Emocionalna uznemirenost i negativne automatske misli učenika tijekom srednjoškolskog obrazovanja

/ Emotional Distress and Negative Automatic Thoughts of Students During Secondary School Education

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Epidemiološka istraživanja bilježe trend porasta teškoća mentalnog zdravlja kod djece i adolescenata. Cilj istraživanja bio je ispitati emocionalnu uznemirenost i negativne automatske misli učenika tijekom srednjoškolskog obrazovanja. Uključena su 204 sudionika, a podatci su prikupljeni upitnikom CORE-YP i Upitnikom automatskih misli za vrijeme učenja u pet vremenskih točaka. Analizirani su deskriptivni podatci i provedena analiza varijance ponovljenih mjerenja. Nakon prelaska u srednju školu 26,52 % učenika pokazuje povišenu emocionalnu uznemirenost. Pred kraj svake nastavne godine, ovisno o godini obrazovanja, detektira se od 38,07 % do 55,44 % učenika s povišenom emocionalnom uznemirenošću, a za 22,10 % do 26,09 % učenika rezultat je iznimno povišen. Na kraju drugog razreda emocionalna uznemirenost je statistički značajno viša u odnosu na ostale razrede, osim završnoga. Negativne automatske misli i emocionalna uznemirenost visoko su i statistički značajno povezane. Negativne automatske misli povezane sa strahom od neuspjeha i razočaranja roditelja najčešće su na kraju drugog razreda. Učestalost misli povezanih s razočaranjem roditelja tijekom srednje škole opada, dok učestalost misli povezanih s manjkom motivacije za učenje raste. Vrijeme prije završetka drugog razreda srednje škole osobito je rizično za razvoj teškoća mentalnog zdravlja. Stoga upravo tijekom drugog razreda treba realizirati najviše aktivnosti za očuvanje mentalnog zdravlja te provoditi sustavni probir učenika u riziku. Za to mogu koristiti ovdje provjereni upitnici. Dobiveni rezultati sukladni su pretpostavkama kognitivnih modela disfunkcionalnog doživljavanja i ponašanja, u okviru kojih se interpretiraju.

/ Epidemiological research indicates an increasing trend of mental health difficulties in children and adolescents. The aim of the study was to examine emotional distress and negative automatic thoughts of secondary school students. The study was conducted on a sample of 204 respondents and data were collected by the Young Person's CORE (YP-CORE) questionnaire and the Automatic Thoughts Questionnaire during learning at five time points. Descriptive data were analysed and an analysis of variance for repeated measurements was performed. After transferring to secondary school, 26.52% of students showed increased emotional distress. Towards the end of the school year and depending on the year of education, 38.07% to 55.44% of students showed increased emotional distress, whereas 22.10% to 26.09% of students showed exceptionally increased distress. Emotional distress was statistically significantly higher at the end of the second grade than in other grades, except for the final grade. There was a high and statistically significant association between negative automatic thoughts and emotional distress. Negative automatic thoughts associated with the fear of failure and subsequent disappointment of one's parents were most frequently expressed at the end of the second grade. The frequency of thoughts associated with disappointing one's parents during secondary school was declining, while the frequency of thoughts associated with the lack of motivation for studying was increasing. The time before the completion

4   *of the second grade of secondary school is particularly risky for the development of mental health difficulties. Therefore, it is during the second grade that most activities for preservation of mental health should be implemented and a systematic screening of students at risk should be carried out. The questionnaires tested in this study can be used for that purpose. The obtained results are in line with the presumptions of cognitive models of dysfunctional experiences and behaviour in the context of which they have been interpreted.*

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UVOD

Adolescencija je zahtjevno razdoblje života zbog niza novih socijalnih uloga te velikih fizičkih i emocionalnih promjena tijekom kojih mladi ljudi prolaze. Razvojno, to je vrijeme ostvarivanja psihološke nezavisnosti od značajnih odraslih, preispitivanja starih vrijednosti i stvaranja novih. Može se reći kako su adolescenti u stalnom procesu prilagođavanja, što nije uvijek lako. Epidemiološka istraživanja pokazuju da 10 % djece i adolescenata do 16 godina ima neki emocionalni poremećaj ili poremećaj ponašanja (1), dok se u dobi od 10 do 19 godina njihov udio povećava na 10 % do 20 % (2,3). U proteklim desetljećima različite zemlje, npr. Grčka, Island, Nizozemska i Švedska, bilježe trend porasta emocionalnih teškoća među adolescentima (1). Iako treba uzeti u obzir različitu metodologiju u prikupljanju podataka, nalazi o povećanju teškoća su konzistentni. Tako Vladin izvještaj o učenicima s psihološkim teškoćama u Walesu (4) navodi kako „u zadnjih desetak godina potreba za savjetovanjem učenika, osobito u srednjim školama, dramatično raste, radi emocionalnih, bihevioralnih i socijalnih problema". Oko 30 % mladih u dobi od 16 do 25 godina u

INTRODUCTION

Adolescence is a vulnerable period of life due to a number of new social roles and major physical and emotional changes that young people undergo. In terms of development, adolescence is a time of achieving psychological independence from influential adults, and of questioning old values and creating new ones. It can be said that adolescents are in a constant process of adjustment, which is not always easy. Epidemiological studies show that 10% of children and adolescents under the age of 16 have some sort of emotional or behavioural disorder (1), while for adolescents between the ages of 10 and 19 this proportion increases to 10% to 20% (2.3). In recent decades, different countries, e.g. Greece, Iceland, the Netherlands, and Sweden, have recorded an increasing trend of emotional difficulties among adolescents (1). Although differing methodologies in data collection need to be taken in consideration, the findings on increasing difficulties remain consistent. Thus, the Government's report on students with psychological difficulties in Wales (4) states that "in the last decade, the need for student counselling, especially in secondary schools, has increased dramatically, due

Velikoj Britaniji izvještava da se uvijek ili često osjećaju depresivno ili ozbiljno sniženog raspoloženja (5,6). Teškoće mentalnog zdravlja adolescenata prepoznate su kao javnozdravstveni problem i u drugim europskim zemljama, npr. Norveškoj (7) i Danskoj (8). Istraživanja provedena u Hrvatskoj detektiraju 20 do 30 % adolescenata koji imaju određene psihološke teškoće (9-11), a pojedine su teškoće prisutne i kod više od 30 % učenika (11). Prema procjenama Svjetske zdravstvene organizacije (3) oko polovine teškoća mentalnog zdravlja pojavljuju se do četrnaeste godine života, iako često ostanu neprepoznate. Nedovoljno rano prepoznavanje djece i mladih koji imaju takvih teškoća i izostanak adekvatne pomoći može imati značajne posljedice na njihovo zdravlje tijekom odrastanja, ali i u odrasloj dobi. Škole su prepoznate kao mjesto gdje je lako provediv sustavni probir učenika s povećanim rizikom za razvoj teškoća mentalnog zdravlja. „Stoga škole imaju važno mjesto u ranoj detekciji problema mentalnog zdravlja izvan sustava zdravstvene skrbi." (9). Pravodobno prepoznavanje i podrška učenicima s rizikom za razvoj teškoća mentalnog zdravlja može biti značajni zaštitni faktor njihova razvoja. Može doprinijeti uspješnijem školovanju, boljem školskom uspjehu, boljoj poziciji na tržištu rada i očuvanju ukupnog zdravlja (6). Škola je ujedno vrlo važan okolinski sustav u kojemu mogu djelovati i rizični čimbenici povezani s razvojem teškoća mentalnog zdravlja. Na primjer, poznato je kako je tranzicija na višu obrazovnu razinu kognitivno i emocionalno zahtjevno razdoblje zbog niza prilagodbi novom školskom kontekstu (12). Međutim, za mnoge učenike, a i njihove roditelje najstresnije je razdoblje završetak nastavne godine. Brojni čimbenici mogu pridonijeti kognitivnoj procjeni kraja nastavne godine kao stresne, osobito količina pisanih i usmenih provjera znanja, ukupno vrednovanje i ocjenjivanje, odnosno evaluacija naučenoga. Iz takve kognitivne procjene proizlazi negativna emocionalna reakcija, odnosno, doživljaj stresa (13). Neka istraživanja povećanje udjela

to emotional, behavioural and social problems". About 30% of young people aged 16 to 25 in the UK report that they feel depressed or severely depressed always or often (5.6). Adolescent mental health problems have been recognized as a public health concern in other European countries as well, e.g. Norway (7) and Denmark (8). Studies conducted in Croatia found that 20 - 30% of adolescents experience some kind of psychological difficulties (9-11), and that certain difficulties are present in more than 30% of students (11). The World Health Organization (3) estimates that about half of mental health difficulties occur by the age of 14, although they are often unrecognized. Insufficient early identification of children and young people who have such difficulties and a lack of adequate care can result in significant consequences on their health during adolescence as well as adulthood. The school is recognized as a setting where it is not difficult to implement a systematic screening of students who are at increased risk of developing mental health difficulties. "Therefore, schools play an important role in early detection of mental health problems outside the health care system" (9). Timely recognition and support to students at risk of developing mental health difficulties can be an important protective factor for their development. Also, it can contribute to more successful schooling, better school results, better prospects in the labour market and the preservation of overall health (6). The school is also a very important environmental system where risk factors related to the development of mental health difficulties might also be at play. For example, transition to a higher educational level is known to be a cognitively and emotionally demanding time because it implies various adaptations to a new school context (12). However, for many students, as well as their parents, the most stressful period is the end of the school year. Numerous factors can contribute to a cognitive appraisal of the end of the school year as stressful, especially the amount of written and oral tests, overall evaluation and assessment of what has been learned. Such cognitive apprais-

