale uvjete koji su, između ostalog, uključivali i uvođenje određenih protuepidemioloških mjera s ciljem suzbijanja pandemije. Protuepidemiološke mjere, odnosno primarna prevencija uključuje nošenje zaštitnih i medicinskih maski za lice ili vizira, držanje udaljenosti od 1.5 do 2 metra od osoba koje ne pripadaju istom kućanstvu, izbjegavanje okupljanja i briga o vlastitoj higijeni (npr. redovito pranje i dezinficiranje ruku) (Vlada RH, 2020). Generalna sklonost donošenju rizičnih odluka u kontekstu trenutne pandemije predstavlja vjerojatnost

za pridržavanje propisanih mjera obzirom na percipiranu razinu ugroženosti. Ovo istraživanje provodi se s kako bi se saznalo postoji li povezanost između pridržavanja propisanih mjera i sklonosti donošenja rizičnih odluka te kako bi se utvrdilo jesu li rezultati dobiveni na hrvatskoj populaciji sukladni rezultatima dobivenim na globalnoj razini. Dosadašnja istraživanja pokazala su kako postoji povezanost između generalne sklonosti k donošenju rizičnih odluka i nepoštivanja propisanih protuepidemioloških mjera. Byrne i suradnici (2020) navode kako je pronađena statistički značajna pozitivna korelacija između navedenih varijabli, odnosno kako su osobe koje ne poštivaju propisane mjere sklonije donositi rizične odluke. Slične rezultate navode i Camargo i suradnici (2021) koji su također utvrdili kako su sudionici koji su pokazali naznake rizičnog ponašanja bili skloniji kršenju protuepidemioloških mjera. Također, Dryhurst i suradnici (2020) pokazuju kako je ova pojava univerzalna diljem svijeta, pa tako na uzorku stanovnika 10 država utvrđuju pozitivnu povezanost između sklonosti riziku i nepoštivanja propisanih mjera.

Istraživanje je provedeno online putem, a uzorak sudionika činilo je 130 osoba u rasponu od 18 do 66 godina, pri čemu je 46 (35.66%) bilo muškog i 83 (64.34%) ženskog spola.. U ovom istraživanju koristila se Skala pridržavanja uputa za suzbijanje COVID-19 koja mjeri učestalost pridržavanja zaštitnih mjera za sprječavanje širenja koronavirusa. Za provjeru generalne sklonosti k donošenju rizičnih odluka koristit će se Zadaci rizičnih odluka (Damjanović i Gvozdenović, 2016). Prilikom obrade rezultata korišten je Spearmanov koeficijent korelacije koji upućuje na postojanje statistički značajne negativne povezanosti (r=-.176, p<.05) između pridržavanja protuepidemioloških mjera i sklonosti donošenju rizičnih odluka. Nadalje, korištenjem t-testa za velike nezavisne uzorke dobiven je nalaz (t(127)=-3.510, p<.01) da se osobe ženskog spola češće pridržavaju protuepidemioloških mjera. U konačnici, provjeravan je moderatorski efekt spola na povezanost između sklonosti riziku i nepridržavanja mjera, no on se nije pokazao statistički značajnim (R2=.0002, F(1,125)= .0280, p>.01). S obzirom da u ovome istraživanju nije pronađen moderatorski efekt spola na povezanost između ove dvije varijable, potrebno je razmotriti nekoliko mogućih objašnjenja. Naime, rodni stereotipi sugeriraju da je preuzimanje rizika sastavni dio muške rodne uloge, dok je u suprotnosti sa ženskom rodnom ulogom. Ipak, nedavna istraživanja sugeriraju da žene nisu nužno sklonije manjem riziku od muškaraca (Morgenroth i sur., 2018). Ovisno o kontekstu, ljudi formiraju i zadržavaju određena očekivanja i vrijednosti. Kao rezultat, bez obzira na veću sklonost preuzimanju rizika kod muškaraca, moguće je da generalna sklonost nije povezana s većim pridržavanjem protuepidemioloških mjera kod žena. Većina ispitanika ovog istraživanja pripadala je mlađoj odrasloj dobi što može biti jedan od razloga zašto nije došlo do pojave moderatorskog efekta. Osim toga, važno je naglasiti kako je u istraživanju sudjelovao znatno veći broj žena nego muškaraca, a

broj sudionika samog istraživanja bio je relativno malen što je moglo utjecati na dobivene rezultate.

