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PERSONALITY TRAITS AND COGNITIVE EMOTION REGULATION STRATEGIES AS PREDICTORS OF DEPRESSION, ANXIETY, AND STRESS

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Keywords:
personality traits;
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depression;
anxiety;
stress.

Abstract. The aim of this study was to examine the contribution of cognitive emotion regulation strategies in predicting depression, anxiety, and stress in young adults, beyond the basic personality dimensions. The sample consisted of 173 participants aged between 18 and 40 years. The Big Five Inventory (BFI), the Depression, Anxiety, and Stress Scale (DASS-21), and the Cognitive Emotion Regulation Questionnaire (CERQ) were used. Data were analyzed using hierarchical regression analyses. The results indicate that neuroticism was the strongest and most consistent predictor of depression, anxiety, and stress. Extraversion and conscientiousness emerged as significant negative predictors of depression, while conscientiousness also showed a protective role in relation to anxiety. Agreeableness was negatively associated with stress, whereas openness to experience showed a positive contribution to stress prediction. Regarding cognitive emotion regulation strategies, self-blame, catastrophizing, and blaming others were associated with higher levels of depressive symptoms, while self-blame also emerged as a significant predictor of anxiety and stress. In contrast, positive refocusing demonstrated a protective effect against depression. These findings highlight the importance of jointly considering stable personality traits and cognitive emotion regulation strategies in understanding emotional distress and emphasize their relevance for prevention and the development of targeted psychological interventions.

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Introduction

Depression, anxiety, and stress represent some of the most common forms of emotional difficulties in contemporary society, particularly among young adults. The period of early adulthood is characterized by numerous developmental challenges, including educational, professional, and interpersonal changes, which can increase vulnerability to negative emotional states. Research shows that individual differences in emotional experience and regulation play a significant role in the development and maintenance of these difficulties (Domaradzka & Fajkowska, 2018; Purnamaningsih, 2017). In this context, personality traits represent relatively stable dispositions that influence the way individuals perceive and respond to stressful life events. However, although personality traits are an important predictive factor, they alone cannot fully explain individual differences in the occurrence of negative emotional states. One of the key psychological mechanisms that may contribute to understanding these differences is cognitive emotion regulation strategies.

Cognitive Emotion Regulation Strategies

Cognitive emotion regulation refers to the way individuals cognitively process and interpret emotionally significant events, particularly those of a negative or stressful nature (Aldao et al., 2010). Different regulation strategies can serve either adaptive or maladaptive functions in coping with negative experiences. For example, strategies such as positive refocusing are often associated with better emotional adjustment, whereas strategies like self-blame, catastrophizing, or blaming others can contribute to the maintenance and intensification of negative emotional states. Thompson (1991) defines emotion regulation as extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional responses. On the other hand, Gross (1998) defines emotion regulation as processes by which an individual influences which emotions they have, when they have them, how they experience them, and how they express them. Several years

later, Thompson and Gross (2007) expanded the concept of emotion regulation, defining it as an automatic or controlled, conscious or unconscious process by which an individual influences their own emotions, the emotions of others, or as a process involving both aspects.

Garnefski et al. (2001) identified nine conceptually distinct strategies related to the ways a person thinks following a stressful or unpleasant event. These strategies are categorized as adaptive or maladaptive with respect to their effects on mental health. Maladaptive strategies include self-blame, blaming others, rumination, and catastrophizing. Self-blame involves thoughts of blaming oneself for the unpleasant event that occurred, while blaming others entails directing blame toward other people. Rumination refers to the tendency to repetitively focus on the experience of negative emotions, their causes, and consequences, whereas catastrophizing involves explicitly emphasizing the catastrophic nature of a situation or event. Research indicates that individuals prone to frequent use of maladaptive strategies may be more vulnerable to emotional problems such as depression, anxiety, and stress (Garnefski & Kraaij, 2006).

Adaptive strategies include acceptance, planning, positive refocusing, positive reappraisal, and putting into perspective. Acceptance involves thoughts of coming to terms with and reconciling with what has happened, while planning refers to thinking about future steps to be taken and how to respond to future negative events. Positive refocusing involves directing attention toward positive and pleasant thoughts instead of the current negative event. Positive reappraisal, on the other hand, refers to attributing positive meaning to the event in terms of personal growth and development. Putting into perspective involves reducing the seriousness and significance of the event itself or emphasizing its relativity compared to other events (Carver et al., 1989).