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adolescenata s teškoćama mentalnog zdravlja povezuju upravo s činjenicom da zahtjevi unutar školskog konteksta, osobito vezani uz zahtjevnost školskih ispitivanja i očekivanja uspješnosti, postaju za mlade ljude sve veći stresori (14). U literaturi se čak spominje „hipoteza edukacijskih stresora" koja povezuje događaje i situacije važne za ostvarivanje školskog uspjeha, uspješnost polaganja ispita i emocionalnog stanja adolescenata (14). Negativne ili nepravedne ocjene i učenici hrvatskih škola percipiraju kao najveći izvor stresa unutar školskog konteksta (15). Stresna reakcija uključuje fiziološki, emocionalni i ponašajni odgovor na situaciju koju osoba procjenjuje kao prijeteću. Kognitivna procjena situacije kao prijeteće pokretač je stresnih reakcija, pa dovodi i do pojave neugodnih emocionalnih reakcija poput anksioznosti, iritabilnosti, povišene razine emocionalne napetosti i sl. Dio kognitivne procjene su i automatske misli koje su ujedno i središnji konstrukt kognitivnih modela psihopatologije poput Beckovog modela (16). Kognitivni modeli naglašavaju ometajući utjecaj negativnih misli na raspoloženje i ponašanje. Postoji recipročna povezanost između negativnih misli i emocionalnih teškoća, što se može aktualizirati u situacijama koje od učenika zahtijevaju veće napore poput kraja nastavne godine. Kod dijela adolescenata, nesigurnih u vlastito znanje i sposobnosti, mogu se pojavljivati negativne misli povezane s procjenom nedovoljnih osobnih kapaciteta za svladavanje gradiva, mogući neuspjeh, značenje neuspjeha za odnos s roditeljima i sl. Negativne automatske misli i teškoće u svladavanju gradiva pridonose razini opće emocionalne uznemirenosti što može pospješiti razvoj emocionalnih poremećaja. Stoga je u potencijalno stresnim razdobljima, poput kraja nastavne godine, posebno važno pratiti emocionalne i kognitivne aspekte funkcioniranja učenika. Cilj rada bio je ispitati razinu opće emocionalne uznemirenosti i učestalost negativnih automatskih misli za vrijeme učenja u pet vremenskih točaka tijekom srednje škole,

als result in a negative emotional response, i.e. the experience of stress (13). Some studies have linked the increase in the proportion of adolescents with mental health difficulties to the fact that school requirements, especially those related to complex school examinations and expectations of a successful outcome, are becoming increasingly stressful for young people (14). The literature has also mentioned the "educational stressors hypothesis" that links events and situations important for achieving success in school, exam performance, and the emotional state of adolescents (14). Croatian students perceive negative or unfair grades as the most important source of stress within the school context (15). A stress response includes a physiological, emotional, and behavioural response to a situation that a person perceives as threatening. A situation that is cognitively assessed as threatening triggers stress reactions and leads to unpleasant emotional reactions such as anxiety, irritability, elevated levels of emotional tension, and others. Automatic thoughts are part of cognitive assessment and the central construct of cognitive models of psychopathology, such as the Beck's model (16). Cognitive models emphasize the disruptive impact of negative thoughts on mood and behaviour. There is a reciprocal association between negative thoughts and emotional difficulties, which can become apparent in situations that require more effort from students, the end of the school year being such a situation. Some adolescents, who lack confidence in their own knowledge and abilities, may experience negative thoughts related to their assessment of insufficient personal capacity to master the material, possible failure, implications of failure on the relationship with their parents, etc. Negative automatic thoughts and difficulties in mastering the material contribute to the level of general emotional distress, which can promote the development of emotional disorders. Therefore, it is especially important to monitor the emotional and cognitive aspects of the way students function during potentially stressful periods, such as

istražiti koliko učenika ima značajno povišenu razinu emocionalne uznemirenosti te provjeriti postoje li u tome statistički značajne razlike ovisno o godini obrazovanja. U skladu s ciljem postavljene su istraživačke hipoteze. Očekuje se 20-30 % sudionika koji će imati značajno povišenu razinu emocionalne uznemirenosti i negativnih automatskih misli. Emocionalna uznemirenost i negativne automatske misli za vrijeme učenja bit će statistički značajno povezane. Na kraju drugog razreda srednje škole opća emocionalna uznemirenost i izraženost negativnih automatskih misli bit će statistički značajno viša u odnosu na ostale točke mjerenja.

METODE

Sudionici i postupak istraživanja

Sudjelovalo je ukupno 204 učenika srednje strukovne škole, od kojih je bilo 168 (82,4 %) djevojaka i 36 (17,6 %) mladića. Broj sudionika razlikovao se ovisno o točki mjerenja zbog izostanka na dan prikupljanja podataka, promjene škole i sl. (tablica 1).

Podatci iz svih pet mjerenja prikupljeni su za 133 sudionika. Sudionici su bili iz različitih mjesta i gradova i iz više kontinentalnih županija Hrvatske. Prikupljanje podataka provedeno je uz suglasnost ravnatelja i usmeni

TABLICA 1. Broj sudionika po vremenskim točkama istraživanja
TABLE 1. Number of study participants at different measurement points

Točka mjerenja / Measurement point	n
Prva (mjesec dana nakon početka prvog razreda) / First (one month after the beginning of the first grade)	181
Druga (tri tjedna prije kraja prvog razreda) / Second (three weeks before the end of first grade)	176
Treća (tri tjedna prije kraja drugog razreda) / Third (three weeks before the end of second grade)	184
Četvrta (tri tjedna prije kraja trećeg razreda) / Fourth (three weeks before the end of third grade)	181
Peta (tri tjedna prije kraja četvrtog razreda) / Fifth (three weeks before the end of fourth grade)	165

the end of the school year. The aim of the present study was to examine the level of general emotional distress and frequency of negative automatic thoughts during learning at five time points during secondary education, to investigate how many students have significantly increased levels of emotional distress and whether there are statistically significant differences depending on the school grade. The study hypotheses were formulated in line with this aim. Twenty to thirty per cent of participants are expected to have a significantly elevated level of emotional distress and negative automatic thoughts. Emotional distress and negative automatic thoughts during learning are expected to be statistically significantly related. At the end of the second grade of secondary school, the general emotional distress and expression of negative automatic thoughts are expected to be statistically significantly higher than at other measurement points.

METHODS

Participants and methods

Of the total of 204 vocational school students, 168 (82.4%) were girls and 36 (17.6%) were boys. The number of participants differed depending on the measurement point due to absence on the day of data collection, change of schools, etc. (Table 1).

For 133 participants, data from all five measurements were collected. Participants came from various towns and cities and several continental Croatian counties. Data collection was conducted with the consent of the principals and the oral consent of the parents obtained at parent meetings. At each measurement point, students were briefly informed about the purpose of data collection and given instructions on how to answer the questionnaires. The questionnaires were administered during regular classes and it took 20 minutes on average for the students to complete them. Students were also informed that individual protocols and re-

pristanak roditelja na roditeljskim sastancima. Učenicima je ukratko objašnjena svrha prikupljanja podataka te im je pri svakoj primjeni upitnika dana uputa o načinu odgovaranja. Primjena upitnika trajala je prosječno dvadesetak minuta, a provodila se za vrijeme redovne nastave. Učenicima je objašnjeno da individualne protokole i rezultate neće vidjeti nitko osim školskog psihologa i njih samih tijekom individualnih kontakata kao dijela redovnog postupka probira. Prvo mjerenje provedeno je mjesec dana nakon početka nastavne godine, a ostala mjerenja tri tjedna prije kraja svake nastavne godine.

Mjerni instrumenti

CORE-YP upitnik (17) koristi se za procjenu razine opće emocionalne uznemirenosti *("distress")* mladih od 11 do16 godina, ali se može koristiti i u širem rasponu dobi. Preveden je na hrvatski jezik s odobrenjem i prema protokolu *The CORE System Trust*. Sastoji se od 10 tvrdnji koje opisuju određeno raspoloženje ili stanje. Sudionik/ca odgovara na pitanje: Koliko si se puta tako osjećao/la tijekom proteklog tjedna? odabirom jednog od ponuđenih odgovora na ljestvici od 5 stupnjeva (0 - nikad, 1 - vrlo rijetko, 2 - ponekad, 3 - često, 4 - gotovo uvijek). Ukupan rezultat izražen je kao zbroj odgovora na svim česticama. Prethodno se mijenja smjer odgovora na tri čestice prema ključu za odgovore. Veći rezultat znači višu razinu emocionalne uznemirenosti. Budući da je faktorska struktura upitnika poznata, za potrebe ovog istraživanja nije posebno provjeravana. Prethodna istraživanja potvrđuju da je upitnik visoko pouzdan s indeksima pouzdanosti tipa Cronbach alpha od .78 do .90 (5, 6, 18-21), a visoki indeksi pouzdanosti dobiveni su i u ovom istraživanju (od .83 do .89; tablica 2).

Upitnik automatskih misli za vrijeme učenja (22) sastoji se od 48 opisa različitih misli. Sudionik/ca odgovara na pitanje o učestalosti pojavljivanja pojedinih misli u proteklom tjednu na

sults would not be disclosed to anyone other than the school psychologist and themselves during individual contacts as part of the regular screening process. The first measurement was conducted one month after the beginning of the school year, and the other measurements three weeks before the end of each school year.