Dakle, ovo istraživanje upućuje na to da se osobe koje su sklonije riziku općenito manje pridržavaju propisanih protuepidemioloških mjera te da su žene te koje se češće uključuju u odgovorna ponašanja vezana za pandemiju. Važnost ovog istraživanja očituje se u spoznaji da su muškarci ti koji općenito manje poštuju protuepidemiološke mjere, što doprinosi mogućnosti intenzivnijeg djelovanja na tu rizičnu skupinu, prvenstveno u obliku provođenja kampanja s ciljem podizanja svijesti o riziku zaraze virusom COVID-19. Nadalje, pronađena je povezanost između donošenja rizičnih odluka i poštivanja protuepidemioloških mjera, a tome svjedoče i prijašnja istraživanja, što također može biti osnova za određene implikacije. Prema tome, ova vrlo korisna informacija bi se trebala implementirati u rad Stožera i svih odgovornih za osmišljavanje i provedbu mjera na način da jasnom komunikacijom, iznoseći točne informacije o opasnosti pandemije stvaraju realnu sliku stanja i rizika s kojima se suočavaju. Na taj način će se razvijati točnija percepcija rizika osoba, bez obzira na individualne i grupne tendencije, što će povećati šanse za uključivanje u protektivna ponašanja.

Ključne reči: COVID-19, generalna sklonost riziku, protuepidemiološke mjere, spol, percepcija rizika

General propensity for making risky decisions and non-compliance with anti-epidemic measures

Due to the emergence and rapid spread of the COVID-19 virus, the world found itself in a situation where it had to adapt to emerging conditions that, among other things, included the introduction of certain anti-epidemic measures to combat the pandemic. Anti-epidemic measures, i.e. primary prevention, include wearing protective and medical face masks or visors, keeping a distance of 1.5 to 2 meters from persons who are not the members of the same household, avoiding gatherings and taking care of personal hygiene (for example, regular hand washing and disinfection) (the Government of the Republic of Croatia, 2020). The general propensity for making risky decisions in the context of the current pandemic is the likelihood of adhering to prescribed measures given the perceived level of vulnerability. This research is conducted to find out whether there is a link between compliance with prescribed measures and the propensity for making risky decisions and to determine whether the results obtained in the Croatian population are consistent with the results obtained globally. Previous research has shown that there is a link between the general propensity for making risky decisions and non-compliance with prescribed anti-epidemic measures. Byrne et al (2020) state that a

statistically significant positive correlation has been found between the mentioned variables, i.e. that individuals who do not comply with the prescribed measures are more inclined to make risky decisions. Similar results are reported by Camargo et al (2021) who also found that participants who showed indications of risky behaviour were more likely to violate anti-epidemic measures. Furthermore, Dryhurst et al. (2020) show that this phenomenon is universal worldwide, thus they found a positive association between risk propensity and non-compliance with prescribed measures in a sample of residents of 10 states.

The survey was conducted online, and the sample of participants consisted of 130 people ranging in age from 18 to 66 years, with 46 (35.66%) being male and 83 (64.34%) female. This study used the COVID-19 Adherence Guidance Scale, which measures the frequency of adherence to protective measures to prevent the spread of the coronavirus. Risky decisions tasks were used to check the general propensity for making risky decisions (Damjanović and Gvozdenović, 2016). Spearman's correlation coefficient was used for processing the results, which indicates the existence of a statistically significant negative correlation (r= -.176, p < .05) between adherence to anti-epidemic measures and propensity for making risky decisions. Furthermore, using the t-test for large independent samples, it was discovered (t (127) = -3.510, p < .01) that females more often adhere to anti-epidemic measures. Finally, the moderation effect of gender on the association between risk propensity and non-compliance was examined, but it did not prove statistically significant (R^2 = .0002, F(1,125) = .0280, p > .01). Since no moderation effect of gender on the association between these two variables was determined in this study, several possible explanations need to be considered. Namely, gender stereotypes suggest that risk-taking is an integral part of the male gender role, while such behaviour is in contrast to the female gender role. Depending on the context, people form and maintain certain expectations and values. As a result, despite a greater propensity for taking risks in men, it is possible that the general propensity is not associated with greater adherence to anti-epidemic measures in women. Most of the respondents in this study were young adults, which may be one of the reasons why the moderation effect did not occur. In addition, it is important to emphasize that a significantly larger number of women than men participated in the study, and the number of participants in the study itself was relatively small, which could have affected the results obtained.

