THE ROLE OF PERSONALITY TRAITS AND EMOTIONAL INTELLIGENCE IN PREDICTING ACADEMIC STRESS AMONG UNIVERSITY STUDENTS

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ABSTRACT

According to previous studies, academic stress is related to both basic personality traits and emotional intelligence (EI) as a trait which has demonstrated its relevance in numerous research regarding stress and mental health domains. The present study sought to examine the role of trait EI in predicting academic-related stress, while controlling basic personality traits. A sample (N=288) completed: 1) Perceptions of Academic Stress (PAS) Scale, measuring intensity of academic-related stress, 2) HEXACO PI-R comprising traits Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness and Openness, and 3) the TEIQue, examining trait EI (encompassing factors Well-Being, Self-control, Emotionality, and Sociability). The subjects in this online research were students from the University of Belgrade. Four hierarchical regression models comprising the HEXACO traits (entered 1st) and trait EI factors (entered 2nd) as predictors, and academic stress variables as criterions variables, were tested. HEXACO traits explained 8-25% of variance, while predictors of the second block incrementally explained 5-7% of the variance in academic stress. The current data suggests that specific emotion-related personality dispositions encompassed by trait EI have a significant role in predicting academic-related stress and indicates its incremental predictive validity over basic personality traits. The practical implications of the obtained results refer to the importance of programs for planned, targeted stimulation of EI in the context of education.

Key words:
academic stress, HEXACO model of personality, trait emotional intelligence, TEIQue, university students.

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INTRODUCTION

Starting tertiary education is generally interpreted as a positive life event, filled with hope and optimism towards the realization of potential and quality of adult life. In addition to new academic challenges, the period of college or university studies also marks a transition to adulthood and involves making decisions related to one's own future, personal and professional development, redefining boundaries towards the primary family, as well as facing numerous new roles and responsibilities. Students' behaviors, beliefs, and experiences toward academic demands, as well as the degree to which they will successfully adapt to those demands, form a significant segment of this phase of their lives (Karaman *et al.,* 2019; Kitzrow, 2003; Pedrelli *et al.,* 2015). Stressors directly related to the education process are of particular importance for the student population, faced with continuous demands to learn, adapt, and progress.

Academic Stress

The concept of stress, according to the classic definition of Lazarus and Folkman, indicates the relationship between the environment and the individual, whereby the individual assesses that the demands of the environment exceed his/her capacities (Biggs, Brough, & Drummond, 2017). We call it academic stress when it is the result of factors originating from the academic environment (Pascoe, Hetrick, & Parker, 2020). For example, this can be financial requirements imposed by school fees, exams and tests, a competitive climate, cooperation with colleagues during group projects, family pressures to achieve high results, or travel and relocation due to education, etc. (Karaman *et al*., 2019). Some authors separate this construct into three components: 1) the first one is stress caused by academic expectations, i.e. pressures that come from peers, family, as well as the teaching staff of the college or faculty, 2) the second relates to stress resulting from the amount of material, demanding tasks, and worries that the student will not fulfil all his/her obligations and pass exams, while 3) the third component represents the degree of academic self-confidence and beliefs regarding success during studies and a future professional career in the chosen field (Bedewy & Gabriel, 2015). There are also different operationalizations of this construct; one of the older instruments for assessing stress during student life seeks to recognize academic stressors (frustrations, pressures, changes, conflicts and self-imposed stressors) and students' reactions to stress (physiological, emotional, cognitive and behavioural) (Student-Life Stress Inventory-SLSI; Gadzella, 1991, according to Misra & Castillo, 2004).

Studying will necessarily produce certain levels of stress, and it is considered expected and normal during this period. When it remains at optimal levels, stress is a stimulus that makes a person alert and responsive to demands, but when stress

levels exceed these optimal levels, or when resources and coping strategies are not adequate, it becomes a complicating factor in daily functioning. A prolonged duration of academic stress, as well as its high levels, negatively reflect on the achievement and well-being of students, affecting their self-esteem, concentration, and relationships with others (Reddy, Menon, & Thattil, 2018). It is safe to say that academic stress is associated with a number of negative outcomes in terms of students' physical and mental health (Kennett, Quinn-Nilas, & Carty, 2021; Pascoe, Hetrick, & Parker, 2020; Watson & Watson, 2016).