Measuring instruments

The YP-CORE questionnaire (17) was administered to assess the level of general emotional distress among young people aged 11 to 16, but it can also be administered in those below and above this age range. It was translated into Croatian and approved according to the CORE System Trust protocol. The questionnaire consists of 10 statements describing a particular mood or condition. The participant answers the question "How often did you feel that way during the past week?" by rating it on a 5-point scale (0 - not at all, 1 - only occasionally, 2 - sometimes, 3 - often, 4 - most or all of the time). The total score is expressed as the sum of all responses for all categories. The direction of three items is changed in advance according to a key. A higher score is interpreted as a higher level of emotional distress. Having in mind that the factor structure of the questionnaire is known, and it was not specifically investigated for the purposes of this study. Previous research has confirmed that the questionnaire is highly reliable, with Cronbach's alpha reliability indices ranging from .78 to .90 (5, 6, 18-21). High reliability indices were also obtained for this study (from .83 to .89; see Table 2).

The Automatic Thoughts during Learning Questionnaire (22) consists of 48 descriptions of different thoughts. The participant answers the question about the frequency of occurrence of certain thoughts over the last week on a 4-point scale (0 - never or almost never, 1 - sometimes or rarely, 2 - often, 3 - very often or almost constantly). The factor structure of the questionnaire had to be investigated as no results have been published so far for secondary school students. In the correlation matrix of the inputs, there were

ljestvici od 4 stupnja (0 - nikad ili gotovo nikad, 1 - ponekad ili rijetko, 2 - često, 3 - vrlo često ili gotovo stalno). Kako do sada nema objavljenih rezultata koje na ovome upitniku postižu srednjoškolci, provjerena je njegova faktorska struktura. U korelacijskoj matrici rezultata bilo je mnogo koeficijenata većih od .30, vrijednost KMO (Kaiser-Meyer-Olkin) pokazatelja bila je .86, a Barlettov test sfericiteta bio je statistički značajan (4130,57, df=1128, p<.01). Podatci ukazuju na opravdanost provedbe faktorske analize. Konfirmatorna analiza glavnih komponenti identificirala je karakteristične vrijednosti četiri glavna faktora znatno veće od 1 (11,91; 4,50; 2,96; 2,05), koji zajedno objašnjavaju 44,64 % ukupne varijance. Doprinos prve komponente je 24,82 %, druge 9,38 %, treće 6,16 %, a četvrte 4,28 %. Oblimin rotacija za provjeru strukture komponenti potvrdila je visoku podudarnost s prethodnim mjerenjima provedenima s učenicima osnovne škole i studentima (22,23). Temeljem faktorske strukture formirane su 4 podljestvice: Strah od neuspjeha (20 čestica), Strah od razočaranja roditelja (8 čestica), Manjak motivacije za učenje (7 čestica) i Pozitivne misli (13 čestica). Rezultati za podljestvicu Pozitivne misli nisu predmet ovoga rada te neće biti prikazivani. Rezultat na svakoj podljestvici dobiven je kao linearni zbroj odgovora na odgovarajućim česticama podljestvice, a veći rezultat znači veću učestalost tih misli. Pouzdanost podljestvica vrlo je visoka, a indeksi pouzdanosti tipa Cronbach alpha su od .83 do .94 (tablice 3, 4 i 5).

REZULTATI

Izračunati su osnovni deskriptivni podatci i podatci o izgledu raspodjela rezultata (tablica 2, 3, 4 i 5). Iz tablice 2 vidljivo je kako se rezultati na upitniku CORE-YP raspodjeljuju u manjem dijelu mogućeg raspona, što je očekivano s obzirom da se radi o nekliničkoj skupini

many coefficients greater than .30, the value of the Kaiser-Meyer-Olkin (KMO) index was .86, and the Bartlett's test for sphericity value revealed statistical significance (4130.57, df = 1128, p <.01). The data justified the use of factor analysis. A confirmatory principal component analysis showed that characteristic values for the four major factors were significantly greater than 1 (11.91; 4.50; 2.96; 2.05), the combination of which explained 44.64% of the total variance. The first component has contributed with 24.82%, the second with 9.38%, the third with 6.16%, and the fourth with 4.28%. Oblimin rotation was performed to verify the structure of the components and it confirmed a high concordance with previous measurements conducted with primary school students and university students (22,23). On the basis of factor structure, four subscales were formed: Fear of Failure (20 items), Fear of Disappointing One's Parents (8 items), Lack of Motivation to Learn (7 items) and Positive Thoughts (13 items). The results for the Positive Thoughts subscale are not the subject of this paper and shall not be presented here. The result for each subscale was a linear sum of scores on the corresponding subscale items, with higher score indicating a higher frequency of such thoughts. The subscales are highly reliable, with the Cronbach's alpha reliability indices ranging from .83 to .94 (Tables 3, 4 and 5).

RESULTS

Basic descriptive data and data on the score distributions were calculated (Tables 2, 3, 4 and 5). Table 2 shows that the YP-CORE questionnaire scores are distributed in a smaller part of the range, as expected, given that this was a non-clinical group of participants. The arithmetic means of the scores obtained in all time points range between 10.50 and 16.06. Data on the asymmetry and flatness of distributions and normality checks show that there are no statistically significant deviations from the normal distribution at any of the measurement points.

TABLICA 2. Osnovni deskriptivni podatci, podatci o raspodjeli rezultata i udio sudionika s rezultatima većim ili jednakim 15 i 20 za CORE-YP upitnik

TABLE 2. Basic descriptive data, data on score distributions and proportion of participants scoring ≥15 and ≥20 on the YP-CORE questionnaire

	Točka mjerenja / Measurement point				
	Prvo mjerenje / First measurement	**Drugo mjerenje / Second measurement**	**Treće mjerenje / Third measurement**	**Četvrto mjerenje / Fourth measurement**	**Peto mjerenje / Fifth measurement**
M	10,50	12.93	16.06	13.64	14.50
SD	5,98	6.28	7.77	6.88	7.15
TR	0-40	0-40	0-40	0-40	0-40
OR	0-25	1-28	1-35	1-31	2-33
K- S	1,06	1,14	1,02	1,25	0,86
Asimetrija / Asymmetry	-0,59	-0,42	-0,59	-0,67	-0,29
Spljoštenost / Flatness	0,38	0,43	0,32	0,35	0,41
α	.83	.84	.89	.87	.88
≥ 15	48 (26,52 %)	67(38,07 %)	102(55,44 %)	83 (45,86 %)	77 (46,67 %)
≥ 20	34 (18,78 %)	42 (23,86 %)	48 (26,09 %)	40 (22,10 %)	37 (22,42 %)

K-S= Kolmogorov- Smirnov test normaliteta raspodjele; TR= teorijski raspon rezultata; OR= opaženi raspon rezultata; α= indeks pouzdanosti Cronbach alpha; ≥ 15 i ≥ 20= broj i postotak rezultata većih ili jednakih 15 i 20
/ KS = Kolmogorov-Smirnov test for normality; TR = theoretical range of scores; OR = observed range of results; α = Cronbach's alpha reliability index; ≥ 15 and ≥ 20 = number and percentage of results greater than or equal to 15 and 20

sudionika. Aritmetičke sredine rezultata u svim primjenama su između 10,50 i 16,06. Podatci o asimetričnosti i spljoštenosti raspodjela i provjera normalnosti pokazala je da nema statistički značajnog odstupanja od normalne raspodjele ni u jednoj točki mjerenja. Udio učenika koji imaju povišeni rezultat **≥ 15** pokazuje trend porasta, a najmanji je u prvome mjerenju. U trećem mjerenju 55,44 % učenika ima povišen rezultat, nakon čega udio tih učenika opada i stabilizira se tijekom četvrtog i petog mjerenja, ali je i dalje visok. Izračunat je i udio učenika koji imaju rezultat jednak ili veći od 20. Rezultat **≥ 20** pokazuje relativno ujednačen udio učenika, od 22,10 do 26,09 %, dok ih je u prvome mjerenju nešto manje.

Aritmetičke sredine rezultata na podljestvici Strah od neuspjeha raspodjeljuju se u gotovo čitavom teorijskom rasponu, a raspodjela ne odstupa statistički značajno od normalne raspodjele (tablica 3). Misli povezane sa strahom od neuspjeha najčešće su u trećoj točki mjerenja (M = 25,67).

The share of students with increased score **≥15** shows an upward trend and was the lowest in the first measurement. In the third measurement, 55.44% of students had an elevated score, after which the share of these students decreased and stabilized in the fourth and fifth measurements, but still remained high. The share of students with a score ≥20 was also calculated. The result **≥20** indicates a relatively consistent share of students, ranging from 22.10 to 26.09%, with a slightly lower share in the first measurement.

The arithmetic means of the Fear of Failure subscale scores are distributed almost equally over the entire theoretical range, and the distribution does not deviate statistically significantly from the normal distribution (Table 3). Thoughts associated with fear of failure were most frequent at the third measurement point (M = 25.67).