Therefore, this research suggests that individuals with a higher risk propensity generally less adhere to prescribed anti-epidemic measures, and that the women are those who practice responsible pandemic-related behaviours more often. The importance of this research is reflected in the fact that men generally less adhere to

anti-epidemic measures, which contributes to the possibility of more intensive actions towards this risk group, primarily in the form of campaigns to raise awareness of the risk of the COVID-19. Furthermore, a link has been found between making risky decision and adherence to anti-epidemic measures, as evidenced by previous research, which may also be the basis for certain implications. Therefore, this very useful information should be implemented in the work of the Headquarters and all responsible entities for designing and implementing measures in a way which presents accurate information regarding the danger of the pandemic using clear communication, thus creative a more realistic image of the state of affairs and associated risks. In this way, individuals will develop a more accurate perception of risk, regardless of individual and group tendencies, which will increase the chances of engaging in protective behaviours.

Keywords: COVID-19, general risk propensity, anti-epidemic measures, gender, risk perception

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Relacije HEXACO osobina ličnosti i socijalnog ponašanja tokom COVID- 19 pandemije

Cilj ovog istraživanja je ispitivanje relacija između HEXACO bazičnih osobina ličnosti s jedne strane i doživljaja usamljenosti, učestalosti i zadovoljstva kontakatima uživo i onlajn tokom COVID-19 pandemije s druge strane. Uzorak je činilo 201 ispitanik (167 žena), starosti 18-70 godina, koji su u periodu od 31. decembra 2019. godine do 28. januara 2021. godine popunjavali sledeće insturmente: De Jongov upitnik usamljenosti (De Jong Gierveld Loneliness Scale) uz procenu koja se odnosi na period trajanja pandemije, Srpsku adaptaciju kratkog HEXACO inventara (Brief HEXACO Inventory) i posebno konstruisana pitanja u vezi sa učestalošću i zadovoljstvom kontakatima. Rezultati regresione anlize pokazuju da je Ekstraverzija, očekivano, najsnažniji negativni korelat usamljenosti (β = -.26), a pozitivan učestalosti onlajn ili telefonskih kontakata tokom pandemije (β = .30). Poštenje-skromnost je takođe značajan negativan prediktor usamljenosti (β = -.19), dok je Emocionalnost pozitivan prediktor (β = .17). Na zadovoljstvo kontaktima uživo negativan efekat ostvaruje Emocionalnost (β = -.25), ali i Prijatnost (β = -.14) i Otvorenost (β = -.17). Osobine ličnosti nisu ostvarile značajan efekat na zadovoljstvo

kontaktima onlajn ili preko telefona, tokom pandemije. Moglo bi se zaključiti da su osobe s višom Ekstraverzijom uspele da nadomeste svoju potrebu za socijalnim kontaktima onlajn ili na druge načine, dok je kod osoba s višom Prijatnošću i Otvorenošću izraženije nezadovoljstvo socijalnim kontaktima uživo. Osobe s višom Emocionalnošću su doživele veću usamljenost i veće nezadovoljstvo uživo kontaktima, što je u skladu sa istraživanjima i u drugim kontekstima.