Frequent use of adaptive strategies is positively associated with measures of optimism and self-confidence, and negatively associated with measures of depression, anxiety, and stress (Carver et al., 1989). Although cognitive emotion regulation strategies represent relatively flexible ways of coping with negative experiences, their use is not entirely independent of more stable individual characteristics. Research suggests that a tendency toward certain emotion regulation strategies may be associated with personality traits that shape the way individuals experience and interpret stressful events (Domaradzka & Fajkowska, 2018; Purnamaningsih, 2017).

Personality Traits

Personality is commonly defined as a complex set of psychological characteristics and mechanisms within an individual that are relatively enduring and organized, influencing the person's interactions and adaptations to physical, intrapsychic, and social environments (Buss & Larsen, 2008). In contemporary personality

psychology, there is considerable interest in the lexical approach to studying personality structure, which is based on the assumption that personality traits can be derived from natural language. This approach laid the groundwork for the Big Five personality model. The five-factor structure of personality was first identified by Donald Fiske (Fiske, 1949, as cited in Goldberg et al., 1996), who analyzed 22 variables from Cattell's model, confirming the five-factor structure in both self-report and observer-report domains.

John and Srivastava (1999) proposed a personality model in which the dimensions postulated in the Big Five framework are understood as a phenotypic configuration of personality, emphasizing a descriptive level. The operationalization of this model is the Big Five Inventory (BFI; John & Srivastava, 1999), one of the most widely used instruments in personality research, encompassing five core dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Extraversion is characterized by a strong orientation toward the external world and includes sociability, talkativeness, positive affectivity, and energy. Individuals scoring high on this dimension tend to be enthusiastic, action-oriented, and conversational. Agreeableness includes traits such as compassion, kindness, and loyalty. Agreeable individuals are considerate, generous, and willing to compromise to maintain harmonious relationships, holding an optimistic view of human nature and believing that people are fundamentally honest and trustworthy. Conscientiousness encompasses traits such as planning, efficiency, and organization, reflecting the way a person controls, regulates, and directs their impulses. Neuroticism includes indicators of anxiety, tension, and low mood, as well as a tendency to experience negative emotions. Individuals high in neuroticism are emotionally reactive and prone to interpret neutral or benign events as threatening. Openness to experience involves imagination and a broad range of interests; open individuals are characterized by intellectual curiosity and sensitivity to beauty and art.

Depression, Anxiety, and Stress

Symptoms of depression, anxiety, and stress are among the most common and clinically significant psychological problems in contemporary society. These conditions are not only characteristic of clinical populations but are also widely present in the general population, regardless of age, gender, or socioeconomic status (Jovanović et al., 2011).

Depression is most commonly described as a prolonged state of low mood, accompanied by a loss of interest and pleasure in daily activities, along with a range of other symptoms that can significantly impair daily functioning (Jovanović et al., 2011). In addition to pronounced feelings of sadness, individuals often experience sleep and appetite disturbances, feelings of guilt or worthlessness, difficulties in concentration, and slowed thinking.

Anxiety can be understood as a state of heightened internal tension and worry, often accompanied by feelings of uncertainty, which may occur even in the absence of an identifiable external trigger (Jovanović et al., 2011). This state is characterized by various cognitive symptoms, such as difficulty maintaining attention and a sense of loss of control, as well as pronounced emotional agitation and physiological reactions. Common physiological manifestations of anxiety include accelerated heart rate, shallow and rapid breathing, sweating, trembling, dizziness, and increased muscle tension (Junaković, 2024).

Stress is typically defined as the organism's response to external or internal demands that an individual perceives as threatening, challenging, or exceeding their coping abilities (Jovanović et al., 2011). While short-term stress can have an adaptive function, increasing alertness and preparing the body for action, prolonged exposure to stress may lead to the development of avoidant behaviors and impaired functioning across various life domains, including educational, professional, and social contexts (Junaković, 2024).

Despite a substantial body of research in this area, there remains a need for an integrative approach that simultaneously considers the contribution of cognitive emotion regulation strategies in predicting depression, anxiety, and stress in young adults, alongside core personality dimensions. Building on this premise, the aim of the present study is to examine the contribution of cognitive emotion regulation strategies in predicting depressive, anxious, and stress-related symptoms in young adults, over and above the influence of basic personality traits. This approach allows for a more comprehensive understanding of the psychological factors contributing to emotional difficulties, as well as the identification of potential targets for prevention and psychological interventions.