Basic Personality Traits, Academic Stress, and Related Variables

In an effort to clarify the nature and origin of academic stress, numerous studies have paid attention to the factors of personality, environment, and academic programs themselves, which could be related to this phenomenon, using different operationalizations of academic stress. Research related to gender differences in the domain of academic stress and the strategies used to overcome it did not lead to unequivocal conclusions. Some authors state that the intensity of academic stress is higher in female students, and they are more inclined to vent and express their emotions, while male students more often try to control their emotions in stressful situations related to higher education (García-Martínez *et al.*, 2021; Karaman *et al.*, 2019; Misra *et al.*, 2000; Pau *et al.*, 2007; Poon, Lee, & Ong, 2012). On the other hand, in some studies, the intensity of academic stress among male and female students was equal (Bedewy & Gabriel, 2015). Examining the relationship between academic stress and age gives similar results: the correlation is either negative, i.e. younger students are more prone to academic stress (Pau *et al.*, 2007), or it does not exist (Bedewy & Gabriel, 2015).

Research examining differences in academic stress in relation to study programs shows that psychology students generally report lower levels of academic stress compared to students of other faculties, for example medicine and dentistry (Debowska *et al.,* 2022; Neveu *et al.*, 2012), and that there is a complex relationship between stress and different study programs. The source of stress registered among medical students is related to psychosocial and academic pressures: high family expectations, frequency of exams, volume of curriculum, sleep disorders, and worries about the future (Bedewy & Gabriel, 2015).

Levels of academic stress are successfully predicted by other variables, such as external locus of control (Karaman *et al.*, 2019), coping self-efficacy (Watson & Watson, 2016), anxiety, time management, and satisfaction with leisure activities (Misra & McKean, 2000). For the sake of a better understanding of academic stress, studies in which the relationship between this construct and personality structure

are considered are particularly significant. In general, the findings indicate that stress, anxiety and depression among students are positively related to Neuroticism, i.e. negatively with emotional stability as well as Extraversion (Milić *et al.*, 2019), and that a significant connection with anxiety in the academic context and its prevalence are also achieved by other traits within the Five-Factor Personality Model - Openness, Conscientiousness and Agreeableness (Steinberger, Eshet, & Grinautsky, 2021). More recent studies have been increasingly concerned with studying the relationship between academic stress and so-called "emotional" traits, among which emotional intelligence as a personality trait stands out (García-Martínez *et al.*, 2021; Trigueros *et al.*, 2020; Watson & Watson, 2016).

Emotional Intelligence

Literature dealing with emotional intelligence (EI) describes two dominant approaches regarding the conceptualization and assessment of this construct. Within the first approach, EI generally refers to the capacity to perceive, process, and use information concerning emotions (Mayer & Salovey, 1997). This construct is assessed through maximum performance tests. Against this model of EI as an ability, another way of conceptualizing the construct stands out, which is called mixed models of EI, and within which the field of EI extends through different psychological domains - both intellectual and personal (Bar-On, 1997; Goleman; 1995; according to Petrides & Furnham, 2003). Within this model, influential authors, such as Petrides and Furnham, believe that the concept of EI should be reduced primarily to the domain of personality, and operationalized through self-assessment (Petrides & Furnham, 2000). In this paper, EI will be considered within the framework of the mixed model, i.e. as a personality trait.

According to Petrides, EI understood as a personality trait is a complex construct made up of 15 facets: self-esteem, emotion expression, self-motivation, emotion regulation, happiness, empathy, social awareness, impulsivity, emotion perception, stress management, emotion management, optimism, relationship with others, adaptability and assertiveness – which are grouped into four higher-order factors: Well-being, Emotionality, Sociability and Self-control (Petrides, 2009).