Ključne reči: usamljenost, učestalost socijalnih kontakata, zadovoljstvo socijalnim kontaktima, HEXACO

Relations between HEXACO personality traits and social behavior during the COVID- 19 pandemic

The purpose of this study is to examine the relationships between HEXACO traits on the one side and feeling of loneliness, frequency and satisfaction with offline and online contacts during the COVID-19 pandemic on the other side. The sample consisted of 201 participants (167 female), aged between 18 and 70 years, who in period from Dec. 31st 2020 to Jan. 28th 2021. filled out De Jong Gierveld Loneliness Scale in the context of the pandmeic period, Serbian adaptation of the Brief HEXACO Inventory and questions about frequency and satisfaction with contacts. Results of multiple refression analysos showed that Extraversion is the strogest negative correlate of loneliness (β = -.26) and positive of frequency of online/phone contacts during the pandemic (β = .30). Honesty–Humility is also a significant negative predictor of loneliness (β = -.19), and Emotionality positive (β = .17). Emotionality showed negative effect on satisfaction with live contacts (β = -.25), as well as Agreeableness (β = -.14) and Openness (β = -.17). There is no significant effects of HEXACO traits on satisfaction with online/phone contacts. It culd be conclude that during the pandemic, individuals with higher Extraversion succseeded in maintaining social interractions online or in the other way, but those with high Agreeableness and Openness showed unsatisfaction with live social contacts. Individuals with higher Emotionality experienced higher feeling of loneliness and lower satisfaction with live contacts, which is in line with studies in otdher contexts.

Keywords: loneliness, frequency of social contacts, satisfaction with social contacts, HEXACO

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Every day use of math- structure and sociodemographic correlates

Math literacy and math skills are very important for everyday life functioning (e.g., budget planning, cooking, etc.) as well as for wide range of professions. Despite that, some previous findings demonstrate that a large number of adults do not possess the adequate math skills to handle the quantitative tasks of everyday life. The reasons for this vary from sociodemographic characteristics (gender, age, level of education, socioeconomic status, etc.) to emotional and cognitive aspects of math behavior in every day life such as math anxiety, math motivation and perceived math self-efficacy. On the other hand, the previous operationalization of every day use of math have resulted in somewhat combined measures of the practical use of mathematics and every day mental arithmetic with low to moderate reliability. This study aimed to investigate the structure and sociodemographic correlates of Every Day Use of Math Scale (EDUMS) in adult sample. EDUMS was applied on a sample of 352 adults (50.3% females) from Serbia (mean age = 38.74). Parallel analysis suggested an optimal two-factor solution (35.85% explained variance; inter-factor correlation r = .23, p < .01). First factor includes indicators related to financial aspect of math use in every day life (budget planning, paying bills, shopping), so this factor was named as Financial Use (FU; α = .60). The second factor embraced items related to every day practical activities (cooking, decorating, time management), and this factor was named as Practical Use (PU; α = .62). There were no gender differences in FU (t(350) = 0.17, p = .86), PU (t(350) = -0.01, p = .99), as well as in general measure of every day use of math (t(350) = 1.50, p = .13). Age (r = .11, p < .05), socioeconomic status (r = .19, p < .01) and educational level of participants (r = .28, p < .01) were positive correlated to general measure of every day use of math. PU was also positive related to socioeconomic status (r = .18, p < .01) and educational level (r = .27, p < .01), while FU did not achieve significant relations with sociodemographic variables. The results of this research indicated that the everyday use of math can be reduced to two main aspects: practical and financial, but also that reliability of EDUMS measures must be further examined and improved. Additionally, sociodemographic variables appear to be more important determinants of the practical use of mathematics in everyday life, especially in wealthy and high educated sample. It seems that people rely on other factors during the financial use

of math in every day life, which passivate mental engagement and reduce the possibility of improving mathematical literacy.

Keywords: every day use of math, sociodemographic determinants, financial use, practical use

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Sex as moderator in relationshipc between Dark Triad traits and Behavioural Approach System

The Dark Triad triad traits (Machiavellianism, psychopathy, and narcissism) are socially toxic traits that are defined primarily by a tendency to be insensitive and unemphatic. Dark Triad traits were intensively investigated in the context of basic personality traits, mostly within the Big Five/Five Factor Model and HEXACO model, while less is know about the relations with Gray´s Reinforcement Sensitivity Theory (RST). Previous research showed that among RST systems, Behavioral Approach System (BAS) was the most important correlate of dark traits, especially narcissism. However, there is the possibility that sex moderates the relationships between Dark Triad traits and BAS. Since men scored higher than women on all dark traits, we could expect that relationships between Dark Triad traits and BAS could be higher in men.