The scores on the Fear of Disappointing One's Parents subscale were highest in the third measurement (M = 5.83). Until that point, they were distributed over the larger part of the possible range, and after the third measure-

TABLICA 3. Osnovni deskriptivni podatci i podatci o raspodjeli rezultata za podljestvicu Strah od neuspjeha
TABLE 3. Basic descriptive data and data on score distributions on Fear of Failure subscale

	Točka mjerenja / Measurement point				
	Prvo mjerenje / First measurement	**Drugo mjerenje / Second measurement**	**Treće mjerenje / Third measurement**	**Četvrto mjerenje / Fourth measurement**	**Peto mjerenje / Fifth measurement**
M	18,44	21,41	25,67	21,11	22,33
SD	9,59	10,71	11,84	10,52	11,18
TR	0-60	0-60	0-60	0-60	0-60
OR	1-55	0-53	2-57	3-51	1-53
K- S	1,36	1,26	0,99	1,21	0,96
Asimetrija / Asymmetry	0,89	0,56	0,46	0,59	0,53
Spljoštenost / Flatness	1,08	0,06	-0,17	-0,11	-0,08
α	.92	.93	.94	.93	.94

K-S= Kolmogorov- Smirnov test normaliteta raspodjele; TR= teorijski raspon rezultata; OR= opaženi raspon rezultata; α= indeks pouzdanosti Cronbach alpha
/ KS = Kolmogorov-Smirnov test for normality; TR = theoretical range of scores; OR = observed range of results; α = Cronbach's alpha reliability index

Rezultati na podljestvici Strah od razočaranja roditelja najviši su u trećem mjerenju (M= 5.83). Do tada se raspodjeljuju u većem dijelu mogućeg raspona, a nakon trećeg mjerenja raspon rezultata i prosječne vrijednosti se smanjuju. Raspodjela rezultata se značajno razlikuje od normalne (tablica 4). Suprotan trend promjene aritmetičkih sredina pokazuju rezultati na podljestvici Manjak motivacije za učenje *(*tablica 5). Učestalosti ovih misli raste s najvišom prosječnom vrijednošću u petom mjerenju (M= 12,23). U prvoj i drugoj primjeni raspodjela rezultata statistički se značajno razlikuje od normalne.

Većina rezultata raspodjeljuje se u skladu s normalnom raspodjelom, asimetričnost i spljoštenost krivulja koje se razlikuju od normalne su u okviru prihvatljivih vrijednosti (indeks asimetričnosi u rasponu ± 3, indeks spljoštenosti u rasponu ± 10; prema 24) te se rezultati mogu analizirati parametrijskim postupcima.

Na rezultatima 133 sudionika, među kojima je bilo 98 (73,68 %) djevojaka i 35 (26,32 %) mladića i koji su sudjelovali u svim točkama mjerenja, izračunate su korelacije rezultata za sve korištene mjere u svim točkama mjerenja (tablica 6). Povezanost emocionalne uznemirenosti i

ment, the range of results and average values decrease. The distribution of results differs significantly from the normal distribution (Table 4). The Lack of Motivation subscale scores indicate an opposite trend regarding the change of arithmetic means (Table 5). The frequency of these thoughts increases with the highest average value in the fifth measurement (M = 12.23). In the first and second application of the questionnaire, the distribution of results differed statistically significantly from the normal one.

Most scores are distributed according to the normal distribution, and the asymmetry and flatness of curves that differ from the normal are within the acceptable range (the asymmetry index in the range ± 3, the flatness index in the range ± 10; according to 24). Thus, the results can be analysed using parametric procedures.

Based on the scores for 133 participants, where 98 (73.68%) were girls and 35 (26.32%) were boys who participated at all measurement points, the score correlations were calculated for all measures used at all measurement points (Table 6). The link between emotional distress and fear-of-failure-related thoughts measured by the Pearson correlation coefficient is statistically significant and high at all measurement points

TABLICA 4. Osnovni deskriptivni podatci i podatci o raspodjeli rezultata za podljestvicu Strah od razočaranja roditelja
TABLE 4. Basic descriptive data and data on score distributions on Fear of Disappointing One's Parents subscale

	Točka mjerenja / Measurement point				
	Prvo mjerenje / First measurement	Drugo mjerenje / Second measurement	Treće mjerenje / Third measurement	Četvrto mjerenje / Fourth measurement	Peto mjerenje / Fifth measurement
M	4,83	5,00	5,83	3,64	3,64
SD	4,63	5,27	5,74	4,30	4,16
TR	0-24	0-24	0-24	0-24	0-24
OR	0-24	0-22	0-23	0-19	0-18
K- S	2,41*	2,33*	2,13*	2,93*	2,88*
Asimetrija / Asymmetry	1,14	1,37	1,10	1,51	1,49
Spljoštenost / Flatness	1,21	1,40	0,44	1,82	1,61
α	.86	.90	.90	.89	.89

K-S= Kolmogorov- Smirnov test normaliteta raspodjele; *p<.05; TR= teorijski raspon rezultata; OR= opaženi raspon rezultata; α= indeks pouzdanosti Cronbach alpha
/ KS = Kolmogorov-Smirnov test for normality; * p <.05; TR = theoretical range of results; OR = observed range of results; α = Cronbach's alpha reliability index

TABLICA 5. Osnovni deskriptivni podatci i podatci o raspodjeli rezultata za podljestvicu Manjak motivacije za učenje
TABLE 5. Basic descriptive data and data on score distributions on Lack of Motivation to Learn subscale

	Točka mjerenja / Measurement point				
	Prvo mjerenje / First measurement	Drugo mjerenje / Second measurement	Treće mjerenje / Third measurement	Četvrto mjerenje / Fourth measurement	Peto mjerenje / Fifth measurement
M	7,94	10,03	11,58	11,38	12,23
SD	4,04	4,36	4,37	4,66	4,50
TR	0-21	0-21	0-21	0-21	0-21
OR	0-19	0-21	0-21	0-21	1-21
K- S	1,65*	1,82*	1,33	1,07	1,14
Asimetrija / Asymmetry	0,45	0,34	0,07	-0,05	0,03
Spljoštenost / Flatness	-0,35	-0,41	-0,37	-0,64	-0,59
α	.83	.82	.82	.87	.86

K-S= Kolmogorov- Smirnov test normaliteta raspodjele; *p<.05;TR= teorijski raspon rezultata; OR= opaženi raspon rezultata; α= indeks pouzdanosti Cronbach alpha
/ KS = Kolmogorov-Smirnov test for normality; *p <.05; TR = theoretical range of results; OR = observed range of results; α = Cronbach's alpha reliability index

misli vezanih za strah od neuspjeha mjerena Pearsonovim koeficijentom korelacije statistički je značajna i visoka u svim točkama mjerenja (r=.65 do .73; p<.01). Povezanost emocionalne uznemirenosti i misli vezanih uz strah od razočaranja roditelja je također statistički značajna i srednje visoka (r= .42 do .54; p<.01), kao i povezanost emocionalne uznemirenosti i misli vezanih za nemotiviranost za učenje (r=.38 do .54; p<.01).

(r = .65 to .73; p <.01). The correlation between emotional distress and thoughts related to fear of disappointing one's parents is also statistically significant and moderately high (r = .42 to .54; p <.01) as well as the correlation between emotional distress and thoughts related to lack of motivation to learn (r = .38). to .54; p <.01).

One-factor analyses of variance of repeated measurements and post-hoc analyses with Bonferroni correction were performed. For the YP-CORE

TABLICA 6. Interkorelacije za varijable emocionalna uznemirenost, misli vezane uz strah od neuspjeha, misli vezane uz strah od razočaranja roditelja i misli vezane uz manjak motivacije za učenje u pet točaka mjerenja (n=133)
TABLE 6. Inter-correlations for variables of emotional distress, thoughts related to fear of failure, thoughts related to fear of disappointing one's parents and thoughts related to the lack of motivation to learn at five measurement points (n=133)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
1.CO1																				
2.CO2	.52**																			
3.CO3	.47**	.63**																		
4.CO4	.40**	.63**	.63**																	
5.CO5	.28*	.36**	.59**	.68**																
6.SON1	.65**	.44**	.35**	.29*	.22*															
7.SON2	.39**	.70**	.48**	.45**	.27*	.53**														
8.SON3	.45**	.56**	.73**	.55**	.44**	.57**	.70**													
9.SON4	.44**	.56**	.63**	.73**	.54**	.42**	.55**	.72**												
10.SON5	.36**	.34**	.52**	.52**	.68**	.41**	.40**	.64**	.68**											
11.SOR1	.54**	.28*	.22*	.23*	.25*	.51**	.19	.27*	.20*	.34**										
12.SOR2	.33**	.42**	.21*	.28*	.23*	.30**	.40**	.18	.23	.30**	.54**									
13.SOR3	.42**	.35**	.43**	.40**	.32	.27*	.26*	.44**	.44**	.38**	.57**	.55**								
14.SOR4	.21*	.33**	.29*	.45**	.27*	.18	.15	.23*	.46**	.24*	.36**	40**	.68**							
15.SOR5	.19	.17	.27*	.34**	.44**	.11	.12	.18	.34**	.49**	.44**	.49**	.60**	.59**						
16.MMU1	.38**	.35**	.20*	.20*	.09	.57**	.41**	.32**	.30**	.25*	.28*	.21*	.09	.11	.14					
17.MMU2	.31**	.47**	.30**	.23*	.19	.39**	.66**	.38**	.37**	.25*	.09	.28*	.13	.05	.08	.59**				
18.MMU3	.29*	.39**	.40**	.37**	.34**	.31**	.48**	.59**	.48**	.41**	.19	.23*	.40**	.20*	.18	.40**	.56**			
19.MMU4	.26*	.38**	.44**	.54**	.39**	.25*	.36**	.44**	.64**	.36**	.11	.13	.29*	.31**	.26*	.39**	.50**	.62**		
20.MMU5	.23*	.30**	.36**	.38**	.48**	.27*	.29**	.43**	.48**	.66**	.25*	.22*	.29*	.18	.39**	.36**	.45**	.59**	.60**	

CO1- CO5= emocionalna uznemirenost u pet točaka mjerenja; SON1- SON5 = Misli povezane sa strahom od neuspjeha u pet točaka mjerenja; SOR1- SOR5 = Misli povezane sa strahom od razočaranja roditelja u pet točaka mjerenja; MMU1- MMU5 = Misli povezane s manjkom motivacije za učenja u pet točaka mjerenja; ** p<.01; *p< .05
/ CO1- CO5= emotional distress at five measurement points; SON1- SON5 = Thoughts related to fear of failure at five measurement points; SOR1- SOR5 = Thoughts related to fear of disappointing one's parents at five measurement points; MMU1- MMU5 = Thoughts related to the lack of motivation to learn at five measurement points; ** p<.01; *p< .05

