THE INVESTIGATION OF THE RELATIONSHIP BETWEEN NARCISSISM, PERFECTIONISM, LONELINESS, DEPRESSION, SUBJECTIVE AND PSYCHOLOGICAL WELL-BEING IN A SAMPLE OF TRANSYLVANIAN HUNGARIAN AND ROMANIAN STUDENTS

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ABSTRACT. The last decades have witnessed a significant increase in several forms of human psychological malfunctioning, aspects that proved to significantly endanger healthy and efficient human adaptation. Mental health indicators (anxiety, depression, reduced levels of happiness), perfectionism, narcissism, and loneliness have significantly increased, despite the significant improvement of existent life-conditions. The market-based competition and reward system in the educational and professional spheres, as well as the perfectionistic expectations specific to the personal life impose high demands on the individual, which usually become sources of significant chronic stress, further impacting the individual's quality of life (psychological and subjective well-being, loneliness). The comparative investigation of the above-mentioned variables in Transylvanian Hungarian and Transylvanian Romanian students would offer us the chance to compare these levels of functioning in two, culturally different samples. Our present study is a continuation and refinement of previous studies, and concentrates on the following major aims: (i) the investigation of the possible differences in narcissism, perfectionism, loneliness, depression, happiness, subjective and psychological well-being in Transylvanian Hungarian and Transylvanian Romanian first and second year students; (ii) the investigation of the association patterns between variables in both samples, and (iii) the examination of the role the studied variables play on the major indicators of mental and psychological health (depression and happiness) both in

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the united sample and on the two samples of students separately. The results of our investigation may be beneficial for the tailoring of future prevention and intervention programs that would target the enhancement of psychological adaptation of Transylvanian students

Keywords: narcissism, perfectionism, loneliness, depression, subjective well-being, psychological well-being.

ABSTRAKT. In den letzten Jahrzehnten gab es eine signifikante Zunahme verschiedener Formen menschlicher psychischer Fehlfunktionen, Aspekte, die eine gesunde und effiziente Anpassung des Menschen erheblich gefährdeten. Die Indikatoren für die psychische Gesundheit (Angstzustände, Depressionen, vermindertes Glück), Perfektionismus, Narzissmus und Einsamkeit haben trotz der signifikanten Verbesserung der bestehenden Lebensbedingungen erheblich zugenommen. Das marktorientierte Wettbewerbs- und Belohnungssystem im Bildungs- und Berufsbereich sowie die perfektionistischen Erwartungen an das persönliche Leben stellen hohe Anforderungen an den Einzelnen, die in der Regel zu Quellen erheblichen chronischen Stresses werden und die Lebensqualität des Einzelnen weiter beeinträchtigen (psychisches und subjektives Wohlbefinden, Einsamkeit). Die vergleichende Untersuchung der oben genannten Variablen bei siebenbürgischen ungarischen und siebenbürgischen rumänischen Studenten würde uns die Möglichkeit bieten, diese Funktionsniveaus in zwei kulturell unterschiedlichen Stichproben zu vergleichen. Unsere vorliegende Studie ist eine Fortsetzung und Verfeinerung früherer Studien und konzentriert sich auf die folgenden Hauptziele: (i) die Untersuchung der möglichen Unterschiede in Bezug auf Narzissmus, Perfektionismus, Einsamkeit, Depression, Glück, subjektives und psychologisches Wohlbefinden in Siebenbürgen, Ungarisch und Siebenbürgische rumänische Erst- und Zweitklässler; (ii) die Untersuchung der Assoziationsmuster zwischen Variablen in beiden Stichproben und (iii) die Untersuchung der Rolle, die die untersuchten Variablen für die Hauptindikatoren der psychischen und psychischen Gesundheit (Depression und Glück) sowohl in der Stichprobe als auch in der Stichprobe spielen zwei Stichproben von Studenten getrennt. Die Ergebnisse unserer Untersuchung könnten für die Anpassung künftiger Präventions- und Interventionsprogramme von Vorteil sein, die auf die Verbesserung der psychologischen Anpassung siebenbürgischer Studenten abzielen.

Schlüsselworte: Narzissmus, Perfektionismus, Einsamkeit, Depression, subjektives Wohlbefinden, psychisches Wohlbefinden.

INTRODUCTION

In the last decades, a plethora of research has documented a considerable amount of significant changes in important aspects of the optimal human functioning. Despite the fact that worldwide, life conditions have significantly improved (Roser, 2020), especially in the western countries, indicators of mental ill-health have shown an increasing pattern. Depression, anxiety disorders, unhealthy levels of stress, burnout, personality disorders, loneliness, etc. have significantly increased in the last fifty years (Cuijpers, Smit, & van Straten, 2007; Cunningham, Rapee, & Lyneham, 2006; Erzen & Çikrikci, 2018; WHO, 2017b). Such increases have been encountered not only in the adult population, but an increasing number of children and adolescents seem to suffer of different forms of mental ill-health as well (Cunningham et al., 2006).

MENTAL HEALTH INDICATORS: DEPRESSION AND LONELINESS

One of the most frequently encountered forms of mental ill-health is depression, with over 298 million sufferers worldwide (representing over 4.4% of the population of the world) (Ferrari, Charlson, Norman, Patten, Freedman, Murray, et al., 2013; WHO, 2017b). More importantly, research predicts that by 2030 depression will become the second most serious illness, involving considerable personal, interpersonal, and socio-economic burdens (Gustavsson et al., 2011; Wittchen et al., 2011). Recent studies indicate that these results apply for the millennials as well. More precisely, between 2005 and 2015 the number of cases attaining levels above the depression cut-point has increased with 6%, with a significantly higher frequency in the female, than the male population (Bor, Dean, Najman, & Hayatbakhsh, 2014; Patalay & Fitzsimons, 2017; Patalay & Gage, 2019), women being more at risk than men. On the one hand, these dysfunctions do not always attain clinically significant levels. Frequently, the number of those who suffer of subclinical levels of depression is considerable, impeding their optimal functioning both in their personal and professional lives. On the other hand, the personal and societal costs if these mental health problems represent a significant burden at personal

and national levels as well (Banyard, Edwards, & Kendall-Tackett, 2009; Curran & Hill, 2017; Kendall-Tackett, 2009; Lanius, Vermetten, & Pain, 2010; Weehuizen, 2008).