The Well-being factor refers to the experience of satisfaction and fulfilment, positive emotions, self-esteem and satisfaction with life. The Emotionality factor refers to the skills of perceiving and expressing emotions and using them when establishing close relationships. The Self-control factor includes the possibility of balanced control of one's own desires and needs, flexibility, and stress regulation. Sociability is a factor related to the experience of adequacy in social situations, the ability to influence other people's emotional states, shyness and reservedness (Mijatović, 2018).

Basic Personality Traits and Emotional Intelligence

Previous empirical evidence indicates that the position of the trait EI is at the lower levels of the trait hierarchy (Petrides, Pita, & Kokkinaki, 2007). The links between the trait EI and the Five-Factor Personality Model are consistently confirmed in numerous studies. In general, the trait EI is highly negatively associated with Neuroticism, moderately with Extraversion, and weakly with Conscientiousness, Agreeableness, and Openness to experience (Jolić-Marjanović & Altaras-Dimitrijević, 2014; Petrides *et al.*, 2010). When it comes to the relationship between trait EI and HEXACO personality dimensions, the situation is somewhat different, since this personality model differs in terms of the content and names of individual factors, but also because a new factor (Honesty-Humility) has been added. More specifically, the Emotionality factor contains certain aspects of Neuroticism and Conscientiousness from the "Big Five" model, while some features of Neuroticism are integrated into the Conscientiousness factor. The new factor, Honesty-Humility, can be understood as a combination of Neuroticism and Agreeableness from the Big Five (Međedović *et al.,* 2019), and is particularly significant for understanding a number of criteria, primarily those in the domain of unethical/antisocial behaviour (Ashton & Lee, 2008). The mentioned differences somewhat change the relationships of the basic personality dimensions with the trait EI: the global measure of trait EI positively correlates most strongly with Extraversion, weakly to moderately with Agreeableness, Conscientiousness and Openness, while, as a rule, the weakest connections are with trait Honesty-Humility. The association with trait Emotionality is negative and generally low (Anglim *et al.,* 2020; Veselka *et al.*, 2010).

The incremental validity of the trait measures of EI in the prediction of various psychological variables has also been the subject of numerous studies. This construct has shown to be significant in predicting academic achievement over and above gender, cognitive abilities, and the Five Factor Model of Personality (Petrides *et al.*, 2018). The trait EI explains an additional part of the variance, above the "Big Five", in the prediction of psychological well-being (Jolić-Marjanović & Altaras-Dimitrijević, 2014), as well as the cortisol response to stress (Mikolajczak *et al.*, 2007). In general, Well-Being and Self-Control factors have the largest effect sizes in tests of additional contributions of the trait EI (Andrei *et al.*, 2016).

The Relationship of Emotional Intelligence with Academic Stress and Related Variables

Emotional intelligence has proven to be an important predictor of a wide range of different psychological constructs and phenomena. For example, it was found that in the field of education, the trait EI positively predicts academic achievement (Parker *et al.*, 2004), and negatively predicts school absenteeism and the manifestation of deviant

forms of behaviour (Petrides, Frederickson, & Furnham, 2004). More specifically, in the context of higher education, trait EI is negatively associated with perceived stress (Miri *et al.,* 2013), anxiety, depressive symptoms, and addictive behaviour, and positively with peer acceptance, perceived social support, adjustment (Petrides *et al.*, 2018), academic achievement (Perera & DiGiacomo, 2013) and academic satisfaction (Celik & Storme, 2017). Students with more pronounced trait EI drop out less often, i.e. they are more likely to successfully graduate (Keefer, Parker, & Wood, 2012; Wilson, Babcock, & Saklofske, 2019). In addition to the direct ones, indirect connections of the trait EI with academic achievement were established: through the connection of the trait EI with social support and adaptive coping strategies, such as active coping, positive reinterpretation, planning etc. In particular, the roles of adaptive coping and emotion regulation stand out as crucial for coping with academic stress and for achieving academic goals (Petrides *et al.*, 2018).