Provedene su jednofaktorske analize varijance ponovljenih mjerenja te *post-hoc* analize uz korekciju Bonferroni. Za upitnik CORE-YP Wilksova lambda = 0,65; F(4,129) = 15,94, p< .01, uz Eta² = 0,35. *Post-hoc* analize pokazuju da su učenici imali statistički značajno nižu razinu emocionalne uznemirenosti u

questionnaire Wilks' lambda was 0.65; F (4,129) = 15.94, p <.01 with Eta² = 0.35. Post-hoc analyses indicate that students had a statistically significantly lower level of emotional distress in the first measurement than in other measurements. The highest level of emotional distress was found in the third measurement, and it was statistically

prvome mjerenju u odnosu na ostala. Najviša razina emocionalne uznemirenosti je u trećem mjerenju i to statistički značajno viša u odnosu na prvo, drugo i četvrto mjerenje. Nema statistički značajne razlike u odnosu na peto mjerenje. Za podljestvicu Strah od neuspjeha Wilksova lambda = 0,64; F(4,129)= 15,69, p<.01, uz Eta² = 0,36. Automatske misli vezane uz strah od neuspjeha statistički su značajno najčešće u trećem mjerenju u odnosu na ostala mjerenja. Ove su misli značajno češće i u petom mjerenju u odnosu na prvo. Za podljestvicu Strah od razočaranja roditelja Wilksova lambda = 0,73; F(4,129) = 11,74, p<.01, uz Eta² = 0,27. Misli vezane uz strah od razočaranja roditelja najmanje se pojavljuju u petom mjerenju. Razlika je statistički značajna u odnosu na prvo, drugo i treće mjerenje. Statistički je značajno manje ovakvih misli i u četvrtom nego u trećem mjerenju. Za podljestvicu manjak motivacije za učenje Wilksova lambda = 0,57; F (4,129) = 22,90, p<.01, uz Eta² = 0,43. Misli vezane uz nemotiviranost za učenje pojavljuju se statistički značajno manje u prvom mjerenju u odnosu na ostala, te u drugom mjerenju u odnosu na treće, četvrto i peto. Sve prethodno navedene razlike statistički su značajne uz p<.05. Izra-

significantly higher than in the first, second and fourth measurements. There was no statistically significant difference between the third and fifth measurement. For the Fear of Failure subscale, Wilks' lambda was 0.64; F (4,129) = 15.69, p <.01 with Eta² = 0.36. Automatic thoughts related to fear of failure were statistically significantly more common in the third measurement than in other measurements. These thoughts were significantly more expressed in the fifth than in the first measurement. In Fear of Disappointing One's Parents subscale, Wilks' lambda was 0.73; F (4,129) = 11.74, p <.01 with Eta² = 0.27. Thoughts related to the fear of disappointing one's parents were least expressed in the fifth measurement. The difference was statistically significant when the fifth measurement was compared with the first, second and third measurements. These thoughts were statistically significantly less pronounced in the fourth than in the third measurement. In Lack of Motivation to Learn subscale, Wilks' lambda was 0.57; F (4,129) = 22.90, p <.01 with Eta² = 0.43. Thoughts related to lack of motivation to learn were found to be statistically significantly less expressed in the first measurement compared to other measurements. They were also less expressed in the second measurement than in the third, fourth and fifth measurements.

TABLICA 7. Osnovni deskriptivni podatci i rezultati ANOVA-e ponovljenih mjerenja (n=133)
TABLE 7. Basic descriptive data and ANOVA results of repeated measurements (n = 133)

	Točka mjerenja / Measurement point										ANOVA ponovljenih mjerenja / ANOVA repeated measurements			
	Prvo mjerenje / First measurement		Drugo mjerenje / Second measurement		Treće mjerenje / Third measurement		Četvrto mjerenje / Fourth measurement		Peto mjerenje / Fifth measurement					
	M	SD	M	SD	M	SD	M	SD	M	SD	F (4,129)	Wilksova lambda / Wilks' lambda	Eta²	značajne razlike / significant differences
CORE-YP / YP-CORE	10,61	5,89	12,25	5,57	15,53	7,60	13.32	6.83	14.07	6.98	15.94**	0,65	0.35	$M_{1,2}^*; M_{1,3}^*; M_{1,4}^*; M_{1,5}^* M_{3,2}^*; M_{3,4}^*$
Strah od neuspjeha / Fear of failure	18,35	8,81	20,56	9,65	25,00	11,94	19,51	9,76	21,21	10,42	15.69**	0,64	0.36	$M_{3,1}^*; M_{3,2}^*; M_{3,4}^*; M_{3,5}^* M_{5,1}^*$
Strah od razočaranja roditelja / Fear of disappointing one's parents	4,82	4,49	4,66	4,78	5,83	5,63	3,72	4,30	3,34	3,86	11,74**	0,73	0.27	$M_{5,1}^*; M_{5,2}^*; M_{5,3}^* M_{4,3}^*$
Manjak motivacije za učenje / Lack of motivation to learn	7,96	3,83	9,60	4,19	11,23	4,26	10,96	4,56	11,90	4,40	22,90**	0,57	0.43	$M_{1,2}^*; M_{1,3}^*; M_{1,4}^*; M_{1,5}^* M_{2,3}^*; M_{2,4}^*; M_{2,5}^*$

**p<.01; *p<.05

čunati indeksi Eta² (od 0,27 do 0,43) ukazuju na statistički značajan efekt točke mjerenja (24).

RASPRAVA

Cilj provedenog istraživanja bio je ispitati razinu opće emocionalne uznemirenosti i učestalost negativnih automatskih misli za vrijeme učenja tijekom srednje škole, istražiti koliko učenika ima povišenu razinu emocionalne uznemirenosti te provjeriti postoje li u tome statistički značajne razlike ovisno o godini obrazovanja. U skladu s rezultatima prethodnih istraživanja i dostupne literature, kao i činjenice da je većina sudionika bila ženskog spola, očekivali smo 20-30 % sudionika sa značajno povišenim rezultatom na ljestvici emocionalne uznemirenosti, što su rezultati potvrdili. Na osnovi poznavanja razvojnih karakteristika i dinamike adolescencije te praktičnog iskustva u radu s adolescentima, najvišu razinu emocionalne uznemirenosti i negativnih automatskih misli očekivali smo na kraju drugog razreda. Očekivali smo da će razlika u izraženosti biti statistički značajna u odnosu na ostale točke mjerenja, što je djelomično potvrđeno. Rezultati pokazuju kako je na kraju drugog razreda emocionalna uznemirenost statistički značajno viša u odnosu na ostale razrede, osim završnoga, kada nije zabilježena statistički značajna razlika.

Završetak nastavne godine za mnoge je učenike kognitivno i emocionalno stresan zbog povećanog broja pisanih i usmenih provjera znanja i ocjenjivanja. Povišena razina emocionalne uznemirenosti može se očekivati i pri prelasku na višu obrazovnu razinu, kao što je to prelazak u srednju školu. To može utjecati na kvalitetu učenikova rada i povećati rizik za razvoj teškoća mentalnog zdravlja, stoga je važan pravovremeni probir učenika u riziku. Razina emocionalne uznemirenosti i učestalost negativnih automatskih misli za vrijeme uče-

All of the above differences are statistically significant with p <.05. The calculated Eta² indices (ranging from 0.27 to 0.43) indicate a statistically significant effect of the measurement point (24).

DISCUSSION

The aim of the study was to examine the level of general emotional distress and the frequency of negative automatic thoughts during secondary school education, to inspect how many students have an elevated level of emotional distress and to investigate statistically significant differences depending on the year of secondary education. Consistent with previous research and available literature, as well as the fact that the majority of participants were female, we have expected to find 20–30% of participants with a significantly increased score on the emotional distress scale, which was confirmed by the results. Considering the developmental characteristics and dynamics of adolescence and practical experience in working with adolescents, the highest level of emotional distress and negative automatic thoughts was expected at the end of the second grade. We expected that the difference in expression would be statistically significant compared with other measurement points, which our study partially confirmed. The results indicate that emotional distress is statistically significantly higher at the end of the second grade compared with other grades, except for the fourth grade, for which no statistically significant difference was recorded.