Moreover, depression and loneliness seem to go hand in hand, thus not surprisingly, the levels and intensity of loneliness have also increased in the last decades (Cacioppo & Patrick, 2008; Erzen & Çikrikci, 2018). Interestingly, despite expectations, the younger generations report higher and more frequent levels of loneliness, than the older generations (Mushtaq, Shoib, Shah, & Mushtaq, 2014). Research indicates that loneliness is strongly associated with physical and psychological malfunctioning, and is a significant risk factor for substance abuse, obesity, injury and violence, immunization, access to health care, higher levels of depression and anxiety, etc. (Cacioppo & Patrick, 2008; Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015; Holt-Lunstad, Smith, & Layton, 2010; Perissinotto, Stijacic Cenzer, & Covinsky, 2012; Uchino, 2006).

Of more specific interest for our investigation are the results produced by the Hungarostudy: a series of periodic investigations conducted on a nationally representative sample in Hungary. The results of the 1980-investigation indicated that 24% of the Hungarians above 16-years of age experienced symptoms of depression measured with the Beck Depression Inventory (BDI) (Kopp & Skrabski, 1992). According to the Hungarostudy conducted in 1995, 31% of the assessed Hungarians reported serious depressive symptoms assessed with the BDI (Kopp, Skrabski, & Szedmák, 1996). The results of the 2002 Hungarostudy indicated a further increase in depression, the most significant results regarding the older population – 41% of those above 65 years of age reporting significant levels of depression (Purebl & Balogh, 2008). Similar results were produced by ampler investigations as well. Thus, within the countries of the European Union, depression and depressive symptoms have been found to attain the highest levels within the Hungarian population (Eurostat, 2019). According to these results, over 10.5% of the adult Hungarian population experiences depression.

Regarding the Transylvanian Hungarian population, research is much scarcer. Few research has been conducted in order to investigate the possible differences in depression between the Transylvanian and Hungarian Hungarians. Dégi, Kállay, and Vincze's (2007) research indicated

that within a sample of oncological patients, the Transylvanian Hungarian population attained the significantly highest level of depressive symptoms, while the Hungarian sample reported significantly lower levels, and the Romanian sample experiencing the lowest levels of depressive symptoms. Further research would be extremely useful to indicate if there are significant differences in depression between the two Hungarian populations.

PERFECTIONISM AND NARCISSISM

Furthermore, especially within the younger generations, the manifestation of perfectionism has also significantly increased, worldwide, in the last decades (Curran & Hill, 2017). A very plausible underlying motive for this may be represented by the changes in cultural and societal norms, which seem to significantly influence the way individuals view themselves (Foster, Campbell, & Twenge, 2003; Heine & Lehman, 1997; Millon, Grossman, Millon, Meagher, & Ramnath, 2004; Verhaeghe, 2014). Thus, the massive changes in the value system specific to the western society (constant and intense pressure for excellence and success, consumerism), seem to have significantly contributed to the accentuation and increase in number of those who present significant levels of dysfunctional perfectionism (Curran & Hill, 2017; Twenge & Campbell, 2009; Verhaeghe, 2014).

According to one of the most familiar definitions, perfectionism is a personality trait in which the person strives to achieve extremely high standard performances, and evaluates the results of his/her and others' achievements in an excessively critical way (Flett & Hewitt, 2002). At a first glance, due to its inherent benefits (e.g., high accomplishments), perfectionism suits extremely well the expectations set by our present society (Hewitt, Flett, & Mikail, 2017), and occasionally may become a very societally welcome individual characteristic. However, perfectionism may also have important negative consequences, which become evident especially in confrontations with highly stressful situations (e.g., exaggeration of the magnitude of the stressful event, frequency with which such events seem to occur for the highly perfectionist person) (Hewitt & Flett, 2001).

A very comprehensive and useful model of trait perfectionism was proposed by Hewitt and Flett (1991), model which comprises three different forms of perfectionism:

(i) **self-oriented perfectionism** (SOP) - characterized by unrealistic demands and expectations from the self, completed with punitive self-evaluations (Hewitt & Flett, 1991). On the one hand, SOP is strongly associated with achievement-related behaviors (Curran & Hill, 2017; Hewitt & Flett, 1991), while on the other hand, in its exaggerated forms, it is also strongly related to depressive symptomatology, anorexia nervosa, greater physiological reactivity, suicidal ideation and negative affect in general (Besser, Flett, Hewitt, & Guez, 2008; Fry & Debats, 2009; Smith, Sherry, Gautreau, Mushquash, Saklofske, & Snow, 2017).

(ii) **other-oriented perfectionism** (OOP) - characterized by unrealistic demands and expectations from others combined with their extremely critical evaluation. In case these others, burdened with the imposed exaggerated expectations, do not rise to the levels expected, are blamed and criticized, and treated with hostility by persons who score high on OOP (Hewitt, Flett, & Mikail, 2017). High levels of OOP are negatively associated with altruism, compliance, and trust (Hill, Zrull, & Turlington, 1997), and negatively impact intimate relationships (Haring, Hewitt, & Flett, 2003). Moreover, high levels of OOP are positively associated with narcissistic desire to obtain admiration from others (Nealis, Sherry, Sherry, Stewart, & Macneil, 2015).

(iii) **socially prescribed perfectionism** (SPP) - specific to those who consider that others are demanding perfection from them, and judge them. Thus, in order to obtain others' approval, those high on SPP have to constantly display a perfect image of themselves (Curran & Hill, 2017). Of the three dimensions of perfectionism SPP is the most debilitating one, determining the individual to believe that others have excessive, uncontrollable, and unfair expectations of them, beliefs that frequently lead to intense negative emotional states and different forms of psychopathology (e.g., anxiety, depressive symptomatology, suicidal ideation, etc.) (Sherry, Hewitt, Flett, & Harvey, 2003; Smith, Sherry, Rnic, Saklofske, Enns, & Gralnick, 2016).