Some authors point out that when faced with stressors, EI encourages creativity, positive emotions, and assessment of stressful situations as challenging, not threatening (Schneider, Lyons, & Khazon, 2013). Self-regulatory processes included in the construct of EI are also associated with resilience (Magnano, Craparo, & Paolillo, 2016), which is a good predictor of adaptive responses to stress (Avey, Luthans, & Jensen, 2009), as well as academic persistence and success (Cassidy, 2015).

The Aim of the Research

Considering the findings that indicate the importance of personality traits in the experience of academic stress among students, there was a need to examine in more detail their predictive significance on a sample of students at the University of Belgrade, with special reference to emotional intelligence as a trait, since this construct is increasingly prevalent in mental health and well-being research (García-Martínez *et al.*, 2021; Trigueros *et al.*, 2020). Bearing in mind that the connection between the basic dimensions of personality and the trait EI has been consistently confirmed in numerous studies (Jolić-Marjanović & Altaras-Dimitrijević, 2014; Petrides *et al.*, 2010), as well as that the trait EI is found at lower levels in the hierarchy personality (Petrides, Pita, & Kokkinaki, 2007), it is important to examine the importance of this construct in more detail and determine its eventual incremental contribution in the prediction of academic stress.

For a better understanding of academic stress and its structure, all three aspects of this construct will be separately observed according to the operationalization offered by Bedewy and Gabriel (stress related to faculty workload and examinations, stress related to academic expectations, and stress related to academic self-perception) in order to determine the difference in their intensity (Bedewy & Gabriel, 2015).

◼ METHOD

Sample and Procedure

A sample of 288 undergraduate students at the University of Belgrade, aged 18 to 25, participated in this online survey (M = 19.72, SD = 1.35). The convenient sample consisted of 256 female students (89%) and 32 male students (11%), which is important for understanding and interpreting the research findings. The largest percentage of respondents (80%) were students of the Faculty of Special Education and Rehabilitation, while one fifth were students of the Faculty of Geography. The data was collected during December 2020 and January 2021 through a Google questionnaire. Respondents were asked for their consent to participate in the research, while they were informed that the obtained data would be considered collectively and exclusively for research purposes.

Instruments

The Perception of Academic Stress Scale (PAS, Bedewy & Gabriel, 2015) was used to assess academic stress. This instrument contains 18 items that are grouped into three subscales: 1) academic expectations subscale; 2) workload and examinations subscale, and 3) students' academic self-perceptions subscale. Respondents expressed their degree of (dis)agreement with the statements on a five-point scale. After recoding individual statements by adding the scores on the subscales, it was possible to obtain a summary measure of self-assessed stress in the academic context. Higher scores on the scale indicate higher levels of stress. The authors of the scale state that the reliability measures of the instrument are satisfactory - Cronbach's α coefficient is 0.70 (Bedewy & Gabriel, 2015). The reliability of the scale is slightly higher in this sample - α = 0.82.

Personality traits were assessed using the HEXACO-PI-R inventory (HEXACO Personality Inventory Revised, Lee & Ashton, 2018; Serbian adaptation by Međedović *et al.*, 2019). The instrument assesses 6 dimensions of personality: Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness. The inventory represents a direct operationalization of the HEXACO personality model. It consists of 100 items and contains a five-point response scale. The instrument showed satisfactory reliability measures in earlier studies (Međedović *et al.*, 2019), as well as in this research (α = 0.74).

A Serbian adaptation of the Trait Emotional Intelligence Questionnaire (TEIQue; Jolić-Marjanović & Altaras-Dimitrijević, 2014) was used to assess EI as a personality trait. With the instrument, it is possible to evaluate 15 facets, 4 factors, and a global measure of emotional self-efficacy – trait EI. In this research, the trait EI factors will be considered: Well-being, Emotionality, Self-control and Sociability. The

instrument is currently one of the most commonly used instruments for assessing trait EI and has good convergent-discriminant validity. The task of the respondents is to assess their degree of agreement for each of the 153 statements on a scale from 1 to 7. In previous research, it had been shown that the metric characteristics of the instrument are good. Reliability measures range from 0.59 to 0.86 at the factor level, and 0.78 for the global measure of trait EI (Petrides, 2009). The instrument proved to be highly reliable for the Serbian sample as well: α = 0.78 - 0.82 for the trait EI factors and 0.95 for the total score (Jolić-Marjanović & Altaras-Dimitrijević, 2014), and similar measures of reliability were obtained in this research (α = 0.75 - 0.88).

