

Shame, Self-Compassion, and Self-Esteem as Correlates of Depression and Anxiety Symptoms: The Role of Emotion Regulation

Henrietta DÁNI¹ and Roland H. GERGELY^{2,3*} 

ABSTRACT. Background: Shame, self-esteem, and cognitive emotion regulation strategies have been consistently linked to anxiety and depressive symptoms. Shame and low self-esteem are considered risk factors, whereas self-compassion and adaptive strategies act as protective factors. This study examined the mediating role of self-compassion in the relationship between shame and symptoms of depression and anxiety. **Methods:** An online survey was conducted with 201 ethnic Hungarian participants from Romania. Standardized measures were administered to assess shame, self-compassion, self-esteem, stress, cognitive emotion regulation, and depressive and anxiety symptoms. Mediation analyses were performed to test the hypothesized indirect effects. **Results:** Shame significantly predicted lower levels of self-compassion, which in turn mediated the relationship between shame and depressive symptoms. No mediation was found for anxiety symptoms. Stress emerged as a strong predictor of both depression and anxiety, while self-esteem predicted depressive symptoms only. Maladaptive regulation strategies increased the explanatory power of the models, whereas self-blame was not a significant predictor. **Conclusions:** The findings suggest that self-compassion may be associated with a reduced relationship between shame and depressive symptoms. Strengthening self-compassion and self-esteem, while reducing maladaptive regulation strategies and improving stress management, may inform targeted clinical interventions.

Keywords: shame, self-compassion, self-esteem, cognitive emotion regulation, anxiety, depressive symptoms

¹ M.A. in Clinical Psychology, Babeş-Bolyai University, Cluj-Napoca, Romania.

² Department of Applied Psychology, Faculty of Psychology and Educational Sciences, Babeş-Bolyai University, Cluj-Napoca, Romania.

³ Clinical Psychologist and Psychotherapist in Private Practice, CIP Gergely Roland (28771/1CJ12440), 95 Calea Mănăştur, Cluj-Napoca 400667, Romania.

* Corresponding author: roland.gergely@ubbcluj.ro



ZUSAMMENFASSUNG. Hintergrund: Scham, Selbstwertgefühl und kognitive Strategien der Emotionsregulation stehen in einem konsistenten Zusammenhang mit Angst- und Depressionssymptomen. Scham und geringes Selbstwertgefühl gelten als Risikofaktoren, während Selbstmitgefühl und adaptive Strategien als Schutzfaktoren wirken. Die vorliegende Studie untersuchte die vermittelnde Rolle von Selbstmitgefühl in der Beziehung zwischen Scham und depressiven sowie Angstsymptomen. **Methoden:** Eine Online-Befragung wurde mit 201 ethnischen ungarischen Teilnehmer*innen aus Rumänien durchgeführt. Standardisierte Instrumente erfassten Scham, Selbstmitgefühl, Selbstwertgefühl, Stress, kognitive Emotionsregulation sowie depressive und Angstsymptome. Zur Prüfung der hypothesierten indirekten Effekte wurden Mediationsanalysen durchgeführt. **Ergebnisse:** Scham sagte signifikant geringere Werte des Selbstmitgefühls voraus, welches wiederum die Beziehung zwischen Scham und depressiven Symptomen vermittelte. Für Angstsymptome konnte keine Mediationswirkung festgestellt werden. Stress erwies sich als starker Prädiktor sowohl für Depression als auch für Angst, während Selbstwertgefühl nur depressive Symptome vorhersagte. Maladaptive Regulationsstrategien erhöhten die Erklärungsleistung der Modelle, während Selbstvorwürfe keinen signifikanten Prädiktor darstellten. **Schlussfolgerungen:** Die Ergebnisse deuten darauf hin, dass Selbstmitgefühl den Einfluss von Scham auf depressive Symptome spezifisch abmildert, nicht jedoch auf Angstsymptome. Die Förderung von Selbstmitgefühl und Selbstwertgefühl sowie die Reduktion maladaptiver Regulationsstrategien und die Verbesserung des Stressmanagements könnten gezielte klinische Interventionen unterstützen.

Schlüsselwörter: Scham, Selbstmitgefühl, Selbstwertgefühl, kognitive Emotionsregulation, Angst, depressive Symptome

INTRODUCTION

Mental health has become one of the most pressing societal issues in today's fast-paced and performance-oriented world. Anxiety and depression are increasingly prevalent, particularly among young adults aged 18–30, significantly impairing quality of life and psychological well-being. Constant pressure to succeed, the influence of social media, and both internal and external expectations contribute to declining self-esteem, increased shame, and elevated psychological distress. In response, self-compassion and self-acceptance have gained attention as potential protective factors against psychopathology.

Globally, approximately one-fifth of the population suffers from anxiety or depressive disorders (Jacobson & Newman, 2017), with both conditions appearing early and frequently in adolescence. Prevalence rates vary widely:

anxiety affects 1.9–23.8% of the population and depression 0.2–12.9% (Bitsko et al., 2018), with significantly higher rates observed among women (WHO, 2017). Lifetime prevalence of anxiety disorders ranges from 13.6% to 28.8%, while major depressive disorder (MDD) ranges from 6% to 25% (Kessler & Wang, 2009; Hasin et al., 2018). Given their early onset and persistent course, anxiety and depressive disorders pose a substantial burden on public health.

Vulnerability or risk factors, including neurobiological (e.g., genetic predispositions, neurotransmitter imbalances, brain function anomalies, and cortisol dysregulation), psychological (e.g., high neuroticism, maladaptive schemas, self-criticism), and social elements (e.g., low socioeconomic status, insufficient social support)—have been shown to intensify the relationship between stressors and the development of depression and anxiety (Ni, 2022; Walker & Diforio, 1997). Feelings of hopelessness and self-blame significantly increase the risk of chronic and severe depressive episodes (Campbell et al., 1996). Blatt and Zuroff (1994) proposed a model that identifies two personality styles: dependent and self-critical, that are particularly vulnerable to depression due to their heightened sensitivity to interpersonal stressors. When individuals with these predispositions encounter stress, it may activate personal vulnerabilities and exacerbate depressive symptoms (Dozois, 2012; Ingersoll, 2010). In addition, adverse childhood experiences (Ngin et al., 2018), inadequate family support (Liu et al., 2021), and family dysfunction (Li et al., 2021) have been associated with a significantly increased risk for developing depression. While numerous risk factors contribute to the onset of anxiety and depression, it is equally important to highlight the role of psychological protective factors.