Besides significant increases in maladaptive perfectionism, narcissism has also increased, more pronouncedly with the beginning of the 21st century (Twenge & Campbell, 2007). According to the *DSM-5*, clinical manifestations of narcissism refer to a "*pervasive pattern of grandiosity (in fantasy or*

behavior), a constant need for admiration, and a lack of empathy" (American Psychiatric Association, 2013). A large body of evidence supports the existence of different subtypes or variations of the Narcissistic Personality Disorder (Levy, 2012; Pincus & Lukowitsky, 2010; Ronningstam, 2005), the most frequently investigated ones being: (*i*) the **grandiose** or overt subtype (characterized by grandiosity, authority, superiority, exhibitionism, entitlement, exploitativeness, lack of insight regarding the impact their behavior may have on others, etc. (Raskin & Terry, 1988 as cited in Sherry, Gralnick, Hewitt, Sherry, & Flett, 2014; Røvik, 2001), and the (*ii*) **vulnerable** or covert subtype (the most specific characteristics being: shyness, high levels of manifested distress, hypersensitive reactions to the evaluations of others, chronic envy, appearance of empathy, entitlement, secret grandiose fantasies about the self and expectations of oneself and others) (Dickinson & Pincus, 2003; Gabbard, 1998).

As in the case of perfectionism, narcissism has also different, positive and negative effects.

Some research indicate that narcissists have a tendency to be motivated more by extrinsic than intrinsic values and desires (Kasser & Ryan, 1996), are less willing to abide and behave agreeably (Bradlee & Emmons, 1992), may frequently manifest arrogance (Paulhus, 1998), etc. Nevertheless, individuals manifesting adaptive forms of narcissism, present positive associations with high self-esteem (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), emotional intelligence (Petrides, Vernon, Schermer, & Veselka (2011), subjective well-being, and negative associations with sadness, dispositional depression and loneliness (Sedikides et al., 2004).

WELL-BEING

Health is defined as "*a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*" (WHO, 2018). Optimal human functioning has been treated either in the form of **hedonic/subjective well-being** (associated with satisfaction, happiness, and the experience of positive emotions), or as the **eudaimonic/psychological well-being** (attainment of human potential). The subjective

approach equates well-being with the human tendency to seek pleasure and happiness, simultaneously avoiding pain and suffering (for more, see, Kahneman, Diener, & Schwartz, 1999).

According to Ryff and Singer's (1998, 2000, 2008), **psychological well-being** is a multidimensional construct, encompassing six specific dimensions:

(1) **self-acceptance** – the non-judgmental acceptance of one's self.

(2) **positive relations with others** – the ability to develop and maintain warm, affectionate relationships with others.

(3) **autonomy** – the ability to function independently of other people's approval.

(4) **environmental mastery** – the capacity to create an external environment that enhances one's functioning and adaptation (Ryff, 1989).

(5) **purpose in life** – the capacity to find meaning in life

(6) **personal growth** – the need to attain and realize one's potential.

Scientific literature identified that age, wealth, level of education, personality factors, the ability to frequently experience positive affect, adaptive emotion-regulation strategies, etc., are factors that might affect well-being (e.g., Folkman & Moskowitz, 2004; Keyes, Shmotkin, & Ryff, 2002; Lyubomirsky & Della Porta, 2010; Ryff & Singer, 2008).

OBJECTIVES

The World Health Organization defines mental health as not only representing the absence of mental health symptom, but also the presence of positive psychological and social functioning (2017), thus, the major aim of our study is to focus on the investigation of the indicators of mental health: positive (happiness and subjective/psychological well-being) and negative (depression, anxiety, loneliness, etc.).

Taking into consideration the fact that in Transylvania the Hungarian population is the largest minority, the investigation of the mental health indicators (especially depression) within this population and in comparison with the majority Romanian population, becomes an

intriguing topic. Furthermore, it would also be of interest to investigate the relationship between these indicators and possible mechanisms that may be associated with these variables, and which were found in the literature to significantly increase worldwide (narcissism, perfectionism).

Thus, our present study is a continuation and refinement of previous studies, and concentrates on the following major aims: (i) the investigation of the possible differences in narcissism, perfectionism, loneliness, depression, happiness, subjective and psychological well-being in two culturally different samples: Transylvanian Hungarian and Transylvanian Romanian first and second year students; (ii) the investigation of the association patterns between variables in both samples, and (iii) the examination of the role the studied variables play on the major indicators of mental and psychological health on the two samples of students separately.

STUDY

Participants

Our study included 535 students, 247 Transylvanian Hungarian and 288 Transylvanian Romanian first and second year students, from Babes-Bolyai University in Cluj-Napoca, Romania, and from Sapientia, Targu-Mures, Romania (Cluj and Mures counties having highest percentage of Transylvanian Hungarian student populations in Romania). A part of the students was assessed during face-to-face meetings, and another part were asked to participate at an online assessment. The minimum age of the participants was 19 years, and maximum 31, with a mean age of 20.01 years (SD=2.11). Of the 535 participants 120 were male (22.64%), and 415 female students (77.35%). After providing informed consent, participants completed the questionnaire packets that took 45 minutes to fill, in a face-to-face assessment session with the researcher or online.

Instruments

Demographic variables were: age, gender and satisfaction with family income (not at all, so-so, very much).

Depression tendencies were measured with the Beck Depression Inventory-II (BDI, Beck, Rush, Shaw & Emery, 1979; Romanian adaptation David & Dobrean, 2012; translated and adapted into Hungarian by the author). The BDI is a 21-item, multiple-choice format inventory, designed to measure the presence of depression in adults and adolescents. Each of the 21 items assesses a symptom or attitudes specific to depression, inquiring its somatic, cognitive and behavioral aspects. By its assessments, single scores are produced, which indicate the intensity of the depressive episode. Scores ranging from 0 to 9, represent normal levels of depression. Scores situated between 10 and 18 represent mild to moderate depression; values between 19 and 29 represent moderate to severe depression, while scores above the value of 30 represent severe depression. Internal consistency indices of the BDI are usually above .90. For the present sample, the internal consistency indices for the BDI was .87.

