

## THE ROLE OF EMOTIONAL INTELLIGENCE DIMENSIONS AND TRAIT MINDFULNESS IN STUDENTS' FLOURISHING

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### Abstract

Flourishing encompasses the socio-psychological prosperity of individuals and reflects feeling good and functioning well. Examining conditions and individual resources contributing to students' flourishing is an important part of positive psychology research in higher education. Some studies suggest that emotional intelligence (EI) and mindfulness contribute to students' flourishing. Since both EI and mindfulness are complex constructs, it is necessary to examine them at the dimension/facet level to understand their contribution to students' flourishing better. Also, in often highly demanding academic domain specific EI dimensions such as emotional self-regulation and self-motivation may be of great importance for students' flourishing. However, there is a lack of studies exploring the role of these specific EI dimensions as well as the role of specific mindfulness facets to students' flourishing. Therefore, the purpose of this study is to examine the contribution of the specific EI dimensions i.e. regulation of emotion in the self (ROE) and use of emotion to facilitate performance (UOE) and specific facets as well as overall trait mindfulness to students' flourishing. A convenience sample of 124 university students at the Faculty of Teacher Education in Zagreb (97% female, 20 years on average) participated in a study by completing several questionnaires: the Wong and Law Emotional Intelligence Scale, the Five-Facet Mindfulness Questionnaire, and the Flourishing Scale. The correlation analysis showed that the EI dimensions i.e. ROE and UOE as well as mindfulness, both at facet and overall trait levels, were related to students' higher flourishing. Regression analyses showed that EI dimensions explained 44.8% of flourishing with ROE and UOE both being significant predictors. Also, regression analyses showed that three of five facets of mindfulness explained 40.2% of flourishing with observing, describing and acting with awareness being significant predictors. Finally, the results of hierarchical regression analysis showed that after controlling for EI dimensions, overall trait mindfulness, without observing facet, additionally explained 8% of flourishing. The final model explained 52.6% of flourishing with only the UOE and overall trait mindfulness remaining significant predictors of flourishing. This suggests that UOE and mindfulness have key roles in students' flourishing.

**Keywords:** *Emotional intelligence, flourishing, mindfulness, students, well-being.*

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### 1. Introduction

University years marked by academic and developmental transition into adulthood may be a particularly sensitive period for students' psychological well-being (Rule et al., 2024). Psychological well-being is most often conceptualized as flourishing, referring to the social-psychological prosperity reflecting several aspects of daily life, including engagement, positive relationships, feelings of competence and optimism, meaningfulness and having a purpose in life (Diener et al., 2010). Some studies suggest that emotional intelligence (EI) and mindfulness contribute to students' flourishing.

EI is a subset of social intelligence that refers to positive emotional resources and adaptive emotional functioning (Schutte & Loi, 2014). EI can be conceptualized as a trait (e.g., Petrides & Furnham, 2001; Wong & Law, 2002), or as an ability (Mayer et al., 2004). The core components included in the most operationalizations of EI are perceiving, understanding and regulation of emotion in self. Previous research found that emotionally intelligent individuals have greater mental health (Martins et al., 2010), better relationships with others (Lopes et al. 2004), higher subjective and psychological well-being (e.g., Schutte & Malouff, 2011). EI was found to be positively associated with flourishing in workers (Du Plessis, 2023) and students (Pradhan & Jandu, 2023; Zewude et al., 2024).

Besides EI, studies showed that mindfulness is also positively related to flourishing (e.g., Akin & Akin, 2015). Mindfulness refers to a purposefully focused attention to a present-moment experience without judgment, and it includes components of acting with awareness, the ability to observe and describe experiences while remaining non-reactive to them (Baer et al., 2006). Overall mindfulness was found to be

consistently positively related to flourishing (Akin & Akin, 2015; Arslan & Asıcı, 2021), while the results on the facet level are somewhat inconsistent. Some studies found that all facets of mindfulness were positively related to flourishing (MacDonald & Baxter, 2017), while some did not (Gajšek et al., 2023; Rahe et al., 2022). Therefore, more studies are needed to examine the relationships between facets of mindfulness and flourishing.

Besides the relationships between EI and flourishing (Du Plessis, 2023; Pradhan & Jandu, 2023; Zewude et al., 2024), and mindfulness and flourishing (Akin & Akin, 2015; Arslan & Asıcı, 2021; Gajšek et al., 2023; MacDonald & Baxter, 2017), there is also a positive relationship between EI and mindfulness (Baer et al., 2006; Bao et al., 2015; Miao et al., 2018; Pradhan & Jandu, 2023). Therefore, it would be interesting to examine the role of mindfulness besides the role of EI in flourishing. Since both EI and mindfulness are complex constructs, it is necessary to examine them at the dimension/facet level to better understand their contribution to students' flourishing. In addition, in often highly demanding academic context, specific EI dimensions such as emotional self-regulation, i.e., regulation of emotion in the self (ROE), and self-motivation, i.e., use of emotion to facilitate performance (UOE), may be of especially great importance for students' flourishing. However, there is a lack of studies examining the role of these specific EI dimensions as well as the role of specific facets of mindfulness in students' flourishing.