Self-Compassion: Definition, Components, and Psychological Effects

One such factor is self-compassion, which has been shown to buffer against the development of psychopathology. Self-compassion entails extending kindness and understanding to oneself in times of suffering, much as one would toward a close friend facing similar difficulties (Neff & Knox, 2020; Terry & Leary, 2011). Rather than avoiding pain or denying personal shortcomings, individuals practicing self-compassion remain open to their experiences with acceptance and a nonjudgmental attitude, viewing these experiences as part of the broader shared human condition, which can help reduce emotional distress (Luo et al., 2019; Neff & Lamb, 2009). This inward-directed compassion applies to suffering caused by external circumstances as well as one's own perceived failures, promoting resilience and healing.

According to Neff (2011), self-compassion consists of three interrelated components that function synergistically to foster emotional resilience and psychological well-being. The first is self-kindness, which involves responding to one's own suffering, failures, or shortcomings with warmth, understanding, and patience, rather than engaging in harsh self-criticism or judgment. The second is the recognition of common humanity, referring to the understanding that imperfection, struggle, and emotional pain are part of the shared human experience, thereby reducing feelings of isolation. The third component is mindfulness, which entails maintaining balanced and non-reactive awareness of negative emotions, allowing individuals to acknowledge their distress without either suppressing or over-identifying with it. Together, these dimensions form the foundation of a compassionate stance toward the self, promoting adaptive coping in the face of psychological distress.

The language of self-compassion is emotionally supportive and tolerant, particularly in the face of personal failings (Neff, 2011; Allen & Leary, 2010; Neff & Knox, 2020). The common humanity component helps contextualize personal suffering within the broader spectrum of human imperfection, thereby reducing feelings of isolation. Mindfulness facilitates a clear and balanced perception of one's emotional state, allowing for full experiential openness without ruminative entanglement or emotional avoidance (Neff & Lamb, 2009; Luo et al., 2019).

Research has demonstrated that self-compassion promotes effective self-regulation of health behaviors (Terry & Leary, 2011), enhances psychological and physical well-being (Hall et al., 2013), and reduces stress, self-blame, and cortisol levels (Germer & Neff, 2013). It also activates the caregiving system and promotes oxytocin release (Gilbert & Procter, 2006).

As a protective mechanism in the face of trauma, self-compassion supports emotion regulation (Vettese et al., 2011), facilitates more accurate self-appraisal, and promotes adaptive coping strategies (MacBeth & Gumley, 2012). Empirical evidence also shows a significant negative correlation between self-compassion and symptoms of social anxiety (Gill et al., 2018), generalized anxiety, and depression (Muris et al., 2015; Krieger et al., 2013). Moreover, self-compassion has been found to moderate the association between shame and psychological distress, mitigating the impact of internalized negative self-evaluations (Zhang et al., 2018).

Self-Compassion and emotion regulation

Self-compassion is closely linked to cognitive Self-compassion has been linked to emotion regulation strategies, with higher levels of self-compassion associated with reduced reliance on cognitive avoidance (Gill et al., 2018).

Emotion regulation refers to the processes by which individuals influence their emotional experiences and expressions in response to environmental demands. Although emotions are experienced at the individual level, emotion regulation encompasses broader mechanisms, including the management of one's social environment.

Cognitive emotion regulation specifically involves mental responses to emotion-eliciting events, which can operate consciously or unconsciously (Kamalinasab & Mohammadkhani, 2018). It encompasses attentional and cognitive processes aimed at modulating the onset, valence, intensity, and duration of emotional responses (Miklósi, 2015). Emotion regulation more broadly includes both intrinsic and extrinsic processes that support the monitoring, evaluation, and modification of emotional reactions (Kövesdi, 2018). According to Gross and John (2003), it entails the use of contextually appropriate cognitive and behavioral strategies, which can be organized into five sequential stages: situation selection, situation modification, attentional deployment, cognitive appraisal, and response modulation (Fernandes et al., 2021).

Cognitive emotion regulation occurs primarily through mental processes and is distinct from behavioral regulation strategies (Domaradzka & Fajkowska, 2018), influencing the quality, intensity, and duration of emotional experiences (Mónika et al., 2011). These strategies are commonly classified as adaptive or maladaptive: adaptive strategies facilitate effective adjustment and emotional control, whereas maladaptive strategies contribute to the persistence and exacerbation of pathological emotional responses to stress (Mónika et al., 2011; Kamalinasab & Mohammadkhani, 2018).

Importantly, self-compassion has been shown to reduce anxiety and depression by alleviating perceived stress (Luo et al., 2019) and is positively associated with the use of adaptive cognitive emotion regulation strategies, while inversely related to maladaptive ones (Kamalinasab & Mohammadkhani, 2018). Specifically, self-compassion predicts greater engagement in positive refocusing, planning, cognitive reappraisal, and perspective-taking, alongside reductions in self-blame, rumination, and externalizing blame (Kamalinasab & Mohammadkhani, 2018).

The Role of Maladaptive Cognitive Emotion Regulation Strategies in Anxiety and Depression

According to Fernandes, Newton, and Essau (2021), both trait and state anxiety predict the use of emotion regulation strategies, including suppression and reappraisal, as well as internalizing problems, and are linked to response inhibition. Individuals experiencing anxiety tend to rely more on maladaptive

emotion regulation strategies than on adaptive ones. Similarly, anhedonic depression is primarily influenced by negative affectivity and difficulties in emotional regulation (Vujanovic et al., 2007).

Research indicates that individuals who employ reappraisal experience significantly higher positive emotions and fewer negative emotions compared to those who rely on suppression, who are more prone to negative affect and reduced positive affect. Anxiety has been shown to hinder the development of effective emotion regulation strategies, as anxious individuals often resort to avoidant mechanisms such as suppression, making it challenging to reappraise negative situations effectively (Cisler & Koster, 2010).