Method

Sample

The sample comprised a total of 173 participants, of whom 27 (15.6%) were male and 146 (84.4%) were female, aged between 18 and 40 years (M = 26.13; SD = 5.720). The study was conducted using an online questionnaire, which participants completed voluntarily after being informed in advance about the anonymity and confidentiality of all collected data.

Instruments

The following instruments were used in this study:

Big Five Inventory (BFI; John et al., 1991). The BFI represents an operationalization of personality traits within the Big Five model. The inventory consists of 44 items accompanied by a five-point Likert-type response scale. Extraversion

was illustrated by the item "I see myself as someone who is talkative," agreeableness by the item "I see myself as someone who is considerate and kind to almost everyone," conscientiousness by the item "I see myself as someone who does a thorough job," neuroticism by the item "I see myself as someone who worries a lot," and openness to experience by the item "I see myself as someone who is original, comes up with new ideas." The scales of the inventory demonstrate satisfactory reliability: for extraversion, Cronbach's alpha coefficient in the present sample was .79; for agreeableness .77; for conscientiousness .58; for neuroticism .79; and for openness to experience .71.

Depression, Anxiety, and Stress Scales (DASS-21; Lovibond & Lovibond, 1995). The DASS-21 consists of 21 items encompassing three subscales with 7 items each: depression, which includes items assessing core symptoms of depression such as low positive affect, dysphoria, hopelessness, loss of interest, inertia, and a negative attitude toward oneself and life in general (e.g., "I felt that I had nothing to look forward to"); the anxiety subscale, which includes items primarily related to symptoms of physiological arousal (such as dry mouth, breathing difficulties, trembling), as well as the subjective experience of anxious affect (e.g., "I felt scared without any good reason"); and the stress subscale, which assesses symptoms of general, nonspecific arousal, such as difficulty relaxing, irritability, and agitation (e.g., "I noticed that I was getting agitated"). Participants rated the frequency of these feelings on a Likert scale ranging from 0 (This does not apply to me at all) to 3 (This applies to me most of the time). The scales of the inventory demonstrate satisfactory reliability: for depression, Cronbach's alpha coefficient in the present sample was .69, for anxiety .89, and for stress .79.

Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2001). The CERQ is a multidimensional questionnaire used to assess cognitive strategies individuals employ after experiencing a negative event or situation. It is a self-report measure examining how people think following the experience of a threatening or stressful life event. The questionnaire consists of 36 items distributed across nine conceptually distinct subscales (self-blame, acceptance, rumination, positive refocusing, refocusing on planning, positive reappraisal, putting into perspective, catastrophizing, and blaming others), with four items per subscale.

The factors were illustrated with representative items from the questionnaire, such as "I think that I am to blame for what has happened" (self-blame), "I think that I have to accept that this has happened" (acceptance), "I often think about how I feel about what I have experienced" (rumination), "I think about pleasant things instead of thinking about what has happened" (positive refocusing), "I think about what I can do to deal with the situation" (refocusing on planning), "I think that I can learn something positive from the situation" (positive reappraisal), "I think that worse things can happen" (putting into perspective), "I keep thinking about how terrible what I have experienced is" (catastrophizing), and "I think that others are responsible for what has happened" (blaming others). Participants

indicate on a five-point scale (1 = "never," 2 = "very rarely," 3 = "sometimes," 4 = "often," 5 = "always") how frequently they use each of the described ways of thinking after an unpleasant experience.

Scores are obtained by summing the relevant items for each cognitive strategy (ranging from 4 to 20), with higher scores indicating more frequent use of a given strategy and lower scores indicating less frequent use. The authors of the questionnaire report good internal consistency, test–retest reliability, as well as discriminant and convergent validity. The scales of the inventory demonstrated satisfactory reliability, with Cronbach's alpha coefficients ranging from .69 to .79.

Research Results

The following tables present the descriptive statistics and correlations between the study variables, as well as the results of hierarchical regression analyses in which personality traits and cognitive emotion regulation strategies are predictor variables, while depression, anxiety, and stress are criterion variables.