## 2. Objectives

The purpose of this study was to examine the contribution of EI dimensions regulation of emotion and self-motivation, and the contribution of five mindfulness facets as well as overall mindfulness to students' flourishing. The following hypotheses and research question were posed:

**H1:** EI dimensions, i.e., ROE and UOE are bivariate (1a) and uniquely (1b) associated with flourishing.

**RQ1:** Which facets of mindfulness are bivariate (1a) and uniquely (1b) associated with flourishing?

**H2:** Overall mindfulness is bivariate positively associated with flourishing.

**H3:** Facets of mindfulness (3a) and overall mindfulness (3b) explain an incremental amount of the variance in flourishing, above and beyond EI dimensions, i.e., ROE and UOE.

## 3. Method

### 3.1. Participants and procedure

A convenience sample of 124 university students at the Faculty of Teacher Education in Zagreb (97% female,  $M = 20.17$  years;  $SD = 1.91$ ; age ranged from 18 to 25) participated in a study by completing several questionnaires in an online Google format. Participation was voluntary and anonymous during an academic semester at the Faculty of Teacher Education, University of Zagreb.

### 3.2. Instruments

**The Wong and Law Emotional Intelligence Scale** (WLEIS, Wong & Law, 2002) was used to measure two dimensions of emotional intelligence, i.e., regulation of emotion (ROE, e.g., *I am able to control my temper and handle difficulties rationally*) and use of emotions (UOE, e.g., *I am a self-motivated person*). WLEIS assesses four dimensions and has 16 items, but in this research, we assessed two dimensions, ROE and UOE with 8 items total. All items are rated on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

**The Five-Facets Mindfulness Questionnaire** (FFMQ, Baer et al., 2006) was used to measure facets of mindfulness: observing (8 items, e.g., *I pay attention to sensations, such as the wind in my hair or sun on my face*), describing (8 items, e.g., *I can easily put my beliefs, opinions, and expectations into words*), acting with awareness (8 items, e.g., *I find it difficult to stay focused on what's happening in the present*; reversed), non-judging of inner experience (8 items, e.g., *I criticize myself for having irrational or inappropriate emotions*; reversed) and non-reacting to inner experience (7 items, e.g., *I perceive my feelings and emotions without having to react to them*). All 39 items were rated on a 5-point Likert scale ranging from 1 (*never or very rarely true*) to 5 (*very often or always true*).

**Flourishing Scale** (Diener et al., 2010) was used to measure self-perceived social-psychological prosperity, (e.g., *I am a good person and live a good life*). All 8 items were rated on a 7-point Likert scale, ranging from 1 (*untrue*) to 7 (*absolutely true*).

## 4. Results

### 4.1. Descriptive statistics and correlations

Students in this study reported above average levels of EI dimensions, moderate levels of overall and mindfulness facets and experienced relatively high levels of flourishing (Table 1).

The EI dimensions correlated to each other positively ( $r = .40, p < .01$ ). Describing, acting with awareness, non-judging and non-reacting facets of FFMQ correlated to each other significantly and positively ( $r$  ranging from .18. to .77). FFMQ observing showed positive correlation with describing, negative correlation with non-judging and no correlation with three other FFMQ facets of mindfulness.

The EI dimensions were significantly and positively associated with flourishing at a moderate level (ROE,  $r = .43, p < .01$ ; OUE,  $r = .64, p < .01$ ), thus supporting Hypothesis 1a. Regarding the Research Question, all five facets of mindfulness (1a) significantly and positively correlated to flourishing, with correlations ranging from .19 to .52. Overall mindfulness was significantly and positively associated with flourishing at a moderate level, thus supporting Hypothesis 2.

Table 1. Descriptive statistics, Cronbach's alpha and correlations among the study variables.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. WLEIS Regulation of emotion	-	.40**	-.02	.40**	.42**	.33**	.50**	.57**	.43**
2. WLEIS Use of emotion		-	.17	.44**	.40**	.25**	.25**	.47**	.64**
3. FFMQ Observing			-	.27**	-.04	-.25**	.16	.04	.19*
4. FFMQ Describing				-	.46**	.35**	.33**	.77**	.52**
5. FFMQ Acting with awareness					-	.47**	.18*	.76**	.52**
6. FFMQ Non-judging						-	.19*	.75**	.37**
7. FFMQ Non-reactivity							-	.54**	.20*
8. FFMQ Overall mindfulness								-	.58**
9. Flourishing									-
Theoretical range	1-7	1-7	1-5	1-5	1-5	1-5	1-5	1-5	1-7
Cronbach's alpha	.86	.85	.58	.87	.83	.82	.65	.88	.90
M	4.92	5.40	3.47	3.43	3.11	3.10	3.06	2.52	5.77
SD	1.21	1.10	0.49	0.64	0.60	0.68	0.54	0.35	0.86

Note. \* $p < .05$ ; \*\* $p < .01$ . \*Overall mindfulness without observing facet.