Emotion regulation is closely linked to anxiety, with anxious individuals more frequently employing suppression as a regulatory strategy (Fernandes et al., 2021). Maladaptive cognitive emotion regulation strategies, including rumination and self-blame, increase the risk of developing both anxiety and depression across adolescent and adult populations. Conversely, positive reappraisal is associated with fewer symptoms of these disorders (Garnefski et al., 2002).

Several studies have consistently demonstrated strong associations between maladaptive strategies—particularly rumination, self-blame, and catastrophizing—and symptoms of anxiety and depression (Mónika et al., 2011; Cisler et al., 2009; Domaradzka & Fajkowska, 2018). In contrast, adaptive strategies such as positive reappraisal, planning, and positive refocusing serve a protective function and are correlated with reduced symptomatology (Garnefski et al., 2004; Wang et al., 2013; Min et al., 2013; Garnefski & Kraaij, 2007).

Shame, Self-Esteem, and Their Roles in Anxiety and Depression

Shame plays a pivotal role in the emergence of anxiety and depressive symptoms. It is a complex, self-conscious, and socially oriented emotion rooted in negative self-evaluation, feelings of rejection, and anxiety related to potential loss of relational bonds (Callow et al., 2021; Brown, 2006; Cunha et al., 2021). Shame targets the entire self, often eliciting feelings of worthlessness, avoidance, and social withdrawal (Bastin et al., 2016; Cunha et al., 2021), while also serving a protective function by signaling potential humiliation and threats to social connections, thereby encouraging adherence to social norms (MacGinley et al., 2019; Cunha et al., 2021). Self-conscious emotions such as shame arise from advanced cognitive processing and play a crucial role in maintaining social relationships (Kim et al., 2011; Cunha et al., 2021).

From a biopsychosocial and evolutionary perspective, shame manifests both externally—through perceived judgment by others—and internally—through self-criticism (Gilbert, 2003, 2009). Internal shame centers on perceived personal flaws, whereas external shame relates to social rejection, with the two forms often co-occurring as individuals internalize negative external evaluations (Cunha et al., 2021). Shame is commonly categorized into four domains: inferiority, isolation, worthlessness, and fear of criticism (Fekih-Romdhane et al., 2023). Importantly, shame differs from guilt: shame involves a negative evaluation of the global self, whereas guilt pertains to specific behaviors (Câdea & Szentagotai-Tătar, 2018). Shame is characterized by inward focus, stable attributions, and avoidance behaviors, whereas guilt promotes outward focus, empathy, and reparative actions (Miceli & Castelfranchi, 2018; Kim et al., 2011; Câdea & Szentagotai-Tătar, 2018). Overall, shame primarily impacts personal identity, while guilt concerns relational damage (Baumeister et al., 1994; Keltner & Buswell, 1997).

Self-esteem—defined by Rosenberg (1965) as an individual's favorable or unfavorable attitude toward oneself—acts as a cognitive counterpart to shame. High self-esteem reflects a sense of worthiness without implying superiority over others (Sowislo & Orth, 2013). Self-esteem can be conceptualized globally, as an overall self-evaluation, or specifically, across certain domains, encompassing competence and worthiness (Komlósi, 2007; Ni, 2022; Cast & Burke, 2002). Individuals with low self-esteem often employ self-protective strategies to avoid shame, whereas those with high self-esteem emphasize personal strengths through positive self-comparisons (Cunha et al., 2021). Although overlapping, shame is an emotional experience, while self-esteem is a cognitive evaluation; shame involves a desire for invisibility, whereas self-esteem relates to positive visibility and acceptance (Ni, 2022).

Empirical evidence links traumatic shame memories with increased depressive symptoms (Steindl et al., 2018) and social or generalized anxiety disorder symptoms (Fergus et al., 2010). Shame is strongly associated with anxiety, depression, stress, and various anxiety disorders (Callow et al., 2021; Cunha et al., 2021), and shame proneness can predict depressive symptomatology (De Rubeis & Hollestein, 2009; Câdea & Szentagotai, 2013). Conversely, self-esteem and self-efficacy are negatively correlated with anxiety and depression and serve as protective factors that enhance psychological resilience (Muris et al., 2015; Sowislo & Orth, 2013). Low self-esteem contributes to depression in line with the diathesis-stress model, but can also result from depressive episodes according to the vulnerability model (Sowislo & Orth, 2013). Furthermore, self-esteem mediates the relationship between maladaptive perfectionism and depression (Dorevitch et al., 2020) and modulates the interplay between stress, depression, and anxiety (Ni, 2022).

OBJECTIVES

The primary aim of the present study was to examine the associations between shame, self-compassion, self-esteem, perceived stress, and cognitive emotion regulation strategies in relation to symptoms of depression and anxiety.

In addition, the study explored whether self-compassion and maladaptive emotion regulation strategies were statistically associated with the relationship between shame and psychological symptoms. Finally, the study sought to explore the practical implications of the findings by identifying factors that may contribute to the reduction of anxiety and depressive symptoms, thereby informing the development of more effective therapeutic and intervention strategies.

HYPOTHESES

H1: Shame is a significant negative predictor of self-compassion.

H2: Self-compassion mediates the relationship between shame and anxiety as well as depressive symptoms.

H3: Low self-esteem, perceived stress, and self-blame predict higher levels of depressive and anxiety symptoms.

H4: Cognitive emotion regulation strategies mediate the effects of self-compassion, shame, and self-esteem on anxiety and depressive symptoms.

POWER AND SAMPLE SIZE

G*Power software for linear regression (total number of predictors 1–3) was used to perform an a priori power analysis, yielding a statistical power of .80 and a p value of .05. According to the findings, $n = 55\text{--}77$ was the necessary sample size for a medium effect size ($f^2 = 0.15$), and $n = 395\text{--}550$ was needed for a small effect size ($f^2 = 0.02$). The sample size ($N = 201$) in the study was adequate for identifying medium effect sizes.