Table 1. Descriptive statistics for the study variables

Variable	N	Min	Max	M	SD
Neuroticism	173	9	37	22.51	6.11
Extraversion	173	14	40	27.30	5.59
Openness	173	20	46	34.92	5.00
Conscientiousness	173	15	40	30.18	5.19
Agreeableness	173	17	45	35.22	4.97
Depression	173	0	38	8.14	8.65
Anxiety	173	0	31	9.09	7.66
Stress	173	0	41	13.68	9.07
Self-blame	173	4	20	12.29	2.76
Acceptance	173	4	20	14.98	2.53
Rumination	173	4	20	14.09	3.24
Positive refocusing	173	4	20	12.35	3.58
Refocusing on planning	173	4	20	16.27	2.83
Putting into perspective	173	4	20	14.45	3.04
Positive reappraisal	173	4	20	15.78	2.95
Catastrophizing	173	4	20	10.09	3.46
Blaming others	173	4	17	9.20	2.76

Table 2 presents the correlations between the variables.

Table 2. Correlations between the study variables

Variable	N	E	O	Con	Agr	D	Anx	S	SB	A	R	PRf	RP	PP	PRa	Cat	BO
N	1	-.411**	-.097	-.063	-.307**	.524**	.574**	.765**	.399**	.089	.437**	-.353**	-.132	.063	-.219**	.509**	.300**
E	-.411**	1	.311**	.195**	.243**	-.397**	-.288**	-.322**	-.179*	.094	-.135	.232**	.230**	.054	.146	-.118	-.208**
O	-.097	.311**	1	.054	.166*	-.014	-.010	.016	.133	.318**	.249**	.034	.439**	.148	.222**	-.006	-.011
Con	-.063	.195**	.054	1	.040	-.327**	-.169*	-.067	-.132	.103	.020	.092	.270**	.172*	.137	.054	-.110
Agr	-.307**	.243**	.166*	.040	1	-.203**	-.224**	-.353**	-.122	.146	-.022	.246**	.186*	.169*	.299**	-.071	-.171*
D	.524**	-.397**	-.014	-.327**	-.203**	1	.716**	.690**	.446**	.103	.330**	-.339**	-.150*	-.048	-.217**	.352**	.323**
Anx	.574**	-.288**	-.010	-.169*	-.224**	.716**	1	.777**	.459**	.161*	.384**	-.217**	-.073	.039	-.132	.422**	.341**
S	.765**	-.322**	.016	-.067	-.353**	.690**	.777**	1	.506**	.135	.443**	-.345**	-.042	.074	-.169*	.508**	.348**
SB	.399**	-.179*	.133	-.132	-.122	.446**	.459**	.506**	1	.399**	.457**	-.169*	.203**	.106	.028	.440**	.459**
A	.089	.094	.318**	.103	.146	.103	.161*	.135	.399**	1	.429**	.146	.637**	.428**	.460**	.186*	.215**
R	.437**	-.135	.249**	.020	-.022	.330**	.384**	.443**	.457**	.429**	1	-.138	.276**	.287**	.122	.504**	.269**
PRf	-.353**	.232**	.034	.092	.246**	-.339**	-.217**	-.345**	-.169*	.146	-.138	1	.308**	.209**	.528**	-.146	-.102
RP	-.132	.230**	.439**	.270**	.186*	-.150*	-.073	-.042	.203**	.637**	.276**	.308**	1	.415**	.551**	-.008	.043
PP	.063	.054	.148	.172*	.169*	-.048	.039	.074	.106	.428**	.287**	.209**	.415**	1	.531**	.072	.045
PRa	-.219**	.146	.222**	.137	.299**	-.217**	-.132	-.169*	.028	.460**	.122	.528**	.551**	.531**	1	-.104	-.147
Cat	.509**	-.118	-.006	.054	-.071	.352**	.422**	.508**	.440**	.186*	.504**	-.146	-.008	.072	-.104	1	.409**
BO	.300**	-.208**	-.011	-.110	-.171*	.323**	.341**	.348**	.459**	.215**	.269**	-.102	.043	.045	-.147	.409**	1

Note. Variables are abbreviated as follows: neuroticism (N), extraversion (E), openness (O), conscientiousness (Con), agreeableness (Agr), depression (D), anxiety (Anx), stress (S), self-blame (SB), acceptance (A), rumination (R), positive refocusing (PRf), refocusing on planning (RP), putting into perspective (PP), positive reappraisal (PRa), catastrophizing (Cat), blaming others (BO).

Descriptive statistics for the study variables are presented in Table 1, while Table 2 shows the correlations between personality traits, cognitive emotion regulation strategies, and indicators of psychological distress. As can be seen, neuroticism is positively and significantly associated with depression, anxiety, and stress. In contrast, extraversion, conscientiousness, and agreeableness show negative correlations with these indicators of emotional distress.