For many students, the end of the school year is a cognitively and emotionally stressful period due to an increased number of written and oral tests and evaluation of academic achievement. An elevated level of emotional distress can also be expected when moving on to a higher level of education, such as moving on to secondary school. Such a transition can affect the quality of students' work and increase the risk of developing mental health difficulties. Therefore, it is important to have timely screening of students at risk.

nja provjereni su u pet vremenskih točaka. Prvo mjerenje provedeno je mjesec dana nakon započetog prvog razreda srednje škole, a ostala mjerenja tri tjedna prije kraja nastavne godine, u vrijeme zaključnih ispitivanja i provjera znanja. Očekivali smo kako će se više razine uznemirenosti detektirati već u prvoj točki mjerenja. Naime, poznato je kako i tranzicija na višu obrazovnu razinu i prilagodba na novi školski kontekst mogu biti vrlo stresni (12), tim više što dio učenika mijenja i mjesto boravišta i odlazi iz primarne obitelji radi školovanja. Međutim, na razini čitave skupine sudionika, rezultati to nisu potvrdili. U prvom mjerenju prosječni rezultat na CORE-YP upitniku bio je 10,50, što je statistički značajno manje u odnosu na sva ostala mjerenja. Gotovo isti rezultat (10,70) dobiva se za učenike osnovne škole (25). Kao „kritični" rezultat, onaj koji ukazuje na povišenu razinu emocionalne uznemirenosti, navodi se 14,1 za mladiće, odnosno 15,9 za djevojke u dobi od 14 do 16 godina (21). Stoga, na osnovi prosječnog rezultata, možemo zaključiti kako početak školovanja u srednjoj školi za sudionike nije bio osobito stresan. Rezultat je moguće objasniti kombinacijom više čimbenika. Radi se o nekliničkoj skupini sudionika, učenika strukovne škole u kojoj se dosta pozornosti pridaje emocionalnoj prilagodbi učenika. Osim toga, u strukovnim programima odnosi s dijelom nastavnika mogu biti opušteniji zbog praktične nastave koja se odvija u malim skupinama. Na taj način, nastavnici i učenici bolje se upoznaju, a učenici dobivaju i više emocionalne podrške. Pored toga, u vrijeme kad je provedeno prvo mjerenje još se uglavnom obrađuje novo gradivo i prva veća provjeravanja znanja nisu započela. Rezultate možemo usporediti s istraživanjima koja su koristila ovaj upitnik na sličnoj dobnoj skupini. Pri primjeni na skupini britanskih adolescenata u dobi do 14 do 16 godina prosječni rezultat na CORE-YP upitniku bio je 7,4 (17). U drugom istraživanju na skupini od 380 adolescenata

The level of emotional distress and the frequency of negative automatic thoughts during learning were examined at five time points. The first measurement was conducted one month after the start of the first grade of secondary school, and other measurements three weeks before the end of the school year, i.e. the time of the final examinations and tests. We have expected to find higher levels of distress already at the first measurement point. Namely, it is known that the transition to the next higher level of education and adaptation to a new school context can be very stressful (12), especially since some students also have to change their place of residence and leave their family home in order to get education. However, the results for the whole group of participants have not confirmed this presumption. In the first measurement, the average score on the YP-CORE questionnaire was 10.50, which is statistically significantly lower than in all other measurements. Almost the same result (10.70) was obtained for primary school students (25). The so-called "critical" result or the one indicating an elevated level of emotional distress indicates 14.1 for boys and 15.9 for girls aged 14 to 16 (21). Considering the average score, we can conclude that the start of secondary education has not been particularly stressful for the participants. This result can be explained by a combination of several factors. We evaluated a non-clinical group of participants, i.e. students attending a vocational school that pays a lot of attention to emotional adjustment of its students. In addition to that, vocational programmes allow for a more relaxed relationship with teachers because of the practical aspects of vocational teaching taking place in smaller groups. In this way, teachers and students have the opportunity to get to know each other and students receive more emotional support. Furthermore, at the time of the first measurement, new school material was only being introduced and the first examinations had not started yet. The results can be compared with other studies that used the same questionnaire for a similar age group. When administered to a

prosječni rezultat bio je 9,4 (21). Autori navode i rezultate skupine od 90 adolescenata u dobi od 11 do 19 godina, koji su svoje upitnike rješavali dva puta s razmakom od 6 godina. Prvi put prosječni rezultat bio je 8,3, a šest godina kasnije 7,7 (21). Istraživanje provedeno u našoj zemlji na uzorku učenica gimnazijskog i strukovnih programa dobivaju nešto više rezultate aritmetičkih sredina, od 14,48 do 16,30. Međutim, tada su analizirani rezultati samo djevojaka, koje i inače postižu nešto više rezultate (20,21). U tom su istraživanju sudjelovale i učenice iz gimnazijskih programa, čiji su rezultati povisili prosječni rezultat skupine, a podatci prikupljani u studenom, kada se uobičajeno provode prva veća ispitivanja znanja, što je također moglo utjecati na rezultate. Kako bismo dobili dodatne deskriptivne podatke, izračunat je udio učenika s rezultatom 15 ili više, uzimajući u obzir podatke o „kritičnom" rezultatu usporedive dobne skupine mladića i djevojaka (21). Prema kriteriju rezultat ≥ 15, 26,52 % sudionika ima povišenu razinu emocionalne uznemirenosti prije no što su počela ispitivanja znanja. Čak 18,78 % učenika ima rezultat ≥ 20, za što se može reći da je klinički upadljiv. Ističu se dva razdoblja u kojima je kod sudionika razina emocionalne uznemirenosti povišena čak i na razini prosječnog rezultata za sve sudionike. To su razdoblja na kraju drugog i četvrtog razreda. Povišeni stres pred kraj srednjoškolskog obrazovanja (četvrti razred) očekivan je zbog dvostrukog pritiska. Osim redovnih ispitivanja, kao učenici strukovne škole trebaju se posebno pripremati i za polaganje ispita državne mature, što je preduvjet za nastavak obrazovanja. Prije kraja srednje škole čak 46,67 % učenika ima rezultat ≥ 15, a 22,42 % rezultat ≥ 20. Ipak, najviša razina emocionalne uznemirenosti, uz najčešće prisutne negativne automatske misli sadržajno povezane sa strahom od neuspjeha i strahom od razočaranja roditelja prisutna je pri kraju drugog razreda, kad čak 55,44 % sudionika ima rezultat ≥ 15. Tada

group of British adolescents aged 14 to 16 years, the mean score on the YP-CORE questionnaire was 7.4 (17). Another study investigated a group of 380 adolescents and established an average score of 9.4 (21). The authors also reported the results found in a group of 90 adolescents aged 11 to 19 years who answered questionnaires twice in an interval of 6 years. The average score was 8.3 on the first occasion, and 7.7 six years later (21). A study conducted in Croatia on a sample of secondary and vocational school students obtained slightly higher scores, ranging from 14.48 to 16.30. However, the study in question analysed only the scores for girls, and girls usually achieve slightly higher results (20,21). Also, the study in question also included female gymnasium students whose results have increased the group's average score. In addition to that, data were collected in November when the first examinations usually take place, which could also have affected the results. To obtain additional descriptive data, the proportion of students scoring ≥15 was calculated, taking into account the data on the "critical" score in a comparable age group of boys and girls (21). Among the students scoring ≥15, 26.52% of them had an elevated level of emotional distress before the beginning of examinations. As many as 18.78% of students had a score ≥ 20, and our findings can be defined as clinically noticeable. We have found two periods in which the level of emotional distress in the participants was elevated compared to the level of the average score for all participants. The two periods are the end of second and the end of fourth grade. Increased stress towards the end of secondary education (fourth grade) is expected due to the double pressure. In addition to regular examinations, students in vocational schools need to additionally prepare for a nation-wide exit exam (Matura), which is a prerequisite for continuing higher education. Before the end of secondary education, as many as 46.67% of students scored ≥ 15, and 22.42% scored ≥ 20. However, the highest level of emotional distress with the most common negative automatic thoughts related to fear of failure

čak 26,09 % učenika ima rezultat ≥ 20, što je u skladu s prethodnim hrvatskim istraživanjima koja detektiraju 20 % do 30 % adolescenata koji imaju neku vrstu teškoća mentalnog zdravlja (9-11). Povezanost emocionalne uznemirenosti i misli povezanih sa strahom od neuspjeha vrlo je visoka u svim točkama mjerenja (r= .65 do .73; p<.01), što je očekivano i u skladu s teorijskim okvirom istraživanja. Pa, iako se ovdje radi o korelacijskom nacrtu koji ne dozvoljava zaključke o kauzalnoj povezanosti, rezultati se mogu objasniti kognitivnim modelima disfunkcionalnog doživljavanja i ponašanja, u kojima su automatske misli važan konstrukt (23). U svom modelu Beck (16) pretpostavlja da su emocije pod utjecajem percepcije događaja ili situacije, te su kognitivne procjene i emocionalno stanje u međusobno recipročnom odnosu. Ako se analiziraju rezultati postignuti na podljestvicama Upitnika automatskih misli, uočava se kako su u trećoj točki mjerenja najučestalije negativne misli koje uključuju strah od neuspjeha (*Ništa ne razumijem, Gluplja sam od drugih, Uzalud se trudim, ionako neću uspjeti* i sl.) i strah od razočaranja roditelja (*Kako ću roditeljima pred oči, Samo im zadajem brige i probleme, Opet ću morati slušati od svojih* i sl.). Učestalost misli vezanih za strah od neuspjeha pojačana je i na kraju srednje škole, no statistički je značajno veća samo u odnosu na prvo mjerenje. Dakle, prije kraja srednje škole povišena je razina opće emocionalne uznemirenosti, uz nešto manje izražene negativne misli povezane sa strahom od neuspjeha. Moguće je da to proizlazi iz činjenice da su sudionici učenici strukovne škole te imaju svoje prvo zanimanje bez obzira na konačni rezultat završnog razreda. Zanimljivo je uočiti dinamiku promjena u učestalosti misli povezanih sa strahom od razočaranja roditelja. Povezanost emocionalne uznemirenosti i misli povezanih sa strahom od razočaranja roditelja najviša je u prvome mjerenju (r=.54; p<.01), dok je u svim ostalim mjerenjima nešto niža, ali i dalje značajna (.42 do .45; p<.01).