▪ RESULTS

Descriptive and inferential statistics methods were used in the research. Descriptive measures of the examined variables, as well as their correlations, are shown in Table 1. Correlations of age and traits Honesty-Humility and Openness are positive and very low, while other personality traits and measures of trait EI and academic stress are not related to age. HEXACO personality traits correlate with trait EI factors in the expected way: the highest correlation coefficients were obtained for Extraversion (up to $r = 0.65$ with the Well-being factor), and the lowest for Honesty-Humility. Academic stress measures are consistently negatively correlated with trait EI factors (up to $r = -0.47$ with the Well-Being factor), also negatively (up to $r = -0.40$) with the Extraversion, while with the other HEXACO traits, the correlation measures are lower or not significant.

Differences in mean scores on the subscales of the Perceived Academic Stress Scale were tested using a t-test for dependent samples. Stress related to workload and examinations is more intense than stress related to academic expectations ($t = -14.63$, df = 287, $p < 0.001$) and academic self-perception ($t = 6.16$, df = 287, $p < 0.001$). The mean scores on the academic self-perception subscale are significantly higher than scores on the students' academic self-perceptions subscale ($t = 8.80$, df = 287, $p < 0.001$). Additional analyses (t-test for independent samples) did not find gender differences in the intensity of certain aspects and overall perceived academic stress.

Table 1: Descriptive statistics and correlations of age, personality traits, trait EI factors and academic stress variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Age	19,72	1,35	1													
2 H	3,74	0,65	0,14*	1												
3 E	3,54	0,64	-0,06	0,10	1											
4 X	3,45	0,68	-0,06	0,01	0,06	1										
5 A	2,90	0,64	0,00	0,16**	-0,04	0,13*	1									
6 C	3,63	0,64	0,10	0,17**	0,17**	0,24**	0,10	1								
7 O	3,50	0,70	0,14*	-0,04	-0,08	0,05	0,16*	0,25**	1							
8 EI-WB	5,31	0,93	0,06	0,16*	0,08	0,65**	0,16*	0,30**	0,07	1						
9 EI-SC	4,16	0,85	0,11	0,10	-0,25**	0,32**	0,38**	0,51**	0,21**	0,44**	1					
10 EI-EM	5,15	0,81	0,04	0,25**	0,43**	0,50**	0,22**	0,33**	0,13*	0,56**	0,30**	1				
11 EI-SO	4,93	0,74	-0,02	-0,09	0,00	0,54**	-0,22**	0,26**	0,11	0,48**	0,30**	0,45**	1			
12 AS-AE	2,19	0,78	0,10	-0,21**	-0,02	-0,16**	-0,10	-0,18**	-0,05	-0,28**	-0,19**	-0,23**	-0,20**	1		
13 AS-WE	2,94	0,77	0,04	-0,08	0,14*	-0,26**	-0,21**	-0,16**	-0,13*	-0,27**	-0,33**	-0,23**	-0,27**	0,37**	1	
14 AS-SP	2,67	0,71	-0,09	-0,05	0,19**	-0,40**	-0,08	-0,25**	-0,16**	-0,47**	-0,36**	-0,24**	-0,32**	0,24**	0,48**	1
15 AS-TOT	48,32	10,57	0,01	-0,13*	0,16**	-0,36**	-0,19**	-0,25**	-0,16**	-0,43**	-0,39**	-0,30**	-0,35**	0,61**	0,89**	0,75**

Note. M: mean; *SD*: standard deviation; Age; H: Honesty-humility; E: Emotionality; X: Extraversion; A: Agreeableness; C: Conscientiousness; O: Openness; EI-WB: EI-Well-being; EI-SC: EI-Self-control; EI-EM: EI-Emotionality; EI-SO: EI-Sociability; AS-AE: the academic expectations subscale; AS-WE: workload and examinations subscale; AS-SP: students' academic self-perceptions subscale; AS-TOT: total score on the PAS scale; *p< 0,05, **p< 0,01, ***p< 0,001.