Happiness was measured with the 29-item Oxford Happiness Questionnaire (OHQ) (Hills & Argyle, 2002; translated and adapted into Hungarian by the author). The OHS measures happiness as a unidimensional compact construct. The has 29 items, with 12 reverted items, using a Likert scale with answers from 1 to 6 (1=strongly disagree, to 6=strongly agree). The psychometric properties of OHQ are very good (Cronbach α =.90).

Loneliness and *perceived social isolation* was measured with the 20-item UCLA Loneliness Scale (revised UCLA Loneliness Scale; Russell, Peplau, & Cutrona, 1980; translated and adapted into Hungarian and Romanian by the author). Participants are asked to respond to each item on a 4-point Likert scale, from 'never' to 'always'. The scale's items are worded to suggest a general, present-day experience that relate to both social and emotional dimensions of loneliness (e.g., "*No one really knows me well*"; "*My interests and ideas are not shared by those around me*", and "*I feel in tune with the people around me*"). The UCLA Loneliness Scale consists of both positively and negatively worded items, with a possible total score of 20 to 80 points with no identified cut-off score that would

define loneliness. The scale has good internal consistency with a Cronbach's α of 0.94 (Russell et al., 1980). Mean scores for university students usually vary between 36 and 39 (Anderson, Miller, Riger, Dill, & Sedikides, 1994).

Narcissistic traits were measured with 16-item Narcissistic Personality Inventory (NPI-16, Ames, Rose, & Anderson, 2006; translated and adapted into Hungarian and Romanian by the author) derived by the authors from the long, 40-item NPI scale (Raskin & Hall, 1979). The test consists of sixteen pairs of statements, and for each pair subjects should select the one that they feel best reflect their personality. The NPI-16 is a short measure of subclinical narcissism, presenting a good face, internal, discriminant, and predictive validity (Ames et al., 2006). The internal consistency of the NPI-16 for the present sample was .81.

Perfectionism was measured with the 45-item self-report Multi-dimensional Perfectionism Scale (MPS, Hewitt & Flett, 1991; translated and adapted into Hungarian and Romanian by the author). The MPS contains three sub-scales: self-oriented perfectionism (SOP) (e.g., "*One of my goals is to be perfect in everything I do*"), other-oriented perfectionism (OOP) (e.g., "*Everything that others do must be of top-notch quality*"), and socially-prescribed perfectionism (SPP) (e.g., "*I find it difficult to meet others' expectations of me*"). Responses are given on a 7-point Likert scale, from 1 (strongly disagree) to 7 (strongly agree). The psychometric properties of the scale (reliability and validity) were found across studies to be very good (Hewitt et al., 2003). Cronbach's alpha for the present sample ranged from .74 to .87.

Psychological well-being was measured by the 44-item scale developed by Ryff (1989) and adapted by Kállay & Rus (2014) (translated and adapted into Hungarian by the author). This scale has 6 sub-scales measuring the basic components of eudaimonic well-being: self-acceptance (PWB-SA), positive relations with others (PWB-PRO), autonomy (PWB-A), environmental mastery (PWB-EM), purpose in life (PWB-PL), and personal growth (PWB-PG). Items are assessed along a 6-point scale, 1 = total agreement, and 6 = total disagreement. The psychometric properties of the Romanian translation are good (.81-.88). On each sub-scale high scores mean high WB, while low scores mean low levels of psychological well-being. The internal consistency of the Psychological Well-being scale for the present sample ranged from .81.

Subjective well-being was assessed with the 5-item WHO well-being questionnaire (WHO Collaborating Centre in Mental Health, 1999; Hungarian version available on www.psikiatri-regionh.dh/who-5/Documents/WHO5_Hungarian.pdf), focusing on the assessment of positive affective states. Each of the five items is rated on a 6-point Likert scale from 0 (not present) to 5 (constantly present). Scores are summed, with raw scores ranging from 0 to 25. Then the scores are transformed to 0-100 by multiplying by 4, with higher scores meaning better well-being. This scale was adapted for Hungarian population by WHO (WHO Collaborating Centre in Mental Health, 1999). Cronbach's alpha for the present sample was .79.

Results

Firstly, we present the descriptive characteristics of our data (see Table 1).

Table 1. Descriptive statistics

SCALES	Min.	Max.	M	SD	Shapiro-Wilk	p
BDI	.00	44.00	9.94	8.13	.91	.000
UCLA	23.00	72.00	45.13	10.01	.96	.000
WHO-5	.00	100.00	52.05	20.36	.98	.000
OHQ	43.00	169.00	103.65	24.28	.98	.000
PWB-A	15.00	42.00	31.61	5.44	.98	.000
PWM-EM	8.00	48.00	34.64	6.96	.96	.000
PWB-PRO	6.00	36.00	29.14	4.67	.94	.000
PWB-PG	10.00	54.00	45.33	6.44	.92	.000
PWB-PL	7.00	42.00	32.04	6.66	.94	.000
PWB-SA	7.00	42.00	31.57	6.64	.95	.000
MPS-SOP	29.00	89.00	56.73	12.08	.98	.000
MPS-OOP	30.00	86.00	52.79	10.12	.97	.000
MPS-SPP	29.00	91.00	54.88	11.91	.96	.000
NPI_16	16.00	30.00	20.90	3.55	.93	.000

Note:

BDI= Beck Depression Inventory, UCLA = Loneliness scale, WHO-5=subjective well-being, OHQ=Oxford Happiness Questionnaire, PWB-A= Psychological Well-Being – Autonomy, PWB-EM= Psychological Well-Being – Environmental Mastery, PWB-PRO = Psychological Well-Being - Positive relations with Others, PWB-PG= Psychological Well-Being – Personal Growth, PWB-PL= Psychological Well-Being – Purpose in Life, PWB-SA= Psychological Well-Being-Self-Acceptance, MPS-SOP=Multidimensional Perfectionism–Self-Oriented-Perfectionism, MPS-OOP=Multidimensional Perfectionism–Other-Oriented-Perfectionism, MPS-SPP= Multidimensional Perfectionism – Socially-Prescribed-Perfectionism, NPI-16=Narcissistic traits.