Participants

The study included 201 Hungarian-speaking participants from Romania, aged 18 to 67 years ($M = 29.25$, $SD = 11.12$). The sample comprised 141 young adults (18–29 years), 57 middle-aged adults (30–57 years), and 3 elderly individuals (63–67 years). The majority were female (164 women, 37 men). Educational backgrounds varied: most had completed a bachelor's degree ($n = 82$), secondary education ($n = 74$), or a master's degree ($n = 23$), while smaller groups had completed primary education ($n = 3$), vocational training ($n = 16$), or doctoral studies ($n = 3$). Regarding marital status, 60 participants were single,

SHAME, SELF-COMPASSION, AND SELF-ESTEEM AS CORRELATES OF DEPRESSION
AND ANXIETY SYMPTOMS: THE ROLE OF EMOTION REGULATION

71 in a relationship, 47 married, 16 cohabiting, 6 divorced, and 1 widowed. Participants resided in villages or small communities ($n = 96$), the capital city ($n = 20$), small towns ($n = 38$), or cities/county seats ($n = 47$) (*see Table 1*).

Table 1. *Sociodemographic characteristic*

Basic characteristics	Full sample	
	N	%
Categories of age groups		
Young	141	70.1
Older	3	1.5
Middle-aged	57	28.4
Gender		
Male	37	18.4
Female	164	81.6
Educational attainment		
Elementary school (grades 5–8)	3	1.5
Vocational school	16	8
High school diploma	74	36.8
College/University – Bachelor’s degree	82	40.8
College/University – Master’s degree	23	11.4
College/University – Doctoral degree	3	1.5
Marital status		
Married	47	23.4
In a relationship	71	35.3
Single	60	29.9
Cohabiting	16	8
Divorced	6	3
Widowed	1	.5
Place of residence		
Village / Small town	96	47.8
Town	38	18.9
City / County seat	47	23.4
Capital city	20	10

Note. $N = 201$. Mean age was 29.25, $SD = 11.12$

Instruments

Socio-demographic Questionnaire

The socio-demographic questionnaire was developed based on a comprehensive review of existing literature to ensure the relevance of demographic variables to the study's aims. Variables assessed included age, gender, educational attainment, marital status, and place of residence. These factors were included due to their established links with mental health outcomes: age influences emotion regulation and coping effectiveness; gender affects emotional responses and social attitudes; educational attainment relates to psychological awareness and coping styles; marital status impacts social support availability; and urban versus rural residence involves differing mental health risk factors (e.g., Bluth & Blanton, 2013; Charles, 2010; Neff, 2011; Halpern-Manners et al., 2016; Umberson & Karas Montez, 2010; Pee et al., 2010).

External and Internal Shame Scale (EISS)

Shame was measured using an 8-item self-report questionnaire developed by Ferreira et al. (2020). A Hungarian translation was created by the researchers for this study, as no prior adaptation existed. The EISS assesses external, internal, and global shame, with higher scores reflecting greater shame experiences. Responses are rated on a 5-point Likert scale (0 = never to 4 = always). The original scale demonstrated high reliability ($\alpha = .89$); in the present study, reliability was good ($\alpha = .82$) (see Table 2).

Rosenberg Self-Esteem Scale (RSE)

Global self-esteem was measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965), a 10-item self-report tool widely used across populations. Participants rated statements reflecting self-acceptance and self-evaluation on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree). The scale includes five positively worded and five negatively worded (reverse-scored) items. The original scale demonstrated high reliability ($\alpha = .85$), with retest reliability of .88 over two weeks. In this study, reliability was good ($\alpha = .89$); subscales for negative and positive self-esteem showed $\alpha = .84$ and $\alpha = .85$, respectively. The Hungarian translation by Horváth et al. (2021) was used (see Table 2).

Self-Compassion Scale – Hungarian Version (SCS-H)

Self-compassion was assessed using the Hungarian adaptation of the Self-Compassion Scale (Neff, 2003; Horváth et al., 2021), a 26-item questionnaire.

Respondents rated how they treat themselves in difficult situations on a 5-point Likert scale (1 = almost never to 5 = almost always). The original scale showed excellent reliability ($\alpha = .93$), with $\alpha = .91$ in this study. It includes six subscales: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification; the negative subscales were reverse-scored. Subscale reliabilities ranged from $\alpha = .66$ (mindfulness) to $\alpha = .84$ (self-kindness) in the current sample (see Table 2).

Depression, Anxiety, and Stress Scales (DASS-21)

Depression, anxiety, and stress symptoms were measured with the Hungarian version of the shortened DASS-21 (Lovibond & Lovibond, 1995; Horváth et al., 2021). Participants rated how much each statement applied to them over the past week on a 4-point scale (0 = did not apply to me at all to 3 = applied to me most of the time). The original scale demonstrated excellent reliability ($\alpha = .95$); in this study, $\alpha = .92$. The instrument includes three subscales—depression ($\alpha = .86$), anxiety ($\alpha = .85$), and stress ($\alpha = .80$)—all showing good reliability. No items were reverse scored (see Table 2).

Cognitive Emotion Regulation Questionnaire (CERQ)

Cognitive emotion regulation strategies were assessed with the Hungarian version of the CERQ, a 36-item self-report instrument (Garnefski et al., 2001; Miklósi et al., 2011). Participants responded on a Likert scale to nine subscales: self-blame, acceptance, rumination, positive refocusing, planning, positive reappraisal, putting into perspective, catastrophizing, and blaming others. The original CERQ had high reliability ($\alpha = .93$), with the Hungarian adaptation showing $\alpha = .80$. In this study, the overall scale reliability was good ($\alpha = .85$). Subscale reliabilities in the current sample ranged from $\alpha = .61$ (acceptance) to $\alpha = .88$ (positive refocusing). All subscale reliability coefficients are detailed in Table 2.