Regarding cognitive emotion regulation strategies, maladaptive strategies such as self-blame, rumination, catastrophizing, and blaming others are positively correlated with depression, anxiety, and stress. Conversely, certain adaptive strategies, particularly positive refocusing and positive reappraisal, show negative associations with these variables, suggesting a potential protective role. These results provide an initial indication that both personality traits and cognitive emotion regulation strategies are related to levels of depression, anxiety, and stress.

Table 3. Hierarchical regression analysis predicting depression from personality traits and cognitive emotion regulation strategies

Step	R	R^2	Adjusted R^2	F (df1, df2)	p	ΔR^2	ΔF (df1, df2)	Δp
1	.627	.393	.375	21.645 (5, 167)	.001	—	—	—
2	.627	.394	.372	17.965 (14, 158)	.001	.000	.128 (1, 166)	.721

Note. Step 1 includes personality traits; Step 2 adds cognitive emotion regulation strategies. ΔR^2 indicates the change in explained variance from Step 1 to Step 2.

Table 4. Regression coefficients from hierarchical analysis predicting depression from personality traits and cognitive emotion regulation strategies

Step	Predictor	B	SE	β	t	P
1	Neuroticism	.605	.097	.427	6.271	.000
	Extraversion	-.301	.109	-.195	-2.753	.007
	Conscientiousness	-.444	.102	-.267	-4.337	.000
2	Neuroticism	.337	.117	.238	2.891	.004
	Extraversion	-.276	.108	-.178	-2.543	.012
	Conscientiousness	-.374	.106	-.224	-3.522	.001
	Self-blame	.570	.245	.182	2.328	.021
	Positive refocusing	-.397	.157	-.135	-2.084	.039
	Catastrophizing	.431	.175	.173	2.465	.015
	Blaming others	.425	.198	.136	2.141	.034

Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient. Step 1 includes personality traits; Step 2 adds cognitive emotion regulation strategies.

Hierarchical regression analysis was conducted to examine the contribution of personality traits and cognitive emotion regulation strategies in predicting depression.

Step 1 included personality traits (neuroticism, extraversion, and conscientiousness) and explained 39.3% of the variance in depression ($R^2 = .393$, Adjusted $R^2 = .375$, $F(5,167) = 21.645$, $p < .001$). Neuroticism emerged as a significant positive predictor ($\beta = .427$, $p < .001$), while extraversion ($\beta = –.195$, $p = .007$) and conscientiousness ($\beta = –.267$, $p < .001$) were significant negative predictors, indicating that higher levels of neuroticism and lower levels of extraversion and conscientiousness predict greater severity of depression.

Step 2 added cognitive emotion regulation strategies to the model. The inclusion of these strategies did not significantly increase explained variance compared to Step 1 ($\Delta R^2 = .000$, $\Delta F(1,166) = 0.128$, $p = .721$), but several strategies showed significant associations with depression. Neuroticism ($\beta = .238$, $p = .004$), extraversion ($\beta = –.178$, $p = .012$), and conscientiousness ($\beta = –.224$, $p = .001$) remained significant predictors. Among the strategies, self-blame ($\beta = .182$, $p = .021$), catastrophizing ($\beta = .173$, $p = .015$), and blaming others ($\beta = .136$, $p = .034$) were significant positive predictors, whereas positive refocusing was a significant negative predictor of depression ($\beta = –.135$, $p = .039$).

These results indicate that individuals who use dysfunctional emotion regulation strategies (e.g., self-blame, catastrophizing) more frequently exhibit higher levels of depressive symptoms, whereas those who employ adaptive strategies (e.g., positive refocusing) report fewer depressive symptoms.

Table 5. Hierarchical regression analysis predicting anxiety from personality traits and cognitive emotion regulation strategies

Step	R	R^2	Adjusted R^2	F (df1, df2)	P	ΔR^2	ΔF (df1, df2)	Δp
1	.596	.355	.336	18.421 (5, 167)	.001	—	—	—
2	.655	.429	.378	8.475 (14, 158)	.001	.073	2.257 (9, 158)	.021

Note. Step 1 includes personality traits; Step 2 adds cognitive emotion regulation strategies. ΔR^2 indicates the change in explained variance from Step 1 to Step 2.

Table 6. Regression coefficients from hierarchical analysis predicting anxiety from personality traits and cognitive emotion regulation strategies

Step	Predictor	B	SE	β	t	p
1	Neuroticism	.671	.088	.535	7.613	.000
	Conscientiousness	-.187	.093	-.127	-2.003	.047
2	Neuroticism	.447	.107	.356	4.174	.000
	Self-blame	.513	.225	.185	2.285	.024

Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient. Step 1 includes personality traits; Step 2 adds cognitive emotion regulation strategies.