Next, we continued our investigation by comparing the assessed variables between the two samples: Transylvanian Hungarian and Transylvanian Romanian first and second-year students. Since our data did not follow a normal distribution (see Table 1), we opted for non-parametric analyses, and effect size was calculated according to the formula: $r=Z/\sqrt{N}$. Significant differences are presented in Table 2.

Table 2. Significant differences between Transylvanian Hungarian and Romanian students in loneliness, happiness, narcissism, multidimensional perfectionism, and subjective well-being

SCALES	Group	Mean	SD	U	p	r
UCLA	Hu (N=245)	46.84	10.09	27863	.000	0.19
	Ro (N=285)	43.63	9.72			
OHQ	Hu (N=245)	92.26	19.35	17313	.000	0.44
	Ro (N=285)	113.52	23.82			
NPI_16	Hu (N=245)	21.83	3.75	25888	.000	0.23
	Ro (N=285)	20.10	3.16			
MPS_SOP	Hu (N=245)	49.31	7.15	11493.5	.000	0.57
	Ro (N=285)	63.09	11.81			
MPS_OOP	Hu (N=245)	44.73	4.93	4160	.000	0.76
	Ro (N=285)	59.63	8.17			
MPS_SPP	Hu (N=245)	46.30	6.26	6676.5	.000	0.70
	Ro (N=285)	62.22	10.63			
WHO-5	Hu (N=245)	54.84	17.36	29867	.001	0.14
	Ro (N=285)	49.60	22.42			

Note:

UCLA = Loneliness scale, OHQ=Oxford Happiness Questionnaire, MPS-SOP=Multidimensional Perfectionism–Self-Oriented-Perfectionism, MPS-OOP=Multidimensional Perfectionism–Other-Oriented-Perfectionism, MPS-SPP= Multidimensional Perfectionism – Socially-Prescribed-Perfectionism, NPI-16=Narcissistic traits.

According to our results, the Transylvanian Hungarian students report significantly higher levels of loneliness, and significantly lower levels of happiness than their Romanian colleagues. These differences have size-effects that vary between small to medium (0.19-0.44). In the same time, the Transylvanian Hungarian students' reported levels of narcissism are significantly higher than those of the Romanian students'.

However, quite unexpectedly and contrary to the literature, the levels of perfectionism are significantly higher in Romanian students than in their Hungarian colleagues. In all these cases the effect size of these differences are large (0.57-0.76). Finally, Transylvanian Hungarian students report a significantly higher level of subjective well-being, however the effect size of this difference is small (0.14).

We continued our investigation with analyzing the association patterns between the assessed variables in the united sample, as well as in the two samples separately. The results are presented in Tables 3 (for the united sample) and 4 and 5 (for the two samples separately).

Table 3. Correlation matrix for the entire sample

	BDI	UCLA	OXF	NPI-16	MPS_SOP	MPS_OOP	MPS_SPP	WHO_A	PWB_A	PWB_EM	PWB_PG	PWB_PRO	PWB_PL	PWB_SA
BDI	1													
UCLA	.45**	1												
OHQ	-.51**	-.68**	1											
NPI-16	NS	.21**	-.29**	1										
MPS_SOP	.14**	NS	.23**	NS	1									
MPS_OOP	.15**	NS	.24**	-.15**	.68**	1								
MPS_SSP	.26**	NS	.17**	-.15**	.74**	.72**	1							
WHO	-.64**	-.41**	.51**	NS	NS	-.14**	-.21**	1						
PWB_A	-.31**	-.20**	.19**	.18**	NS	NS	NS	.26**	1					
PWB_EM	-.56**	-.35**	.46**	.11**	.15**	NS	NS	.52**	.51**	1				
PWB_PG	-.33**	-.28**	.35**	.12**	.14**	NS	NS	.36**	.58**	.63**	1			
PWB_PRO	-.33**	-.38**	.30**	NS	NS	NS	NS	.31**	.39**	.51**	.68**	1		
PWB_PL	-.54**	-.37**	.49**	.10*	-.37**	.49**	.10**	.51**	.50**	.82**	.68**	.53**	1	
PWB_SA	-.52**	-.38**	.41**	.17**	-.38**	.41**	.17**	.48**	.54**	.79**	.67**	.55**	.83**	1

Note:

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

As seen in Table 3, for the entire sample, the correlation matrix indicates a strong positive correlation between depression tendencies and: loneliness (r=.45, *p<.01*), strong negative correlation with happiness (r=-.51, *p<.01*), weak positive, correlations with all the three dimensions of perfectionism (SOP: r=.14, *p<.01*; OOP: r=.15, *p<.01*; SSP: r=.26, *p<.01*). As for well-being, we found a strong negative correlation between depression and subjective well-being (r=-.64, *p<.01*), and moderate correlation with all the components of the psychological well-being (see Table 3). No significant correlation was found between depressive symptomatology and narcissism. As for happiness, the scores obtained from the OHQ presented moderate positive correlations with all the dimensions of perfectionism, significant positive associations with the subjective and all the components of the psychological well-being, and negative correlation with narcissism (r=-.29, *p<.01*).

The correlation matrix conducted for the two samples separately presents somewhat different association patterns. Depression tendencies continue to positively correlate with loneliness in both samples (Hu: r=.34, p<.01, Ro: r=.56, p<.01), and negatively with happiness (Hu: r=-.32, p<.01, Ro: r=.77, p<.01). Interestingly, in the case of Transylvanian Hungarian students, depressive symptoms do not significantly correlate with either dimensions of perfectionism, while in the case of Romanian students, the correlations between depression and the three components of perfectionism present significant associations (SOP: r=.15, p<.01; OOP: r=.17, p<.01; SSP: r=.33, p<.01). Correlation patterns for the two groups separately regarding subjective and psychological well-being are similar to those for the entire sample. No significant correlation was found between depressive tendencies and narcissism. Regarding happiness, in the case of Transylvanian Hungarian students, it was found to significantly correlate in a negative fashion with narcissism (r=-.70, p<.01), positively with subjective well-being (r=.41, p<.01), and some components of psychological well-being (environmental mastery: r=.18, p<.01; positive relations with others: r=.13, p<.05; purpose in life: r=.25, p<.01, self-acceptance: r=.14, p<.05) (see Table 4). In the case of Romanian students, the scores on the OHQ positively correlate with narcissism (r=.17, p<.01), negatively with other oriented and socially prescribed perfectionism (OOP: r=-.15, p<.01; SPP: r=-.25, p<.01), and positively with all the components of psychological well-being (see Table 4).