Table 2. *Psychometric properties of the scales used in the study*

Scale	M	SD	Range	Cronbach's α
Shame scale (EISS)	11.07	5.599	26	.82
Self-esteem scale (RSE)	29.28	6.626	26	.89
Negative self-esteem	13.557	4.072	15	.84
Positive self-esteem	15.726	3.127	12	.85

Scale	M	SD	Range	Cronbach's α
Self-compassion scale (SCS-H)	76.48	17.202	82	.91
Self-kindness	14.730	4.447	19	.84
Self-judgment	14.05	4.727	20	.83
Common humanity	12.12	3.673	16	.79
Isolation	11.55	3.717	16	.74
Mindfulness	12.82	3.129	16	.66
Over-identification	11.20	3.591	15	.69
Depression, Anxiety, and Stress Scale (DASS-21)	25.218	13.435	61	.92
Depression	7.15	5.183	21	.86
Anxiety	7.66	5.501	21	.85
Stress	10.41	4.812	20	.80
Cognitive Emotion Regulation Strategies Scale (CERQ)	114.38	16.515	118	.85
Self-blame	12.89	3.306	16	.73
Acceptance	13.77	3.005	14	.61
Rumination	14.28	3.645	16	.81
Positive refocusing	11.57	4.069	16	.88
Planning	14.97	3.122	16	.75
Positive reappraisal	14.67	3.854	16	.86
Putting into perspective	13.40	3.808	16	.79
Catastrophizing	10.17	3.687	14	.72
Other-blame	8.68	3.225	13	.81

Research Design

This study employed a correlational research design, as its primary objective was to explore the relationships among various psychological constructs without manipulating any variables or implementing experimental interventions. The research followed a descriptive, quantitative approach, relying on questionnaire-based data collection and statistical analyses to investigate the effects of shame, self-esteem, self-compassion, and cognitive emotion regulation strategies on symptoms of anxiety and depression.

A cross-sectional, single-measurement design was used, wherein all participants were assessed at one point in time. The study did not involve any longitudinal tracking or pre/post measurements. The key variables examined in this research included:

- Predictor variables: shame, self-esteem, self-compassion, and cognitive emotion regulation strategies
- Outcome variables: symptoms of anxiety and depression

This design was chosen to provide a comprehensive snapshot of the associations between the selected variables within the given population.

PROCEDURE

Participants were recruited through a convenience sampling method. Data collection was conducted between November 2024 and April 2025. The battery of questionnaires—including the External and Internal Shame Scale (EISS), Rosenberg Self-Esteem Scale (RSE), Self-Compassion Scale – Hungarian version (SCS-H), Depression, Anxiety, and Stress Scale (DASS-21), and the Cognitive Emotion Regulation Questionnaire (CERQ)—was administered online using Google Forms.

The survey link was distributed via social media platforms (e.g., Facebook, Instagram), university groups, and personal networks. Prior to completing the questionnaires, participants were presented with a brief description of the study's purpose, details about data confidentiality, and were asked to provide informed consent.

Participation was voluntary and anonymous, and respondents were informed that they could withdraw at any time without consequences. Completing the entire survey required approximately 15 minutes. The research adhered to the ethical guidelines established by the Master's Degree program in Clinical Psychology at Babeş-Bolyai University and the Code of Ethics of the Romanian College of Psychologists.

Data Processing Procedures

Prior to conducting statistical analyses, a data cleaning process was undertaken to check for missing values and outliers. All responses were complete and valid, and no missing or extreme values were detected; therefore, no participants were excluded from the final dataset.

All statistical analyses were conducted using IBM SPSS Statistics version 25.0 (IBM Corporation, Armonk, NY). Internal consistency reliability was assessed via Cronbach's alpha coefficients for each scale and subscale (see Table 2).

Prior to the main analyses, the dataset was screened to ensure the assumptions of normality, linearity, multicollinearity, homoscedasticity, and autocorrelation were met. Histograms, P-P plots, and the Durbin-Watson statistic supported the fulfillment of these assumptions. Additionally, the distribution of

data was evaluated through skewness and kurtosis values, which fell within the acceptable range of -1 to $+1$, indicating approximate normality. The Shapiro-Wilk or Kolmogorov-Smirnov tests were also considered for assessing normality, with non-significant results interpreted as evidence of a normal distribution (Pallant, 2016). Outliers were examined via robust score analysis, and listwise deletion was used to handle any missing data (Tabachnick & Fidell, 2013).

Descriptive statistics (means, standard deviations, and percentages) were calculated for all relevant variables. Percentages were used to report categorical variables (see Table 1). The threshold for statistical significance was set at $p < .05$.

To test the study hypotheses, the following statistical procedures were applied:

1. Hypothesis 1: A linear regression analysis was performed to test whether shame (independent variable) significantly predicted self-compassion (dependent variable). Regression assumptions were checked and fulfilled, and outliers were excluded (Pallant, 2016).
2. Hypothesis 2: A mediation analysis was conducted to examine whether self-compassion mediates the relationship between shame (independent variable) and symptoms of anxiety and depression (dependent variables). Assumptions for mediation were assessed: (a) a significant relationship between the independent and dependent variables, (b) a significant relationship between the independent variable and the mediator, (c) a significant relationship between the mediator and the dependent variables (controlling for the independent variable), and (d) a reduction in the strength of the independent–dependent variable relationship when the mediator was included (Pallant, 2016).
3. Hypothesis 3: A multiple linear regression analysis was conducted with self-esteem, stress, and self-blame as independent variables, and depressive and anxiety symptoms as dependent variables. Assumptions of linearity and the absence of outliers were checked and satisfied.
4. Hypothesis 4: A hierarchical mediation analysis was performed to test whether maladaptive cognitive emotion regulation strategies mediated the effects of self-compassion, shame, and self-esteem (independent variables) on anxiety and depressive symptoms (dependent variables). Mediation assumptions were again tested and fulfilled (Pallant, 2016).

Given the relatively large standard deviations observed for certain variables (e.g., shame and depressive symptoms), additional diagnostic checks were conducted to evaluate potential violations of regression assumptions. Visual inspection of histograms and P–P plots suggested approximately normal distributions, and skewness and kurtosis values fell within the acceptable range

(-1 to +1). Furthermore, no influential outliers were identified based on standardized residuals and leverage statistics. These results indicate that the variability in the data reflects natural heterogeneity within the sample rather than violations of statistical assumptions.

All research procedures were conducted in accordance with the ethical standards of the 1975 Helsinki Declaration, as revised in 2000. The study complied with established ethical norms for psychological research, and participants provided informed consent before participating.