The sample consisted of 305 participants (aged 17-55, M = 29.85, SD = 10.23) of which 157 were females. Two instruments were used: BAS scale from Reinforcement Sensitivity Questionnaire (RSQ) and the Serbian adaptation of Dark Triad Dirty Dozen (DTDD), measuring Dark Triad traits. Results showed significant sex differences in BAS ($t(302) = 4.52$, $p < .001$) and psychopathy ($t(302) = 2.40$, $p = .017$), with males scored higher. Although we expected significant sex differences in psychopathy, the lack of significance of sex differences in other traits was not expected. Furthermore, BAS showed a significant positive correlation with all Dark Triad traits in both males and females, which is in line with previous research. The highest correlation was obtained between BAS and narcissism among females ($r = .36$). Finally, results showed that sex marginally moderate relationship only between narcissism and BAS ($B = 0.13$, $p = .08$) in a way that stronger relation was obtained among females ($B = 0.25$, $p < .001$), compared to males ($B = 0.12$, $p = .03$). In the case of relations between psychopathy and Machiavellianism on the one side and BAS on

the other side, there is no significant moderation of sex. Although sex moderated relationships between narcissism and BAS, contrary to our expectation the moderation effect is in opposite direction. The results could be explaind in a way that females with higher narcissism show more masculine characteristics, such are arrogance and grandiosity, and that they are more sensitive to reward signals. Further exploration of the moderation effect of sex is warranted.

Keywords: Dark Triad, Reinforcement Sensitivity Theory, Behavioural Approach System, sex differences, moderation effects

PANEL DISKUSIJA
PANEL DISCUSSION

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Izazovi onlajn nastave u visokom obrazovanju u uslovima pandemije

Mere fizičke distance, socijalne izolacije i karantina, koje su u mnogim zemljama uvedene kao odgovor na COVID-19 krizu, primorale su obrazovne institucije da promene format rada u različite oblike učenja na daljinu. Uslovi pandemije nametnuli su zahteve ka ubrzanom prilagođavanju novonastaloj situaciji i onlajn nastavi, svih učesnika obrazovnog procesa, uz ograničene resurse i tehnološko umeće u pojedinim slučajevima, što je rezultovalo povećanim nivoom stresa kod svih strana uključenih u ovaj proces. Reorganizacija procesa učenja, ali i predavanja, smanjena motivacija kod studenata, povećan pritisak ka samostalnom učenju, napuštanje svakodnevnih rutina, uz ostale promene u socijalnom kontekstu, samo su neki od izazova s kojima se susreću studenti i nastavnici u ovom periodu.

Od početka pandemije sprovedena su brojna istraživanja efikasnosti učenja na daljinu, koja nedvosmisleno upućuju na zaključak da ovaj oblik rada ima značajno

različite reperkusije na ishode učenja, u zavisnosti od toga da li predstavlja dobrovoljno odabranu alternativu tradicionalnim metodama učenja i podučavanja ili, pak, podrazumeva nametnuti i jedini mogući okvir za realizaciju nastavnog procesa. Otuda je za učenje na daljinu u uslovima akcidentne krize, kakva je aktuelna pandemijska situacija, namenjena posebna terminološka odrednica – Emergency Remote Teaching.

U okviru okruglog stola, sa predstavnicima različitih visokoškolskih ustanova u Srbiji i regionu, analiziraćemo pomenute izazove, i načine kako su se ove ustanove izborile sa nametnutim promena, ali i izdvojiti primere dobre prakse koji mogu poslužiti kao smernice za usklađivanje rada fakulteta u narednom periodu.