Hierarchical regression analysis was used to check the predictive power of personality traits from the HEXACO model (first step) and trait EI factors (second step). In this way, it is possible to examine the incremental contribution of trait EI factors in predicting academic stress, while controlling basic personality traits. Four hierarchical regression analyses were performed, for all three aspects and the overall measure of academic stress as criterion variables. The roles of gender and age were not investigated in the regression analysis, since in this sample the mentioned variables did not establish any relationships with measures of academic stress.

Stress related to academic expectations was negatively predicted by traits Honesty-Humility and Extraversion at the first step, explaining 8% of the variance of individual differences. From the second block of variables, trait EI factors Well-being and Sociability stand out as significant negative predictors, whereby this set of variables explains an additional 5% of the variance.

When it comes to stress related to workload and examinations, the HEXACO traits explain 14% of the variance; significant negative predictors are Extraversion and Agreeableness, while Emotionality is positively correlated with the criterion variable. In the second step, the trait EI factor Sociability negatively predicts academic stress associated with faculty workload. This set of predictors explains an additional 5% of the variance in individual differences.

The score on the student's academic self-perception subscale can be predicted by HEXACO traits, which explain 25% of the variance. Significant negative predictors are Extraversion and Conscientiousness, while Emotionality positively predicts stress related to academic self-perception. In the second step, the criterion variable is negatively predicted by the trait EI factor Well-being. The set of predictors from the second step of the regression analysis explains an additional 7% of the variance of this criterion variable.

Significant negative predictors of the general measure of academic stress are, in order of importance, trait Extraversion, followed by Conscientiousness and Honesty-Humility, while trait Emotionality has a positive correlation with the criterion variable. The set of HEXACO predictors explains 23% of the variance in individual differences. Among the significant predictors from the second step, Well-being and Sociability factors stand out. In this case, trait EI factors also additionally contribute to the explanation of academic stress (8%).

Table 2: Hierarchical regression analyses: prediction of academic stress
by personality traits and trait EI factors

	AS-AE	AS-WE	AS-SP	AS-TOT
Step 1	β	β	β	β
Honesty-humility	-0,18***	-0,06	-0,05	-0,11*
Emotionality	0,02	0,17***	0,24***	0,20***
Extraversion	-0,12*	-0,22***	-0,37***	-0,31***
Agreeableness	-0,04	-0,15**	0,02	-0,09
Conscientiousness	-0,12	-0,09	-0,18***	-0,16**
Openness	-0,01	-0,06	-0,08	-0,07
R^2	0,08	0,14	0,25	0,23
$F_{(6,281)}$	4,30***	7,65***	15,97***	13,76***
Step 2	β	β	β	β
Honesty-humility	-0,17**	-0,05	-0,01	-0,08
Emotionality	0,03	0,16*	0,25***	0,20***
Extraversion	0,10	-0,04	-0,15*	-0,05
Agreeableness	-0,09	-0,17**	0,05	-0,11
Conscientiousness	-0,08	0,00	-0,11	-0,07
Openness	0,01	-0,04	-0,07	-0,05
EI-Well-being	-0,19*	-0,04	-0,31***	-0,20**
EI-Selfcontrol	0,02	-0,10	-0,05	-0,07
EI-Emotionality	-0,02	-0,08	-0,05	-0,07
EI-Sociability	-0,17*	-0,21**	0,00	-0,17*
ΔR^2	0,05	0,05	0,07	0,07
$\Delta F_{(4,277)}$	3,72**	4,59***	6,68***	7,38***

Note. AS-AE: the academic expectations subscale; AS-WE: workload and examinations subscale; AS-SP: students' academic self-perceptions subscale; AS-TOT: total score on the PAS scale; *$p< 0,05$, **$p< 0,01$, ***$p< 0,001$.