RESULTS

The Relationship Between Shame and Self-Compassion

A linear regression analysis was conducted to examine whether shame was significantly associated with lower levels of self-compassion. The overall model was statistically significant, $F(1, 199) = 108.75$, $p < .001$, with an R^2 of .353. This indicates that shame accounted for approximately 35.3% of the variance in self-compassion. The regression equation was: $\text{Self-Compassion} = 96.709 - 1.826 \times \text{Shame}$. This means that for each one-unit increase in shame, the predicted level of self-compassion decreased by approximately 1.826 units. Therefore, shame emerged as a significant negative predictor of self-compassion (see Table 3).

Table 3. *The Relationship Between Shame and Self-Compassion*

Variable	Model 1		
	B	β	SE
Constant	96.70**		2.17
Shame	-1.826**	-.594	.17
R ²	.353		

* $p < .05$, ** $p < .01$

The Mediating Role of Self-Compassion Between Shame and Anxiety and Depressive Symptoms

First, a simple linear regression was conducted to examine the effect of shame on depressive symptoms. The model was significant, $F(1, 199) = 77.43$, $p < .001$, with an R^2 of .280, indicating that shame explained 28.0% of the variance in depressive symptoms. The regression equation was: $\text{Depression} = 1.729 + 0.490 \times \text{Shame}$. Thus, higher levels of shame were significantly associated with increased depressive symptoms (see Table 4).

Table 4. *The Mediating Role of Self-Compassion Between Shame and Anxiety and Depressive Symptoms*

Variable	Model 1		
	B	β	SE
Constant	1.72*		.69
Shame	.490**	.529	.05
R ²	.280		

Shame as a Predictor of Anxiety

Similarly, a linear regression was performed to assess the relationship between shame and anxiety symptoms. The model was significant, $F(1, 199) = 20.49, p < .001$, with an R^2 of .093. This suggests that shame accounted for 9.3% of the variance in anxiety symptoms. The regression equation was: Anxiety = $4.332 + 0.300 \times \text{Shame}$. Therefore, shame also significantly predicted anxiety symptoms, though the effect was smaller compared to depression (see Table 5).

Table 5. *Shame as a Predictor of Anxiety*

Variable	Model 1		
	B	β	SE
Constant	4.33**		.82
Shame	.300**	.306	.06
R ²	.093		

* $p < .05$, ** $p < .01$

To establish mediation, a regression was conducted to confirm the association between shame and self-compassion. As reported earlier, the model was significant ($F(1, 199) = 108.75, p < .001, R^2 = .353$), confirming that shame is a strong negative predictor of self-compassion (see Table 6).

Table 6. *Shame as a Predictor of Self-Compassion*

Variable	Model 1		
	B	β	SE
Constant	96.70**		2.17
Shame	-1.82**	-.594	.17
R ²	.353		

* $p < .05$, ** $p < .01$

Mediation Analysis: Self-Compassion as a Mediator

A hierarchical regression analysis was used to test the mediating effect of self-compassion on the relationship between shame and depressive symptoms. In the first model, shame was a significant predictor of depression, $F(1, 199) = 77.43, p < .001, R^2 = .280$.

In the second model, self-compassion was added. The model remained significant, $F(2, 198) = 59.44, p < .001$, and R^2 increased to .375. The change in R^2 ($\Delta R^2 = .095$) was statistically significant, $F_{\text{change}} = 30.12, p < .001$, indicating that self-compassion accounted for an additional 9.5% of the variance in depressive symptoms.

Notably, in this model, self-compassion significantly predicted depression ($\beta = -.383, p < .001$), while shame's effect was reduced, supporting partial mediation (see Table 7).

Table 7. *Shame as a Predictor of Self-Compassion*

Variable	Model 1			Model 2		
	B	β	SE	B	β	SE
Constant	1.79*		.69	12.90**		2.13
Shame	.490**	.529	.05	.279**	.301	.06
Self-compassion				-.116**	-.383	.02
R^2	.280			.375		
ΔR^2				.095		

* $p < .05$, ** $p < .01$

A similar hierarchical regression was performed with anxiety as the dependent variable. In the first model, shame significantly predicted anxiety, $F(1, 199) = 20.49, p < .001, R^2 = .093$.

In the second model, the addition of self-compassion slightly improved the model, $F(2, 198) = 13.67$, but the increase in explained variance ($\Delta R^2 = .028$) was not statistically significant, $F_{\text{change}} = 6.30, p = .013, p > .05$. Self-compassion did not significantly predict anxiety symptoms when controlling for shame ($\beta = .208, p = .013$), and shame remained a significant predictor. These results suggest that self-compassion does not significantly mediate the relationship between shame and anxiety (see Table 8).

Table 8. *Self-compassion does not significantly mediate the relationship between shame and anxiety*

Variable	Model 1			Model 2		
	B	β	SE	B	β	SE
Constant	4.33**		.82	10.76**		2.68
Shame	.300**	.306	.06	.179*	.182	.08
Self-compassion				-.067*	-.208	.02
R²	.093			.121		
ΔR^2				.028		

* $p < .05$, ** $p < .01$

The Role of Self-Esteem, Perceived Stress, and Self-Blame in Depressive and Anxiety Symptoms

A multiple regression analysis was conducted to assess the predictive value of self-esteem, perceived stress, and self-blame on depressive symptoms. The overall model was significant, $F(3, 197) = 91.24$, $p < .001$, and accounted for approximately 58.2% of the variance in depressive symptoms ($R^2 = .582$). Self-esteem was a significant negative predictor of depressive symptoms ($B = -.356$, $\beta = -.455$, $p < .001$), indicating that higher self-esteem is associated with lower depressive symptoms. Perceived stress was a significant positive predictor ($B = .480$, $\beta = .446$, $p < .001$), suggesting that greater stress levels are associated with higher depressive symptoms. Self-blame, however, was not a significant predictor ($B = .008$, $\beta = .005$, $p > .001$). Similarly, overall cognitive emotion regulation strategies were not significant predictors of depressive symptoms ($B = -.001$, $\beta = -.003$, $p > .001$) (see Table 9).