and fear of disappointing one's parents was found at the end of second grade, when as many as 55.44% of participants scored ≥ 15. At that point in time, as many as 26.09% of students scored ≥ 20, which is in line with previous Croatian research that found that 20-30% of adolescents experienced some sort of mental health problems (9-11). The link between emotional distress and negative automatic thoughts associated with the fear of failure was very highly expressed at all measurement points (r = .65 to .73; p <.01), which was expected and in line with the theoretical framework of the research. Although our correlation design does not allow conclusions about causal relations, the results can be explained by cognitive models of dysfunctional experience and behaviour, in which automatic thoughts represent an important construct (23). Beck's cognitive model (16) proposes that emotions are a result of one's perception of a particular event or situation, and that cognitive evaluation and emotional state have a reciprocal relationship. The analysis of the scores obtained on the Automatic Thought Questionnaire subscales has found that the most common negative thoughts at the third measurement point included fear of failure (*I do not understand anything, I am stupider than others, I have been trying in vain, I will not succeed*, etc.) and fear of disappointing one's parents (*How will I face my parents, I just give them worries and problems, My parents will scold me again*, etc.). The frequency of thoughts related to fear of failure also increased by the end of secondary education, but it was statistically significantly higher only in comparison with the first measurement. Therefore, the level of general emotional distress elevates towards the end of secondary education combined with somewhat less pronounced negative thoughts associated with fear of failure. It is possible that this result stems from the fact that the participants attended a vocational school and that their first occupation did not depend on the academic achievement during the last year of secondary education. It is interesting to note the dynamics of change in the frequency of thoughts

Nakon što dosegnu vrhunac na kraju drugog razreda srednje škole, učestalost misli povezanih sa strahom od razočaranja roditelja opada i najmanja je pri kraju srednje škole. Rezultat se može objasniti na dva načina. Prvo, procesom razvoja osobnog identiteta, odnosno zadovoljavanja potrebe za osobnom nezavisnošću i psihološkog odvajanja adolescenata od roditelja. Razvojno, što je adolescent psihološki manje zavisan od roditelja to bi i zabrinutost od njihova razočaranja mogla biti manja. Moguće je i to da nakon prvog razreda u novoj školi dolazi do stabilizacije očekivanja i roditelja i učenika oko uspjeha, čime se smanjuje i zabrinutost učenika oko eventualnog razočaranja roditelja. Osobito zato što se radi o učenicima strukovne škole koji završetkom ove obrazovne razine imaju svoje prvo zvanje za tržište rada. Uočavaju se i promjene u učestalosti misli povezanih s nemotiviranošću za učenje čija učestalost vremenom raste. Povezanost ovih misli i emocionalne uznemirenosti je također značajna i kreće se od r = .38 do .54; p <.01. Statistički ih je značajno manje u prvom mjerenju u odnosu na ostala. Takvih je misli najviše na kraju srednje škole (*Ovo mi nikad u životu više neće trebati, Ovo je glupo, Ne mogu se koncentrirati* i sl.). Moguće je da su učenici zasićeniji školskim sadržajima te se to odražava i padom motiviranosti za učenje. Manjak motivacije za učenje može biti i vrsta obrambenog mehanizma. Možda je adolescentima koji se boje neuspjeha, ali i promjena koje donosi završetak srednje škole, lakše sačuvati samopoštovanje uz umanjivanje vrijednosti sadržaja učenja. Na taj način eventualni neuspjeh lakše je pripisati nedovoljnom radu zbog nemotiviranosti, nego li tome da učenik nije kompetentan za dosizanje boljeg uspjeha. Budući da do sada nisu objavljeni rezultati koje na Upitniku automatskih misli postižu srednjoškolci, rezultate možemo usporediti samo s onima koje postižu učenici osnovnih škola i studenti (22, 23, 26-28), uz oprez u zaključivanju, budući da u strukturi podljestvica po-

associated with fear of disappointing one's parents. The link between emotional distress and thoughts associated with fear of disappointing one's parents was highest in the first measurement (r = .54; p <.01) and remained somewhat lower but still significant in all other measurements (.42 to .45; p < .01). After reaching a peak at the end of the second grade of secondary school, the frequency of thoughts associated with the fear of disappointing one's parents decreases, reaching the lowest level at the end of secondary education. This finding can be explained in two ways. First, it is due to the process of developing personal identity, i.e. satisfying the need for personal independence and psychological separation of adolescents from their parents. In terms of development, the less the adolescent is psychologically dependent on the parents, the lower the concern about disappointing them. It is also possible that parents and students' expectations of success in school stabilize following the first grade of secondary education, which, in turn, reduces students' concern about disappointing their parents. This might be related to the fact that we have studied students attending vocational school preparing them to enter the labour market upon completion of this educational level. We also observed alternations in the frequency of thoughts associated with the lack of motivation to learn, the frequency of which increased over time. The link between these thoughts and emotional distress is also significantly pronounced, ranging from r = .38 to .54; p <.01. Thoughts associated with the lack of motivation to learn were statistically less significant in the first measurement than in other measurements and most common at the end of secondary education (*I will never need this again in my life, This is stupid, I can't concentrate*, etc.). It is possible that students were more overwhelmed with school obligations resulting in decreased motivation to learn. Lack of motivation to learn might also be a kind of defence mechanism. It is perhaps easier for adolescents who are afraid of failure and change following the completion of secondary education to

stoje male razlike. Prosječni rezultati na podljestvici Strah od neuspjeha slični su između sve tri skupine, osim upadljivo višeg rezultata srednjoškolaca u trećem mjerenju. Na podljestvici Strah od razočaranja roditelja srednjoškolci postižu manji rezultat u odnosu na osnovnoškolce, a rezultati su slični onima koje postižu studenti, iako ne u svim provedenim istraživanjima. Misli vezane uz manjak motivacije za učenje češće su kod učenika srednje škole nego učenika osnovne škole, a nešto se manje pojavljuju nego kod studenata, iako razlike nisu velike.

Analiza rezultata ovog istraživanja potvrdila je primjenjivost korištenih upitnika za probir učenika s rizikom za razvoj teškoća mentalnog zdravlja. Upitnik CORE-YP koji smo koristili, najčešće je korišten upitnik za procjenu razine opće emocionalne uznemirenosti kod učenika od 11 do 16 godina u Velikoj Britaniji (5), a od 2015. godine uveden je i u popis upitnika preporučenih za korištenje školskih savjetovatelja (21). Hrvatski zavod za javno zdravstvo uvrstio ga je u popis instrumenata u projektu „*Probir rizika u mentalnom zdravlju školske djece*" koji će provoditi školski liječnici u okviru sistematskih pregleda učenika (29). Stoga prikupljeni podatci mogu biti korisni za usporedbu kako u školama tako i u dispenzerima školske medicine. Upitnik automatskih misli kvalitetna je dopuna, jer daje uvid u kognitivni aspekt emocionalne uznemirenosti učenika što može biti odlična polazna točka za intervencije u savjetovanju. Ovim istraživanjem potvrđena je njegova prethodno definirana struktura i na učenicima srednje škole, kao i visoka pouzdanost (22, 23). Provedba probira, naravno, nije sama sebi svrha. „...Mora imati osiguranu mogućnost pružanja intervencija za djecu za koju se utvrdi da imaju povećani rizik za prisutnost psihičkog poremećaja" (9), za što je vrlo važna suradnja liječnika školske medicine i škole, poglavito školskih psihologa.

maintain self-esteem by downplaying the value of the learning material. Thus, it is easier to attribute possible failure to a lack of motivation and resulting insufficient efforts than to a student's lack of competence to do better at school. Because no results on the Automatic Thought Questionnaire for secondary school students have been published so far, we could compare our results only with the results for primary school students and university students (22, 23, 26-28). However, it is important to be cautious about drawing firm conclusions due to small differences in the structure of the subscales. The average scores on Fear of Failure subscale were similar for all three groups, except for the markedly higher score of secondary school students in the third measurement. On Fear of Disappointing One's Parents subscale, secondary school students scored lower than elementary school students, and the scores were similar to those achieved by college students, although not in all surveys conducted. Thoughts related to the lack of motivation to learn were more frequent among secondary school students than among elementary school students, and they occurred somewhat less frequently than among college students, although the differences were not significant.

The analysis of the study results has confirmed the applicability of the questionnaires used to screen students at risk for developing mental health difficulties. The YP-CORE questionnaire used in this study is the most commonly used questionnaire for assessing the level of general emotional distress in students aged 11 to 16 in the UK (5). Since 2015, it has been included in the list of recommended questionnaires for use by school counsellors (21). The Croatian Institute of Public Health has included it in the list of tools to be used in the *"Risk screening of mental health in school children"* project that will be carried out by school doctors as part of regular physical examination of students (29). Therefore, the collected data can be useful for comparing results obtained both in schools and in school children's outpa-

Potrebno je razmotriti neke metodološke nedostatke i ograničenja provedenog istraživanja. Korišten je prigodni uzorak učenika strukovne škole što ne dozvoljava generalizaciju rezultata. Osim toga, zajedno su statistički analizirani rezultati (malobrojnih) mladića i djevojaka. Buduće istraživanje trebalo bi uključiti veći broj sudionika, podjednak broj djevojaka i mladića iz različitih škola. Poznato je kako djevojke u odnosu na mladiće češće i intenzivnije doživljavaju emocionalnu napetost i nelagodu (15,20,21), što je i biološki i socijalno uvjetovano te je svakako moglo utjecati i na rezultate ovog istraživanja. Osobito bi bilo vrijedno prikupiti podatke učenika gimnazijskih programa i usporediti ih s rezultatima učenika strukovnih škola, budući da bi i vrsta škole mogla imati značajni utjecaj na izraženost ispitivanih varijabli, kako je to prethodno već i komentirano.