◼ DISCUSSION

In general, the expression of overall academic stress was moderate among the students who participated in our research. There are differences in the expression of stress between the three subscales, but they are not overly strong. Questions related to the academic expectations subscale examine unrealistic, high expectations of professors and parents and a competitive atmosphere among students. For this aspect of academic stress, the lowest scores were reported. On the other hand, the highest levels of stress that students experienced was related to faculty workload, which refers to extensive course loads, lengthy assignments, time restraints, and exam deadlines. The subscale of stress related to academic self-perceptions examines beliefs regarding success in studies, but also in future career, and decision-making skills relevant to successful studies. In our sample, the results on this subscale were between the level of stress related to academic expectations and those related to faculty workload. This finding is consistent with the results of the study conducted by the authors of the applied scale for assessing academic stress (Bedewy & Gabriel, 2015). In addition, in accordance with the findings of the mentioned study are the results that the intensity of academic stress is not related to age.

The profile of the results indicates that the respondents find it most challenging to organize their time and activities in relation to the demands of their studies. Considered in combination with low stress from academic expectations, we can try to understand such findings as low competitiveness and the absence of the need of students to impose themselves and stand out in the circle of families and colleagues through success in their studies, which makes greater sacrifices in the direction of faculty workload and activities pointless, and then raises stress in situations that require it. Although it is generally psychologically desirable for stress levels to be moderate and lower, in the long term, data on lower competitiveness may signal the absence of incentives for learning, commitment and advancement. In this regard, this finding may be important for the planning and programming of the work of higher education institutions, which have the complex task of creating an environment in which there is at the same time sufficient incentives, but also protection from academic stress and its negative implications.

In our research, personality traits and emotional intelligence were associated with both the general measure of academic stress and its specific components. The significance of the role of trait Extraversion is noticeable along the entire measure of academic stress in our research, and its greatest importance is recognized in the prediction of stress associated with academic perception, as well as with the general measure of academic stress. In the HEXACO model, Extraversion is a trait related to social self-confidence, social boldness, activity, and friendliness (Međedović *et al.*, 2019). It is an understandable contribution of these social and

emotional capacities for an individual who is tasked to function successfully for longer periods, in an environment saturated with interactions, such as the faculty environment. Being accompanied by states of anxiety, fear and dependence, academic stress is positively predicted with the trait Emotionality, in all domains except the domain of stress related to academic expectations. Such findings are compatible with earlier research on the relationship between personality traits and academic stress (De la Fuente *et al.,* 2021; Milić *et al.*, 2019). The results also indicate a significant effect of trait Honesty-Humility in reducing stress related to academic expectations. Certain studies point out the role of the trait Honesty-humility combined with Extraversion in strengthening the social network and the capacity to overcome stressful situations (Carlander & Johansson, 2020; Krause *et al.,* 2016). It is an interesting observation that the stress associated with faculty workload is higher in situations of low Extraversion and Agreeableness, and elevated Emotionality. This finding may indicate the importance of peer support and connection with colleagues as protective factors. Although the HEXACO personality model explains a significant percentage of the variance of academic stress (up to 25% in the case of stress related to academic self-perception), the key question was how trait EI predicts academic stress and whether it additionally contributes to the prediction of this variable.

The results of the hierarchical regression analysis showed that the trait EI, primarily through the its factors Well-Being and Sociability, significantly predicted academic stress when the effects of HEXACO personality traits were controlled. An additional 5% to 7% of the variance is explained by the predictors from the second step of the regression analysis. The significance of the HEXACO personality traits Extraversion and Conscientiousness in the prediction of academic stress is lost in the second step of the hierarchical regression analysis. Based on this finding, a potential mediating role of the trait EI factors Well-Being and Sociability in relation of basic personality traits and academic stress can be assumed. The negative relationship between the trait EI and stress in the academic context was also confirmed in previous studies (Miri *et al.*, 2013; Petrides *et al.*, 2018). More specifically, stress related to academic workload is negatively predicted almost equally strongly by Well-being and Sociability, and the same predictors play a significant role in predicting the general measure of academic stress. Stress related to faculty responsibilities is significantly predicted by the factor Sociability, while stress related to academic self-perception is significantly predicted by the factor Well-being. These two factors reduce the intensity of stress since they represent optimism, self-confidence, and positive emotions (Well-Being), along with adaptive management of emotions, increased assertiveness and social awareness (Sociability). People in whom these factors are more pronounced, more often experience satisfaction and fulfilment accompanied by positive feelings, and successfully, confidently and easily enter social interactions (Mijatović,