Table 9. *The Role of Self-Esteem, Perceived Stress, and Self-Blame in Depressive Symptoms*

Variable	Model 1		
	B	β	SE
Constant	12.48**		2.08
Self-esteem	-.356**	-.455	.04
Stress	.480**	.446	.05
Self-blame	.008	.005	.08
Cognitive emotion regulation strategies	-.001	-.003	.01
R²	.582		

* $p < .05$, ** $p < .01$

When predicting anxiety symptoms using the same set of predictors, the overall model was also significant, $F(3, 197) = 42.91, p < .001$, explaining 39.5% of the variance in anxiety ($R^2 = .395$). Perceived stress was again a significant positive predictor ($B = .692, \beta = .605, p < .001$). In contrast, self-esteem ($B = -.054, \beta = -.065, p > .001$) and self-blame ($B = -.029, \beta = -.017, p > .001$) were not significant predictors. Overall cognitive emotion regulation strategies were also non-significant ($B = .025, \beta = .075, p > .001$) (see Table 10).

Table 10. *The Role of Self-Esteem, Perceived Stress, and Self-Blame in Anxiety Symptoms*

Variable	Model 1		
	B	β	SE
Constant	2.41		2.66
Self-esteem	-.054	-.065	.05
Stress	.692**	.605	.07
Self-blame	-.029	-.017	.10
Cognitive emotion regulation strategies	.025	.075	.01
R²	.395		

* $p < .05$, ** $p < .01$

Mediating Role of Maladaptive Cognitive Emotion Regulation Strategies

A multiple regression analysis was conducted to examine whether self-compassion, shame, and self-esteem predicted maladaptive emotion regulation strategies. The model was significant, $F(3, 197) = 19.61, p < .001$, explaining 23.0% of the variance ($R^2 = .230$). However, none of the predictors had statistically significant effects: Self-compassion: $B = -.050, \beta = -.088, p > .001$; Shame: $B = .303, \beta = .173, p > .001$; Self-esteem: $B = -.397, \beta = -.268, p > .001$

In the first step, a regression model including self-compassion, shame, and self-esteem significantly predicted anxiety, $F(3, 197) = 9.19, p < .001$, accounting for 12.3% of the variance ($R^2 = .123$).

In the second step, maladaptive emotion regulation strategies were added to the model. The revised model remained significant, $F(4, 196) = 11.76, p < .001$, and the explained variance increased to 19.4% ($R^2 = .194$), with a statistically significant change in variance ($\Delta R^2 = .071$), $F_{\text{change}} = 17.21, p < .001$. Maladaptive strategies were significant predictors ($B = .170, \beta = .303, p < .001$), while self-compassion, shame, and self-esteem lost their predictive power, indicating that maladaptive emotion regulation may mediate their effects (see Table 11).

Table 11. *Mediating Role of Maladaptive Cognitive Emotion Regulation Strategies*

Variable	Model 1			Model 2		
	B	β	SE	B	β	SE
Constant	11.82**		3.25	1.94		3.93
Self-compassion	-.054	-.169	.034	-.045*	-.142	.033
Shame	.152	.155	.094	.101	.102	.091
Self-esteem	-.059	-.071	.102	.009	.010	.100
Maladaptive emotion regulation strategies				.170**	.303	.041
R²	.123			.194		
ΔR^2				.071		

* $p < .05$, ** $p < .01$

In the hierarchical regression analysis predicting depressive symptoms, the initial model—comprising self-compassion, shame, and self-esteem as predictors—was statistically significant, $F(3, 197) = 50.38$, $p < .001$, and explained 43.4% of the variance in depressive symptoms ($R^2 = .434$). In the second step, maladaptive cognitive emotion regulation strategies were added to the model. This extended model also proved to be significant, with the explained variance increasing to 49.0% ($R^2 = .490$). The change in explained variance was statistically significant ($\Delta R^2 = .056$), $F_{\text{change}} = 21.64$, $p < .001$, indicating that the inclusion of maladaptive strategies significantly improved the model.

Maladaptive cognitive emotion regulation strategies were found to be significant positive predictors of depressive symptoms ($B = .143$, $\beta = .270$, $p < .001$). While self-esteem remained a significant predictor in the extended model, both self-compassion and shame lost their predictive significance after the inclusion of maladaptive strategies. This pattern suggests a partial mediating role of maladaptive cognitive emotion regulation strategies in the relationship between self-compassion, shame, and depressive symptoms (see Table 12).

Table 12. *Mediating Role of Maladaptive Cognitive Emotion Regulation Strategies*

Variable	Model 1			Model 2		
	B	β	SE	B	β	SE
Constant	19.19**		2.46	10.89**		2.94
Self-compassion	-.040	-.134	.026	-.033	-.110	.025
Shame	.120	.130	.071	.077	.083	.068

SHAME, SELF-COMPASSION, AND SELF-ESTEEM AS CORRELATES OF DEPRESSION
AND ANXIETY SYMPTOMS: THE ROLE OF EMOTION REGULATION

Variable	Model 1			Model 2		
Self-esteem	-.351**	-.449	.078	-.295**	-.377	.075
Maladaptive emotion regulation strategies				.143**	.270	.031
R ²	.434			.490		
ΔR^2				.056		

*p<.5, **p<.01

CONCLUSIONS

The present study examined the relationships among shame, self-compassion, self-esteem, stress, and emotion regulation strategies in association with symptoms of depression and anxiety. Consistent with previous literature, the results indicated that shame was significantly and negatively associated with self-compassion. Individuals with higher levels of shame were less likely to exhibit kindness toward themselves, recognize shared human experiences, or maintain mindful awareness. Instead, they appeared more prone to self-criticism, feelings of isolation, and over-identification with negative emotions. These findings align with the conceptualization of shame as a self-focused, socially evaluative emotion that can undermine self-acceptance and compassion (Kim et al., 2011). This inverse relationship between shame and self-compassion is consistent with earlier findings (Barnard & Curry, 2011; Mosewich et al., 2011; Sedighimornani et al., 2019; Callow et al., 2021) and further highlights the potential protective role of self-compassion in relation to the maladaptive aspects of shame.