Table 4. Correlation matrix for the assessed
Transylvanian Hungarian students

	BDI	UCLA	OXF	NPI-16	MPS_SOP	MPS_OOP	MPS_SPP	WHO_A	PWB_A	PWB_EM	PWB_PG	PWB_PRO	PWB_PL	PWB_SA
BDI	1													
UCLA	.34**	1												
OXF	-.32**	-.72**	1											
NPI-16	NS	.44**	-.70**	1										
MPS_SOP	NS	NS	NS	NS	1									
MPS_OOP	NS	NS	NS	NS	.36**	1								
MPS_SSP	NS	NS	NS	NS	.46**	.38**	1							
WHO	-.58**	-.32**	.41**	13.7*	.16*	NS	NS	1						
PWB_A	-.49**	NS	NS	NS	.15*	NS	NS	.34**	1					
PWB_EM	-.52**	-.14*	.18**	NS	.34**	NS	NS	.51**	.45**	1				
PWB_PG	-.17**	NS	NS	NS	.31**	NS	NS	.39**	.46**		1			
PWB_PRO	-.36**	-.13*	.13*	NS	.25**	.13*	.19**	.43**	.32**	.45**	.56**	1		
PWB_PL	-.49**	-.22	.25**	NS	.32**	NS	NS	.50**	.46**	.75**	.60**	.47**	1	
PWB_SA	-.45**	-.17*	.14*	NS	.26**	NS	NS	.47**	.54**	.70**	.60**	.52**	.69**	1

Note:

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

Next, we conducted two hierarchical multiple regression (HMR) analyses in order to investigate the degree to which depressive symptoms (as measured with the BDI scale) (Table 5) and happiness (as measured with OHQ) (Tables 6a,b and 7a,b) are predicted by the variables that correlated with them, separately for the assessed Transylvanian Hungarian and Romanian students. For practical reasons, we presented the regression analysis separately for the Transylvanian Hungarian and Transylvanian Romanian students. In this way, those interested can easily obtain more concrete results specific to the population of interest.

Table 5. Correlation matrix for the assessed Romanian students

	BDI	UCLA	OXF	NPI-16	MPS_SOP	MPS_OOP	MPS_SSP	WHO	PWB_A	PWB_EM	PWB_PG	PWB_PRO	PWB_PL	PWB_SA
BDI	1													
UCLA	.56**	1												
OXF	-.77**	-.67**	1											
NPI-16	NS	NS	.17**	1										
MPS_SOP	.15**	.18**	NS	.14**	1									
MPS_OOP	.17**	.21**	-.15**	NS	.51**	1								
MPS_SSP	.33**	.31**	-.25**	NS	.63**	.47**	1							
WHO	-.67**	-.49**	-.75**	NS	NS	-.14*	-.23**	1						
PWB_A	-.27**	-.31**	.34**	.23**	NS	NS	NS	.21**	1					
PWB_EM	-.58**	-.52**	.71**	.18**	.13**	NS	NS	.53**	.55**	1				
PWB_PG	-.42**	-.48**	.57**	.16**	NS	NS	NS	.35**	.64**	.70**	1			
PWB_PRO	-.31**	-.59**	.47**	NS	NS	NS	NS	.23**	.43**	.55**	.74**	1		
PWB_PL	-.56**	-.53**	.71**	.16**	.13*	NS	NS	.51**	.52**	.86**	.73**	.57**	1	
PWB_SA	-.55**	-.56**	.70**	.20**	NS	NS	NS	.47**	.54**	.84**	.71**	.57**	.89**	1

(Row group label at left margin: ROMANIAN)

Note:

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

For the Transylvanian Hungarian students, based on the correlation matrix for depressive tendencies in the first step of the HMR we entered loneliness. In step two we introduced happiness. In the third step, we introduced subjective well-being, and in the fourth step we introduced the six subscales of the psychological well-being. After running the regression analyses, we selected those variables which significantly predicted depressive tendencies. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity and homoscedasticity. Results are presented in Table 6a for depressive symptoms.

Table 6a. Hierarchical Regression Model of depressive tendencies, with loneliness, subjective well-being, and psychological well-being as predictors for the assessed Transylvanian Hungarian students

	R	R²	R² Change	B	SE	ß	t
Step 1	.34	.12***	.12				
UCLA				.24	.04	.34	5.76 (***)
Step 2	.60	.32***	.24				
UCLA				.09	.04	.14	2.49(**)
WHO				-.22	.02	-.53	-9.51(***)
Step 3	.71	.56***	.03				
UCLA				.65	.03	.09	1.77(NS)
WHO				-.16	.02	-.38	-6.47(***)
PWB-A				-.37	.08	-.23	-4.39(***)
PWB-PG				.50	.08	.38	5.86 (***)
PWB-PRO				-.30	.10	-.17	-2.97(**)
PWB-PL				-.39	.08	-.31	-4.84(***)

Model one with loneliness as predictor of depression proved to be statistically significant [$F_{(1,243)}$=181.51, *p<.001*], predicting 12.1% of the variance in depressive tendencies. Next we introduced subjective well-being which also proved statistically significant [$F_{(2,243)}$=67.99, *p<.001*], explaining an additional 24% of the variance in depressive tendencies. In the third, final step we introduced the four components of the psychological well-being (A, PG, PRO, PL). This final model was also statistically significant [$F_{(6,243)}$=40.06, *p<.001*], explaining an additional 14.3% of the variance in depressive tendencies. The three variables together (loneliness, subjective well-being, and psychological well-being) explain 50.4% of the variance in depressive tendencies.