2018), which can make them more prepared and equipped to overcome stressful situations in an academic environment. Planned strengthening of these domains of emotional intelligence may be particularly important for the student population, as research findings indicate that the trait EI can be strengthened through various intervention programs, even during adulthood (Kotsou *et al.*, 2011). For example, by strengthening emotion regulation strategies, raising awareness of the effects of applying dysfunctional patterns of regulation, a person can achieve higher levels of self-control, self-confidence, and concern for overcoming future problems in the professional and educational domains, leading him/her to increased academic satisfaction (Celik & Storme, 2017). Through intervention programs, developing the trait EI, students' capacities for adaptation are enhanced through efforts to see future obstacles and difficulties in the academic context as challenges, not as threats. This is expected to encourage students' curiosity, control, and self-confidence, which further contributes to the experience of satisfaction and academic resilience (Celik & Storme, 2017).

The importance of this study is primarily recognized in confirming the role of the trait EI in predicting a relevant construct for the domain of education, such as academic stress, as well as representing another confirmation of the incremental validity of the measure of the construct operationalized through the Questionnaire on emotional intelligence as a trait. On the other hand, bearing in mind that the survey was conducted on a convenient sample of students from only two faculties of the University of Belgrade, as well as the sample not being balanced when considering gender differences, the key limitation of this research is the impossibility of generalizing the findings to the total population of students. Examining other potentially important factors (such as motivation, aspirations, locus of control, etc.) would enable a deeper understanding of academic stress in future studies.

CONCLUSION

Empirical evidence consistently indicates a strong contribution of the trait EI in the sphere of education. Pupils and students in whom the trait EI is strongly manifested have a predisposition to regulate their emotions more successfully in situations of learning and knowledge assessment, adapt better socially and emotionally in different situations brought by schooling, and cooperate more easily and successfully with the environment, which can lead to the desired academic achievement (Perera & DiGiacomo, 2013). The results of our research are consistent with these insights. In particular, we would like to point out the finding that highlights the incremental contribution of the trait EI in the prediction of

academic stress. The implications that this brings to pedagogic practice relate to the importance of recognizing, valuing, and the planned and targeted encouragement of emotional intelligence in the educational context.

Some authors emphasize that, due to the complexity of the construct of emotional intelligence, it is necessary to develop programs that are focused on specific, individual dimensions in order to be more effective (Zeidner, Roberts, & Matthews, 2002). In addition, programs must have a clear conceptual framework, and the specific goals of the program should be clear and measurable and follow the key components of the concept itself (e.g. Emotional Competence Training, see Kotsou *et al.*, 2011). When developing the program, it is necessary to keep in mind the expected target group and the socio-cultural context in which the implementation is planned, in order to ensure sensitivity to all relevant factors of the community, such as age, gender, cultural characteristics and unique factors of the community. The curriculum of the program should enable the generalization of skills to new subjects and relationships, but also in new situations. In order to achieve long-term effects, quality programs for fostering EI should not be isolated as a special subject of study that takes place once, but should become part of the continuous culture of educational institutions as a whole and should enable the development of emotional competences through various contents and areas. Staff expected to implement emotional intelligence programs should be provided with accessible opportunities for professional development, learning and support. Some universities have recognized the significance and importance of such programs, whose goal is to strengthen and improve emotional intelligence and strengthen academic satisfaction, since these are predictors of future academic achievement and career success (Celik & Storme, 2017; Zeidner, Matthews, & Roberts, 2004).

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