ZAKLJUČCI

Unatoč ograničenjima, istraživanje je dalo vrijedne rezultate. Nađene su značajne razlike u razini emocionalne uznemirenosti i učestalosti automatskih negativnih misli kod učenika tijekom srednjoškolskog obrazovanja. Emocionalna uznemirenost nakon tranzicije na srednjoškolsku razinu obrazovanja u prosjeku nije povišena, ali 26,52 % učenika zadovoljava kriterij probira i kod njih postoji potreba za psihološkom podrškom. U vrijeme ispitivanja prije završetka nastavne godine bilježe se znatno više razine emocionalne uznemirenosti. Ovisno o godini obrazovanja, u tim razdobljima između 38,07 % i 55,44 % učenika zadovoljava kriterij probira zbog rizika za razvoj emocionalnih teškoća, a između 22,10 i 26,09 % učenika ima klinički upadljiv rezultat što ukazuje na potrebu daljnje kliničke obrade, a možda i terapijskog rada s njima. Kao osobito rizično razdoblje u kojem učenici pokazuju najvišu emocionalnu uznemirenost, najčešće prisutne misli vezane uz strah od neuspjeha i strah od razočaranja

tient clinics. The Automatic Thoughts Questionnaire may supplement and provide useful insights into the cognitive aspect of school children's emotional distress, which can be an excellent starting point for counselling interventions. This study has confirmed its pre-defined structure with secondary school students as well as its high level of reliability (22, 23). Certainly, the implementation of screening is not an end in itself. "… It must provide a possibility to intervene with children with an increased risk of developing mental health disorders" (9). To achieve this, it is very important to have well-developed collaboration between school doctors and schools, especially school psychologists.

It is necessary to consider certain methodological shortcomings and limitations of the conducted study. The sample that was used comprised vocational school students, which does not allow for generalization across the results obtained. In addition, the results obtained from (a small number of) boys and girls have been statistically analysed together. Future research should include a larger number of participants and an equal number of girls and boys from different schools. It is known that girls experience emotional tension and discomfort more frequently and intensely (15, 20, 21) than boys, which is conditioned both biologically and socially and could have influenced the results of this study. As already mentioned, it would be worthwhile to collect data from students attending gymnasiums and compare them with the results obtained from vocational school students because the type of school could have a significant impact on the level of expression of the variables examined.

CONCLUSIONS

Despite its limitations, the study yielded valuable results. Significant differences were found concerning the level of emotional distress and the frequency of negative automatic thoughts

roditelja ističe se kraj drugog razreda. Stoga bi upravo tijekom drugog razreda srednje škole trebalo realizirati najviše aktivnosti za očuvanje mentalnog zdravlja, ali i provoditi sustavni probir učenika u riziku. U tom procesu, upitnici korišteni u ovome istraživanju mogu biti od velike koristi.

with students during secondary education. On average, emotional distress after the transition to the secondary level of education was not increased. However, 26.52% of students have met the screening criteria, which indicates the need for psychological support. Significantly higher levels of emotional distress were recorded at the time of examinations before the end of the school year. Depending on the year of education, between 38.07% and 55.44% of students meet the screening criteria during that period given that they are exposed to the risk of developing emotional difficulties, while 22.10 - 26.09% of students have a clinically significant result, indicating the need for further clinical study and, perhaps, therapeutic work. The end of second grade is a particularly sensitive period during which students express the highest level of emotional distress, most often associated with their thoughts resulting from fear of failure and fear of disappointing one's parents. Therefore, most activities relating to maintaining mental health should take place during the second grade of secondary education. At the same time, a systematic screening of students at risk should be carried out. In this process, the questionnaires used in this study can be very useful.

LITERATURA / *REFERENCES*

1. Collishaw S. Annual research review: secular trends in child and adolescent mental health. J Child Psychol Psychiatry 2015; 56 (3): 370–93.

2. Merikangas KR, Nakamura EF, Kessler RC. Epidemiology of mental disorders in children. Dialogues Clin Neurosci 2009; 11(1): 7-20.

3. World Health Organization. Adolescent mental health 2019. Preuzeto 10. prosinca 2019. s https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health.

4. Hill A, Cooper M, Smith K, ,Maybanks N, Cromarty K ,Pattison S *et al*. Evaluation of the Welsh school-based counselling strategy: stage one report. Social Research Division Welsh Government 2011. Preuzeto 11.siječnja 2020. s https://dera.ioe.ac.uk/13164/1/110712schoolcounsellingen.pdf.

5. Flynn A, Sharp NL, Walsh J, Popovic N. An exploration of an integrated counselling and coaching approach with distressed young people. Couns Psychol Q 2018; 31(3): 375- 96.

6. Stafford MR, Cooper M, Barkham M, Beecham J, Bower P, Cromarty K *et al*. Effectiveness and cost-effectiveness of humanistic counselling in schools for young people with emotional distress (ETHOS): study protocol for a randomised controlled trial; 2018. Preuzeto 1. travnja 2020. s https://doi.org/10.1186/s13063-018-2538-2.

7. Granrud MD, Bisholt B, Anderzèn-Carlsson A, Steffenak AKM. Overcoming barriers to reach for a helping hand: adolescent boys' experience of visiting the public health nurse for mental health problems. Int J Adolesc Youth 2020; 25 (1): 649-60.

8. Hjorth CF, Bilgrav L, Frandsen LS, Overgaard C, Torp-Pedersen C, Nielsen B *et al*. Mental health and school dropout across educational levels and genders: a 4.8-year follow-up study. BMC Public Health 2016. Preuzeto 1.travnja 2020. s https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3622-8.

9. Boričević Maršanić V, Zečević I, Paradžik Lj, Karapetrić Bolfan Lj. Probir i rana detekcija psihičkih odstupanja/poremećaja kod djece u predškolskim ustanovama i adolescenata u osnovnim školama Grada Zagreba - rezultati probnog projekta. Soc psihijat 2017; 45(3): 169-86.

10. Vulić Prtorić A, Lončarević I. Školski uspjeh i mentalno zdravlje: Od relacija do intervencija. Napredak 2016; 157(3): 301- 24.

11. Novak M, Ferić M, Mihić J. Rezultati projekta Pozitivan razvoj adolescenata u Hrvatskoj. Zagreb: Izlaganje na znanstve-no-stručnom skupu Ministarstva znanosti i obrazovanja, 13. 12. 2019.

12. Salmela-Aro K, Tynkkynen L. Gender pathways in school burnout among adolescents. J Adolesc 2012; 35: 929- 39.

13. Lazarus RS, Folkman S. Stres, procjena i suočavanje. Jastrebarsko: Naklada Slap, 2004.

14. West P, Sweeting H. Fifteen, female and stressed: changing patterns of psychological distress over time. J Child Psychol Psychiatry 2003; 44(3): 399–411.

15. Kalebić Maglica B. Spolne i dobne razlike adolescenata u suočavanju sa stresom vezanim uz školu. Psihologijske teme 2006; 15(1): 7-24.

16. Beck JS. Osnove kognitivne terapije. Jastrebasko: Naklada Slap, 2007.

17. Twigg E, Barkham M, Bewick BM, Mulhern B, Connell J, Cooper M. The Young Person's CORE: Development of a brief outcome measure for young people. Couns Psychother Res 2009; 9(3): 160-68.

18. Cooper M, Fugard AJB, Pybis J, McArtir K, Pearce P. Estimating effectiveness of school-based counseling: using dana from controlled trials to predict improvement over non-intervention change. Couns Psychother Res 2015; 15(4): 262-73.

19. Gergov V, Lahti J, Marttunen M, Lipsanen J, Evans C, Ranta K *et al*. Psychometric properties of the Finnish version of the Young Person's Clinical Outcomes in Routine Evaluation (YP-CORE) questionnaire. Nord J Psychiatry 2017; 71(4): 250-55.

20. Kozjak Mikić Z, Jokić-Begić N. Emocionalne teškoće adolescentica nakon tranzicije u srednju školu. Soc psihijat 2013; 41(4): 226-34.

21. Twigg E, Cooper M, Evans C, Freire E, Mellor-Clark J, McInnes B *et al*. Acceptability, reliability, referential distributions and sensitivity to change in the Young Person's Clinical Outcomes in Routine Evaluation (YP-CORE) outcome measure- replication and refinement. Child Adolesc Ment Health 2016; 21 (2): 115-23.

22. Živčić-Bećirević I. Uloga automatskih misli i ispitne anksioznosti u uspjehu studenata. Društvena istraživanja 2003; 5(67): 703-20.

23. Živčić-Bećirević I, Rački Ž. Uloga automatskih misli, navika učenja i ispitne anksioznosti u objašnjenju školskog uspjeha i zadovoljstva učenika. Društvena istraživanja 2006; 15(6): 987-1004.

24. Kline RB. Principles and practice of structural equation modeling. New York: The Guilford Press, 2005.

25. Jurjević D. Određivanje kritičnih vrijednosti hrvatskog prijevoda YP- CORE upitnika. Neobjavljen diplomski rad. Zagreb: Odsjek za psihologiju Filozofskog fakulteta u Zagrebu, 2016.

26. Vranješ V. Načini suočavanja s ispitnom situacijom, akademsko postignuće i učestalost negativnih automatskih misli kod studenata. Neobjavljen diplomski rad. Osijek: Studij psihologije Filozofskog fakulteta u Osijeku, 2012.

27. Vrbanec L. Uloga roditeljske uključenosti u fakultetsko obrazovanje u prilagodbi studenata na studij u Hrvatskoj i Poljskoj. Neobjavljen diplomski rad. Rijeka: Odsjek za psihologiju Filozofskog fakulteta u Rijeci, 2016.

28. Živčić-Bećirević I, Juretić J, Miljević M. Uloga metakognitivnih vjerovanja, automatskih misli za vrijeme učenja i atribucija uspjeha u objašnjenju ispitne anksioznosti i akademskoga uspjeha studenata. Psihologijske teme 2009; 18(1): 119-36.

29. Hrvatski zavod za javno zdravstvo. Pokretanja pilot-projekta "Probir rizika u mentalnom zdravlju školske djece"- priopćenje 20. studeni 2019. Preuzeto 10. prosinca 2019. s https://www.hzjz.hr/tag/mentalno-zdravlje-djece-i-mladih/.