Challenges with distance learning in higher education during the COVID-19 pandemic

Physical distancing measures, social isolation, and lockdown, which were introduced in many countries as a response to the COVID-19 crisis, forced the educational institutions to change their working format to various modes of distance learning. A pandemic imposes demands on students and teachers to adapt to new situation and online teaching, sometimes with limited resources or technological knowledge, thus resulting in higher stress levels in all parties involved. Reorganisation of learning and teaching activities, reduced motivation for studying, increased pressures to learn independently, abandoning daily routines, along with other changes in the social context, were some of the challenges that students and teachers faced during this period.

Since the start of the pandemic, many studies on distance learning efficiency have been conducted, which unequivocally point to the conclusion that this teaching format exerts various impacts on learning outcomes, depending on whether they are a voluntarily chosen alternative to traditional teaching methods/approaches, or else it implies the only possible and imposed framework for the realisation of the teaching process. Accordingly, distance learning in times of crisis, as is the current pandemic situation, may thus be termed as Emergency Remote Teaching.

On the panel, together with representatives of different higher education institutions from Serbia and the region, we will be analysing the said challenges and the ways how these institutions handled the imposed changes, but we will also point to the examples of good practice that may serve as guidelines for such a form of teaching at the university level in the forthcoming period.

RADIONICE

WORKSHOPS

Dragana Mitrić-Aćimović

Centar "Culture Impact", Novi Sad

Kako i zašto definisati ključne vrednosti organizacije?

Na ovoj radionici će se polaznici upoznati sa važnošću definisanja ključnih vrednosti jedne organizacije i putem njihovog definisanja u organizaciji. Najpre će saznati šta su vrednosti i koje vrste vrednosti razlikujemo. Potom će imati prilike da nauče na koji način se vrednosti organizacije mogu prepoznati i ustanoviti. Proći će i praktično kroz simulaciju tog puta. Radionica takođe upućuje na koji način se u kompanijama dalje koriste definisane ključne vrednosti za staranje o organizacionoj kulturi, i ustanovljavanje HR praksi i procedura.

How and why to Define the Core Values of the Organization?

Recognition and definition of company values - principles and beliefs which are crucial in organization - is an important task and challenge. At this workshop, participants will learn why it is so. First, we will talk about how to distinguish declarative and real values, and also how we define core and desired values of the organization. The workshop provides an opportunity for participants to practically adopt the path of defining the core and desired values. Finally, it indicates how companies use defined values to care for organizational culture, primarily through HR practices and procedures.

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A Theatre for Everyone: sincere encounters, inside stories we create and play – a practical workshop of Applied Theatre

Applied Theatre's development throughout the 20th century has been shaped by its pro-active ethics of intervention to cause change and improvement. Today, we find

this aesthetic movement being engaged throughout the world with the dramatisation of educational material in formal and informal education and life-long learning; the stimulation of public debates inside communities; the support of requests such as training for team building or self-awareness; or the celebration of the past and present of smaller or larger locations, or citizens' groups.

The workshop "A Theatre for Everyone" aims to provide a practical introduction to how Applied theatre makers and participants experience spontaneous or lightly rehearsed, and emotionally safe, interactive and improvisational performance. Improvisation games, physical theatre, devised theatre, and process drama, will be used with the following aims:

--to teach exercises that facilitate the development of expressivity, spontaneity and communication;

--to remember somatic and non-verbal ways of imagining, playing, and interpreting human interactions;

--to dramatise narratives devised through participants' responses to some initial stimuli (works of art, photographs, poems, fictional situations, etc);

---to investigate how techniques of contemporary theatre help people not trained in acting to create dramatic scenes which allow them to address their educational, social and artistic needs;

--to understand how the devising of narratives in collective contexts benefits social and personal growth by working with, instead of against, differences in personalities, talents, experiences and viewpoints;

--to observe ways in which Applied Theatre offers substantial complementary tools to therapeutic drama and theatre, to applied social sciences and rehabilitation programs.

NAUČNO-STRUČNI SKUP
SAVREMENI TRENDOVI U PSIHOLOGIJI 2021
KNJIGA SAŽETAKA

PROGRAMSKI ODBOR
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