Hierarchical regression analysis was conducted to examine the contribution of personality traits and cognitive emotion regulation strategies in predicting anxiety symptoms.

Step 1, which included personality traits (neuroticism and conscientiousness), explained 35.5% of the variance in anxiety ($R^2 = .355$, $p < .001$). Neuroticism emerged as a strong positive predictor ($\beta = .535$, $p < .001$), while conscientiousness was a significant negative predictor ($\beta = –.127$, $p = .047$). The other personality traits did not make a significant contribution.

Step 2, which added cognitive emotion regulation strategies, showed a significant increase in explained variance ($\Delta R^2 = .073$, $\Delta F (9, 158) = 2.257$, $p = .021$), indicating that emotion regulation strategies contribute to the understanding of anxiety beyond personality traits. Neuroticism remained a significant predictor, though with a reduced contribution ($\beta = .356$, $p < .001$), and self-blame emerged as a significant positive predictor ($\beta = .185$, $p = .024$).

Table 7. Hierarchical regression analysis predicting stress from personality traits and cognitive emotion regulation strategies

Step	R	R^2	Adjusted R^2	F (df1, df2)	p	ΔR^2	ΔF (df1, df2)	Δp
1	.784	.614	.603	53.183 (5, 167)	.001	—	—	—
2	.818	.669	.639	22.788 (14, 158)	.001	.055	2.891 (9, 158)	.003

Note. Step 1 includes personality traits; Step 2 adds cognitive emotion regulation strategies. ΔR^2 indicates the change in explained variance from Step 1 to Step 2.

Table 8. Regression coefficients from hierarchical analysis predicting stress from personality traits and cognitive emotion regulation strategies

Step	Predictor	B	SE	β	t	p
1	Neuroticism	1.071	.081	.721	13.279	.000
	Openness	.216	.092	.119	2.339	.020
	Agreeableness	-.263	.094	-.144	-2.812	.006
2	Neuroticism	.830	.097	.559	8.603	.000
	Agreeableness	-.267	.093	-.146	-2.866	.005
	Self-blame	.599	.202	.182	2.957	.004

Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient. Step 1 includes personality traits; Step 2 adds cognitive emotion regulation strategies.

Hierarchical regression analysis was conducted to examine the contribution of personality traits and cognitive emotion regulation strategies in predicting stress.

Step 1, which included personality traits (neuroticism, openness, and agreeableness), explained 61.4% of the variance in stress ($R^2 = 0.614$, $p < 0.001$).

Neuroticism emerged as a strong positive predictor ($\beta = 0.721$, $p < 0.001$), openness was a significant positive predictor ($\beta = 0.119$, $p = 0.020$), and agreeableness was a significant negative predictor ($\beta = -0.144$, $p = 0.006$), indicating that higher levels of neuroticism and openness are associated with higher stress, while higher agreeableness predicts lower stress.

Step 2, which additionally included the cognitive emotion regulation strategy of self-blame, showed a significant increase in explained variance ($\Delta R^2 = 0.055$, $\Delta F (9, 158) = 2.891$, $p = 0.003$). The model explained 66.9% of the variance in stress ($R^2 = 0.669$, $p < 0.001$). Neuroticism remained the strongest predictor ($\beta = 0.559$, $p < 0.001$), while agreeableness ($\beta = -0.146$, $p = 0.005$) and self-blame ($\beta = 0.182$, $p = 0.004$) also significantly influenced stress levels. Self-blame was associated with higher stress, whereas agreeableness was associated with lower stress.

Discussion

The aim of this study was to examine the role of personality traits and cognitive emotion regulation strategies in predicting depression, anxiety, and stress. One of the most consistent findings in this study, as well as in previous research, is the significant association of neuroticism with higher levels of depression, anxiety, and stress. In all three predictive models, neuroticism emerged as the most reliable and stable predictor. This trait, which encompasses emotional instability, a tendency toward negative emotions, and increased sensitivity to stress, has been a focus of mental health research for decades (Tackett & Lahey, 2016).