We continued our investigation with conducting hierarchical multiple regression analyses for the happiness experienced by the Transylvanian Hungarian students, based on the correlation matrix presented in Table 4. In the first step of the HMR we entered depressive tendencies as measured with the BDI. In step two we introduced loneliness. In the third step, we introduced narcissistic characteristics, and in the fourth step we introduced subjective well-being. After running the regression analyses, we selected those variables which significantly predicted depressive tendencies.

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity and homoscedasticity. Results are presented in Table 6b for happiness as measured with the OHQ.

Table 6b. Hierarchical Regression Model of Happiness, with depressive tendencies, loneliness, narcissism, and subjective well-being as predictors

	R	R²	R² Change	B	SE	ß	t
Step 1	.32	.10***	.10				
BDI				-.87	.16	-.32	-5.36 (***)
Step 2	.73	.53***	.43				
BDI				-.23	.12	-.08	-1.82(NS)
UCLA				-1.34	.09	-.69	-14.89(***)
Step 3	.85	.72***	.19				
BDI				-.34	.09	-.12	-3.54(***)
UCLA				-.90	.07	-.46	-11.66(***)
NPI				-2.53	.19	-.48	-12.91(***)
Step 4	.86	.74***	.02				
BDI				-.09	.10	-.03	-.876(NS)
UCLA				-.82	.07	-.42	-10.71(***)
NPI				-2.56	.18	-.49	-13.55(***)
WHO				.20	.04	.18	4.43(***)

Model one with depressive tendencies as predictor of happiness proved statistically significant [$F_{(1,241)}$=28.75, *p<.001*], predicting 10.7% of the variance in happiness. Next we introduced loneliness which also proved statistically significant [$F_{(2,241)}$=138.54, *p<.001*], explaining an additional 43% of the variance in happiness. In the third step we introduced narcissistic characteristics, model which was also statistically significant [$F_{(3,241)}$=211.95, *p<.001*], explaining an additional 19.1% of the variance. In the final model we introduced subjective well-being, model that was also significant [$F_{(4,241)}$=176.32, *p<.001*], explaining an additional 2% of the variance in happiness. The four variables together (depressive tendencies, loneliness, narcissism, and subjective well-being) explain 74.8% of the variance in happiness.

We continued our investigations by running the same analyses for the sample of Romanian students as well, based on the correlation matrix presented in Table 4. In the first step of the HMR we entered loneliness. In step two we introduced happiness. In the third step, we introduced the three dimensions of perfectionism, and in the fourth step we introduced subjective well-being. Results are presented in Table 7a for depressive symptoms.

Table 7a. Hierarchical Regression Model of depressive tendencies, with loneliness, happiness, perfectionism and subjective well-being as predictors for the assessed Romanian students

	R	R^2	R^2 Change	B	SE	ß	t
Step 1	.56	.32***	.32				
UCLA				-51	.04	-.08	11.57 (***)
Step 2	.77	.60***	.28				
UCLA				.07	.04	-.08	1.68(NS)
OHQ				-.26	.01	-.71	-14.25(***)
Step 3	.79	.62***	.02				
UCLA				.03	.04	.04	.78(NS)
OHQ				-.26	.01	-.72	-14.33(***)
MPS-SOP				.04	.03	.06	1.24(NS)
MPS-OOP				-.03	.04	-.03	-.74(NS)
MPS-SPP				.10	.04	.12	2.40(*)
Step 4	.80	.64***	.01				
UCLA				-.04	.04	.04	-.978(NS)
OHQ				-.21	.02	-.56	-8.67(***)
MPS-SOP				.04	.03	.05	1.11(NS)
MPS-OOP				-.03	.04	-.03	-.77(NS)
MPS-SPP				.09	.04	.11	2.36(*)
WHO				-.07	.02	-.19	-3.51 (**)

Model one with loneliness as predictor of depression proved to be statistically significant [$F_{(1,284)}$=134.02, *p<.001*], predicting 32.1% of the variance in depressive tendencies. Next we introduced happiness which also proved statistically significant [$F_{(2,284)}$=216.59, *p<.001*], explaining an additional 28.5% of the variance in depressive tendencies. In the

third, step we introduced the three components of the perfectionism [$F_{(5,284)}$=93.95, *p<.001*], explaining an additional 2.1% of the variance. In the fourth, final model we introduced subjective well-being, which was also statistically significant [$F_{(6,243)}$=83.53, *p<.001*], explaining an additional 1.6% of the variance in depressive tendencies. The four variables together (loneliness, happiness, perfectionism, and subjective well-being) explain 64.3% of the variance in depressive tendencies in the case of the assessed Romanian students.

We continued our investigation with conducting hierarchical multiple regression analyses for the happiness experienced by the assessed Romanian students, based on the correlation matrix presented in Table 4. In the first step of the HMR we entered depression. In step two we introduced loneliness. In the third step, we the Environmental Mastery component of Psychological well-being. After running the regression analyses, we selected those variables which significantly predicted depressive tendencies. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity and homoscedasticity. Results are presented in Table 7b for happiness as measured with the OHQ.

Table 7b. Hierarchical Regression Model of Happiness,
with depressive tendencies, loneliness, and Environmental Mastery
as predictors of happiness in Romanian students

	R	R²	R² Change	B	SE	ß	t
Step 1	.77	.60***	.60				
BDI				-2.09	.10	-.77	-20.67 (***)
Step 2	.82	.68***	.07				
BDI				-1.57	.11	-.58	-14.25(***)
UCLA				-.83	.10	-.34	-8.32(***)
Step 3	.86	.74***	.06				
BDI				-1.19	.10	-.44	-11.02(***)
UCLA				-.60	.09	-.24	-6.44(***)
PWB-EM				1.02	.11	.32	8.39(***)

Model one with depressive tendencies as predictor of happiness proved statistically significant [$F_{(1,284)}$=427.6, *p<.001*], predicting 60.2% of the variance in happiness. Next, we introduced loneliness which also proved statistically significant [$F_{(2,284)}$=300.08, *p<.001*], explaining an additional 7.8% of the variance in happiness. In the third, and final step we introduced Environmental Mastery, the component of psychological well-being that correlated with happiness, model which was also statistically significant [$F_{(3,284)}$=272.91, *p<.001*], explaining an additional 6.4% of the variance. The three variables together (depressive tendencies, loneliness, and environmental mastery) explain 74.4% of the variance in happiness in the case of the assessed Romanian students.