## 4.2. Regression analyses

Two linear regression analyses were conducted with specific emotional intelligence dimensions (Table 2a) and facets of trait mindfulness (Table 2b) as predictors and flourishing as criteria. Dimensions of EI, ROE and UOE, explained 44% of flourishing ( $F = 49.14, p < .001$ ), with both dimensions being significant predictors, thus supporting Hypothesis 1b. Regarding Research Question 1b, facets of mindfulness explained 38% of flourishing ( $F = 15.85, p < .001$ ), with three out of five facets being significant predictors, i.e., observing, describing and acting with awareness.

To determine the unique associations between EI dimensions and facets of mindfulness, hierarchical regression analysis was conducted with EI dimensions entered in Step 1, and facets of mindfulness in Step 2 (Table 3). Facets of mindfulness explained an additional 11% of the variance in flourishing, beyond and above the EI dimensions thus supporting Hypothesis 3a. The final model explained 53% of the variance of flourishing ( $F = 20.81, p < .001$ ) with only the EI dimension of UOE remaining significant, along with the mindfulness facet of acting with awareness. Additionally, a hierarchical regression analysis with UOE and ROE entered in Step 1, and overall mindfulness without observing facet entered in Step 2 as predictors of flourishing was performed ( $F = 44.33, p < .001$ ). Overall mindfulness explained an additional 8% of the variance in flourishing (Table 3), thus supporting Hypothesis 3b.

Table 2. Results of regression analyses of flourishing predicted by EI dimensions (2a) and mindfulness facets (2b).

Table 2a		Table 2b	
Predictors	$\beta$	Predictors	$\beta$
Regulation of emotions	.20**	Observing	.17*
Use of emotion	.56***	Describing	.27**
		Acting with awareness	.32***
$R^2$	.45***	Non-judging	.17
Adj $R^2$	.44***	Non-reactivity	-.01
		$R^2$	.40***
		Adj $R^2$	.38***

Note (Table 2a and 2b).  $\beta$  = standardized beta coefficients; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Table 3. Results of two hierarchical regression analyses of students' flourishing (final model).

Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	ΔR <sup>2</sup>	Predictors	β
1	.75***	.56***	.53***	.11***	Regulation of emotion	.13
					Use of emotion	.42***
					Observing	.14
					Describing	.15
					Acting with awareness	.19*
					Non-judging	.14
					Non-reactivity	-.10
2	.73***	.53***	.51***	.08***	Regulation of emotion	.06
					Use of emotion	.45***
					Overall mindfulness	.35***

Note. β = standardized beta coefficients; \*p < .05; \*\*p < .01; \*\*\*p < .001.

## 5. Discussion

First, the results are consistent with previous studies on the positive relationship between EI and mindfulness (Bao et al., 2015). Second, the results showed that regulation of emotion and self-motivation were significantly positively associated with flourishing, in line with previous studies (Du Plessis, 2023; Zewude et al., 2024). The novelty of this study is that it showed that these EI dimensions were unique predictors of students' flourishing.

Third, overall mindfulness and all facets of mindfulness were positively associated with flourishing, in line with previous studies (e.g., Akin & Akin, 2015; MacDonald & Baxter, 2017). Fourth, regression analysis showed only facets of observing, describing and acting with awareness as unique and significant predictors of flourishing. Describing, i.e., verbalizing inner experiences, and acting with awareness, i.e., being engaged and aware of oneself and surroundings, were found to be significant predictors of students' flourishing, which replicates Gajšek et al. (2023) findings and further suggest the crucial role of these facets for experiencing flourishing. The results regarding observing facet being a positive predictor of flourishing are inconsistent with the previous research on Croatian students' sample which did not find observing as a significant predictor of flourishing (Gajšek et al., 2023), but in line with one study on a German student sample (Rahe et al., 2022). This inconsistency regarding observing facet which reflects attending to and noticing thoughts and feelings, could be due to the psychometric properties of the FFMQ observing subscale (Baer et al., 2006; Gračanin et al., 2017). Hierarchical regression analysis found that after controlling for ROE and UOE, only acting with awareness was significantly related to flourishing, indicating that this facet has a unique association with flourishing, beyond variance shared with EI dimensions. Interestingly, ROE did not remain a significant predictor after including mindfulness in the regression predicting flourishing, suggesting that mindfulness facets include some mechanisms of emotional regulation which exert flourishing-promoting effects. In line with that, MacDonald and Baxter (2017) found that mindfulness was related to flourishing via decreased difficulties with emotion regulation.

This study focused on EI as a trait, but future studies may include EI as an ability. Since both EI and mindfulness can be trained (Nelis et al., 2011; Tang et al., 2019), educational institutions may offer such training to students in order to increase their flourishing.

## 6. Conclusion

This study extends the literature in suggesting that the regulation of emotion, especially the use of emotions are important and may be a base for students' flourishing. The finding that examining individual facets of mindfulness accounted for more variance in general flourishing than using overall mindfulness as a distinct higher-order predictor suggest that investigating mindfulness at the facet level is justifiable to better understand its beneficial effect on flourishing. Among the facets of mindfulness, acting with awareness has the most important role in promoting flourishing.

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