Regarding depression, neuroticism has repeatedly been confirmed as the strongest predictor. Individuals scoring high on this dimension more frequently experience feelings of sadness, helplessness, self-reproach, and generalized negativity in interpreting daily experiences. Numerous studies indicate that neuroticism significantly increases the risk of developing depressive disorders (Hakulinen et al., 2016; Jylhä et al., 2006; Widiger & Oltmanns, 2017). For example, a meta-analysis by Hakulinen et al. (2016) demonstrated a consistent association between high neuroticism and depressive symptoms in both cross-sectional and longitudinal analyses. These results suggest that neuroticism may serve as an early psychological marker of increased vulnerability to depressive symptoms, further confirming its significant role in explaining emotional disorders. Neuroticism may also operate indirectly, not by directly causing depressive symptoms, but by increasing the likelihood of experiencing negative life events and developing negative automatic thoughts, which in turn contribute to the development of depression. Thus, neuroticism can be understood as a vulnerability that shapes how an individual experiences and responds to stress, increasing the risk of depressive disorders (Kercher et al., 2009).

Regarding anxiety, the association with neuroticism is even more pronounced. Neurotic individuals exhibit heightened anticipatory worry, hypersensitivity to

threat, and chronic internal unease (Robinson et al., 2024; Schlatter et al., 2022; Servaas et al., 2014). This personality trait influences the perception and processing of emotional stimuli, leading to increased emotional reactivity and chronic worry. Neuropsychological studies indicate that neuroticism is associated with functional changes in the brain, particularly in the amygdala and prefrontal cortex. The amygdala, responsible for fear processing and emotional reactions, shows hyperactivation in individuals with high neuroticism, while the prefrontal cortex, responsible for emotion regulation and impulse control, may be less efficient, contributing to heightened anxiety (Servaas et al., 2014). Longitudinal studies further confirm that neuroticism is not only associated with the presence of anxiety symptoms but also with their development and maintenance over time. Williams et al. (2021), in a six-year follow-up study of older adolescents, found that neuroticism predicted worsening overall distress, including the emergence of anxiety and depressive symptoms.

Stress, although often viewed as an external category, is deeply rooted in how an individual interprets and reacts to situations. Neurotic individuals tend to perceive everyday events as threatening or frustrating, leading to increased subjective experiences of stress (Luo et al., 2022). Overall, the importance of neuroticism lies not only in its association with current emotional states but also in its predictive power. Multiple studies confirm that neuroticism is an indicator of vulnerability to the development of depression-, anxiety-, and stress-related disorders (Lahey, 2021; Tackett & Lahey, 2016).

Beyond neuroticism, the results of this study suggest that other personality traits from the Big Five model play a significant role in predicting emotional problems. Extraversion emerged as a significant negative predictor of depression, consistent with research indicating that extraverted individuals, due to more frequent social interactions and positive affect, are more resilient to depressive symptoms (Cai et al., 2024; Luo et al., 2022; Wang et al., 2025). These individuals generally have greater access to social support and more pronounced optimistic thinking patterns, which may reduce the risk of internalizing disorders (Yu & Hu, 2022). Conscientiousness was also negatively associated with depression and anxiety, confirming findings from other studies that high levels of organization, responsibility, and self-discipline contribute to better stress regulation and more effective coping with life challenges (Brouwer et al., 2015; Chen et al., 2017). Agreeableness was identified as a significant negative predictor of stress, which is consistent with the idea that compassion and interpersonal cooperativeness promote more harmonious relationships and reduce the likelihood of exposure to conflict (Zhong et al., 2024). Agreeable individuals more often employ prosocial and constructive strategies in resolving interpersonal problems, thereby mitigating the cumulative effects of daily stress.

Conversely, openness to experience showed an unusual pattern. In this study, this trait was positively associated with stress, consistent with findings suggesting

that high openness may lead to greater exposure to unfamiliar, complex, and demanding situations, which, while stimulating, can also be stressful (Chiappelli et al., 2021). These findings confirm that personality traits have a multilayered impact on psychological functioning, and understanding these relationships can contribute to better individualization of psychological interventions.

In line with increasing evidence highlighting the importance of cognitive patterns in stress response, the results of this study indicate that specific cognitive emotion regulation strategies contribute to explaining depression, anxiety, and stress (Johnston et al., 2024; Garnefski & Kraaij, 2018; Martin & Dahlen, 2005). Strategies such as self-blame, catastrophizing, and blaming others were positively associated with depressive symptoms, while self-blame was also a significant predictor of anxiety and stress symptoms, reflecting a tendency to prolong negative interpretations of events and intensify psychological burden (Garnefski & Kraaij, 2018; Garnefski et al., 2005). Self-blame, for example, involves internalizing responsibility without realistically evaluating the situation, while catastrophizing entails exaggerated interpretations of the negative potential of events, increasing perceived threat (Garnefski et al., 2001). These patterns have been linked in multiple studies to chronically elevated stress levels, reduced functional flexibility, and strengthened symptoms across the depressive and anxiety spectrum (Garnefski & Kraaij, 2018; Garnefski et al., 2005).