CONCLUSIONS

As Weehuizen contends (2008), in some ways, in the presently developed life- and work-conditions, mental health "*functions as an **input** factor in the production processes of today's economy*" (p. 63). In other words, in most areas of the present life- and work-conditions excellent mental functioning becomes a condition of well-being, productivity, economic growth, etc. As seen in the introductory part of this paper, mental health represents not only a stringent personal problem, but it has also become an issue in national and international level, due to the disability costs produced by the increasing tendencies of mental malfunctioning (WH0, 2002), with depression ranking highest in lost productivity and associated costs.

In these conditions, the investigation of the factors that contribute to the way mental health, and associated phenomena, are contoured and related to each other, is of utmost importance. Another essential aspect refers to the understanding of the cultural specificities of these phenomena, since the way in which prevention and intervention programs may be promoted should depend on this information. Narrowing more down towards the objectives of our investigation, an important population in which the relationship between these factors is very important to investigate is that of the population of youngsters who are in transition from adolescence to adulthood, and who prepare for contouring a personal

life and simultaneously develop a career. The student population is a very common and well represented segment of this population. The challenges accompanying the bio-psycho-social growth, rapidly changing and occasionally obscure social role transitions (which have drastically changed in the last decades) (Sawyer, Azzopardi, Wickremarathne, & Patton, 2018), frequently changing living and learning conditions, easier relocation, the facile access to information, changes in learning conditions, the gradual transition from traditional to interactive learning, e-learning, increased pressure for excellence, are just a few of the burdens these youngsters have to face, burden which in many cases may surpass the originally intended significance of challenge, and may frequently turn into adversity (Curran & Hill, 2017).

As discussed more thoroughly in the introductory part, the last decades have documented a considerable amount of significant changes in important aspects of the optimal human functioning. Even if life conditions have significantly improved worldwide (Roser, 2020), indicators of mental ill-health have shown an increasing pattern. Depression, anxiety disorders, unhealthy levels of stress, burnout, personality disorders, loneliness, etc. have significantly increased in the last fifty years (Cuijpers, Smit, & van Straten, 2007; Cunningham, Rapee, & Lyneham, 2006; Erzen & Çikrikci, 2018; WHO, 2017b). Such increases have been encountered not only in the adult population, but an increasing number of children and adolescents seem to suffer of different forms of mental ill-health as well (Cunningham et al., 2006).

Based on these assumptions, our present study had the following major aims: (*i*) the investigation of the possible differences in narcissism, perfectionism, loneliness, depression, happiness, subjective and psychological well-being in Transylvanian Hungarian and Transylvanian Romanian first and second year students; (*ii*) the investigation of the association patterns between variables in both samples, and (*iii*) the examination of the role the studied variables play on the major indicators of mental and psychological health (depression and happiness) both in the united sample and on the two samples of students separately.

Our results have indicated that between the two culturally different samples (Transylvanian Hungarian and Romanian students), there were significant differences in the following variables: in the case

of Transylvanian Hungarian students, loneliness was significantly higher, and happiness was significantly lower. Moreover, the Transylvanian Hungarian students scored significantly higher on narcissism, while the Romanian students scored significantly higher on all dimensions of perfectionism. Despite the fact that the Transylvanian Hungarian students proved lonelier and less happy, they reported significantly higher levels of subjective well-being. The somewhat controversial results regarding the differences in narcissism and perfectionism may be due to the fact that narcissism was assessed with the NPI-16, a questionnaire that does not differentiate between the grandiose and the vulnerable forms of narcissism. Thus, we do not exactly know which form of narcissism is higher in the case of Transylvanian Hungarian students as reported to their Romanian counterparts.

Furthermore, as expected, correlation patterns indicate a somewhat different association tendency between variables, in the case of Transylvanian Hungarian students, depression tendencies as measured with the BDI do not present any significant correlation with narcissism and perfectionism, but significantly correlates with loneliness, and subjective and psychological well-being. In the Romanian students, depression significantly correlated with all the assessed variables except narcissism. Similar patterns may be observed in the case of happiness as measured with the OHQ (see Tables 4 and 5).

Based on the comparison of the conducted regression analyses, we may observe that in both samples depression seems to be quite well predicted by loneliness (12.1% for Transylvanian Hungarian and 32.1% for Romanian students), while subjective well-being plays a more pronounced role for Transylvanian Hungarian students (24%) compared to the Romanian students (1.6%). On the other hand, regarding happiness, depression and loneliness seem to be the best predictors for both samples (BDI=10.7% and UCLA=43% for Transylvanian Hungarian students, and BDI=60.2% and UCLA=7.8% for Romanian students). In addition to these variables, the happiness of Transylvanian Hungarian students is also well predicted by levels of narcissism and subjective well-being, while for the Romanian students by Environmental Mastery component of the Psychological well-being.

Based on these findings, we may consider loneliness as a very important factor that may play a significant role in the way depression and happiness develops and is maintained in both groups of students. However, our study cannot conclude the direction of the relationship between depression tendencies and loneliness, as well as happiness and loneliness. Further research should investigate in-depth both the relationship between loneliness and depression and happiness, as well as the possible causes of loneliness, and differences in these causes depending on cultural characteristics.

One of the major limitations of our study regards the fact that for temporal economy's sake, we used the short version of the NPI, based on which we cannot refine our results regarding the different types of narcissism (grandiose and covert), which might have significantly enhanced the conclusions of our investigation. However, based on the present results, we may suggest future directions out of which research might gain even more valuable information: the use of a narcissism scale that assesses both grandiose and covert narcissism, to complete the research design with a qualitative side that may evince the possible differences in the subjectively perceived causes of loneliness, and an eventual experimental design which may permit us to indicate the direction of the relationship between the three key variables: depression, loneliness, and happiness, all of which significantly contributing to the well-being experienced. Finally, we consider that our results may be useful in the development of prevention and intervention programs, targeting the enhancement of the psychological functioning of students with different cultural backgrounds (in this case, Transylvanian Hungarian and Romanian).

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