In contrast, strategies such as positive refocusing and acceptance were negatively associated with depression, suggesting that the ability to redirect attention to alternative or more positive aspects of experience, as well as willingness to accept emotions without overanalyzing, may play a protective role (Martin & Dahlen, 2005; Min et al., 2013). Martin & Dahlen (2005) found that individuals who more frequently use positive refocusing and reappraisal report lower levels of anxiety and stress, while other studies indicate that flexible application of adaptive strategies can contribute to better emotional adjustment in daily life. It is important to note that the effects of these strategies are not universal but depend on context, frequency of use, and individual differences. Nevertheless, the consistent findings regarding the negative effects of maladaptive strategies and the protective potential of adaptive strategies highlight their importance in clinical assessment and treatment. Empowering individuals to develop more realistic and flexible cognitive responses to stress can reduce psychological burden and improve daily functioning.

Although the findings of this study provide valuable insights into the relationship between personality traits and emotion regulation strategies with depression, anxiety, and stress, there are certain limitations to consider. First, the sample was relatively small and predominantly female, within a narrow age range, which limits the generalizability of the results to the broader population. Additionally, the study lacked insight into the broader context of participants, such as prior stress experiences, the presence of family or chronic health problems, or the level

of social support, which could further illuminate the mechanisms underlying the development and maintenance of emotional difficulties. Furthermore, future research could include other potentially important constructs that may play a significant role in psychological functioning.

Despite these limitations, the findings of this study offer concrete guidelines for application in various contexts. Clearly recognizing the role of stable personality traits can help professionals identify emotional vulnerability earlier. Moreover, understanding which emotion regulation strategies contribute to reducing or exacerbating symptoms opens the door for designing educational and developmental programs that are not only problem-focused but also aim to strengthen capacities for everyday psychological functioning.

Conclusion

The results of this study confirm that personality traits and emotion regulation strategies are closely related to the experience of depression, anxiety, and stress. Neuroticism emerged as the strongest predictor of all examined symptoms, while traits such as extraversion, conscientiousness, and agreeableness demonstrated a protective effect in certain domains. Strategies such as catastrophizing and self-blame were associated with an intensification of symptoms, whereas approaches like positive refocusing and acceptance served a protective function. These findings highlight the multilayered relationship between enduring psychological personality traits, cognitive emotion regulation, and everyday emotional functioning, emphasizing the importance of developing support that addresses not only symptoms but also individual psychological resources and coping strategies.

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Особине личности и стратегије когнитивне регулације емоција као предиктори депресије, анксиозности и стреса

Резиме

Циљ овог истраживања био је да се испита допринос стратегија когнитивне емоционалне регулације у предикцији депресивности, анксиозности и стреса код младих одраслих особа, поред основних димензија личности. Узорак су чинила 173 испитаника узраста од 18 до 40 година. У истраживању су коришћени Инвентар личности Великих пет (БФИ), Скала депресивности, анксиозности и стреса

(ДАСС-21) и Упитник когнитивне емоционалне регулације (ЦЕРQ). Подаци су анализирани хијерархијском регресионом анализом.

Резултати показују да је неуротицизам најснажнији и најдоследнији предиктор депресивности, анксиозности и стреса. Екстраверзија и савесност су се показале као значајни негативни предиктори депресивности, док је савесност имала заштитну улогу и код анксиозности. Сарадљивост је била негативно повезана са стресом, док је отвореност ка искуству показала позитиван допринос предикцији стреса. Од стратегија когнитивне емоционалне регулације, кривљење себе, катастрофирање и кривљење других били су повезани са вишим нивоима депресивности, док се кривљење себе издвојило као значајан предиктор и анксиозности и стреса. Насупрот томе, позитивно рефокусирање је имало заштитни ефекат у односу на депресивност. Налази указују на значај заједничког разматрања стабилних особина личности и когнитивних стратегија регулације емоција у разумевању емоционалних проблема, као и на њихов потенцијални значај за превенцију и планирање психолошких интервенција.

Кључне речи: особине личности; когнитивна емоционална регулација; депресивност; анксиозност; стрес.