Self-compassion also emerged as a partial mediator in the relationship between shame and depressive symptoms, but not anxiety. This finding suggests that the association between shame and depressive symptoms may be partly explained by lower levels of self-compassion. This pattern is consistent with the Shame–Self-Criticism–Depression model (Gilbert & Irons, 2009), which proposes that internalized shame may contribute to depressive symptoms through increased self-criticism and negative self-evaluation. In contrast, no significant mediating effect of self-compassion was observed in the relationship between shame and anxiety. Although shame was positively associated with anxiety, the absence of a mediating effect suggests that different psychological processes may be involved. This interpretation is broadly consistent with theoretical models of social anxiety that emphasize fear of social rejection and external shame as important factors (Clark & Wells, 1995; Heimberg et al., 2010). Thus, self-compassion may be particularly relevant in psychological difficulties characterized by internalized shame and self-critical tendencies, such as depression.

In line with previous studies, self-compassion was negatively associated with depressive symptoms, supporting its potential role as a protective psychological factor (Steindl et al., 2018; Zhang et al., 2018). Interventions aimed at increasing self-compassion—especially those grounded in mindfulness practices, such as loving-kindness meditation (METTA)—may therefore be beneficial in reducing shame and depressive symptoms (Sedighimornani et al., 2019).

Regarding other variables included in the model, perceived stress showed strong associations with both depressive and anxiety symptoms, suggesting that stress may be relevant across different forms of psychological distress. Low self-esteem, however, was significantly associated only with depressive symptoms. This finding is consistent with the vulnerability model proposed by Sowislo and Orth (2013), which suggests that lower self-esteem may contribute to the development of depressive symptoms, while its relationship with anxiety tends to be weaker and more context-dependent. Longitudinal studies have also indicated that lower self-esteem may precede depressive symptoms over time (Orth et al., 2008, 2009). Despite its relevance in cognitive vulnerability models of anxiety (Clark & Beck, 2010), self-esteem did not show a significant association with anxiety symptoms in the present study.

Self-blame, contrary to expectations, was not significantly associated with either depressive or anxiety symptoms. Although previous studies have linked self-blame to psychological distress (Else-Quest et al., 2009; Jannati et al., 2020), its direct association in the current model was minimal. This finding may indicate that indirect pathways or interaction effects are more relevant than direct associations in explaining the relationship between self-blame and psychological symptoms.

Maladaptive cognitive emotion regulation strategies—such as rumination, suppression, and catastrophizing—were significantly associated with both depressive and anxiety symptoms. These findings are consistent with previous meta-analytic evidence indicating that maladaptive strategies are related to increased psychological vulnerability, whereas adaptive strategies (e.g., reappraisal, acceptance, and problem-solving) are generally associated with better psychological adjustment (Aldao et al., 2010; Schäfer et al., 2016). However, in the present study, acceptance did not emerge as a significant factor, which may reflect differences in operationalization or characteristics of the specific sample.

The role of maladaptive emotion regulation strategies was further supported by the hierarchical regression analyses. When these strategies were added to the predictive models for both depression and anxiety, they significantly increased the explained variance, indicating that they accounted for additional variability in psychological symptoms. For depressive symptoms, maladaptive strategies partially mediated the associations between shame, self-esteem, and

depression. In this model, self-esteem remained a significant variable, whereas the associations involving self-compassion and shame were attenuated, suggesting that maladaptive emotion regulation strategies may partly explain how these variables are linked to depressive symptoms.

Previous neurobiological research suggests that maladaptive emotion regulation strategies may be associated with heightened amygdala activity and reduced prefrontal control (Etkin et al., 2015). However, the present study relied exclusively on self-report measures and therefore cannot directly assess underlying neurobiological mechanisms. In contrast, strategies such as cognitive reappraisal have been linked to greater emotional well-being, stronger social support, and more adaptive psychological outcomes (Gross & John, 2003). Suppression, on the other hand, has been associated with increased emotional distress, reduced interpersonal support, and elevated risk of depressive symptoms.

Taken together, the findings highlight the potential importance of maladaptive emotion regulation strategies, self-compassion, and self-esteem in relation to depressive and anxiety symptoms. These variables may represent relevant targets for psychological interventions and prevention programs aimed at reducing psychological distress. In particular, interventions that promote adaptive emotion regulation and foster self-compassion and healthy self-evaluation may contribute to improved emotional well-being.

Limitations and Future Directions

Despite its contributions, the present study has several limitations that should be acknowledged. First, the use of convenience sampling limits the generalizability of the findings. Participants were recruited from populations accessible to the researchers, resulting in a non-representative sample. This limitation is further compounded by the predominance of female participants, which may influence the results and reduce their applicability to broader populations, including males or gender-diverse individuals.

Second, the reliance on self-report questionnaires introduces the possibility of response biases, including social desirability and inaccuracies in self-perception. Although self-report instruments are widely used and well validated in psychological research, they may not fully capture objective psychological processes.

Another limitation concerns the cross-sectional design of the study, which does not allow conclusions about causal relationships between variables. While associations among the studied constructs can be identified, the temporal or directional nature of these relationships cannot be determined. Future studies employing longitudinal or experimental designs would provide stronger evidence regarding potential causal mechanisms.

Additionally, cognitive emotion regulation strategies were examined in aggregated form, which may have obscured the specific contributions of individual strategies. Although composite scores offer a useful overview, analyzing individual strategies separately could reveal more nuanced associations with depressive and anxiety symptoms.

Further methodological limitations relate to the online administration of the survey. Participation was restricted to individuals with sufficient internet access and digital literacy, which may have excluded certain demographic groups. Moreover, environmental conditions during survey completion (e.g., distractions or lack of privacy) could not be controlled and may have influenced response quality.

Future research could address these limitations in several ways. Employing more diverse and representative sampling strategies, as well as achieving greater gender balance, would improve the generalizability of findings. Comparing clinical and non-clinical populations could also provide valuable insight into how these psychological variables operate across different levels of symptom severity.

Longitudinal designs would allow researchers to examine changes in psychological variables over time and clarify the direction of relationships observed in the present study. Experimental approaches, including randomized controlled trials evaluating self-compassion-based interventions, may also help determine whether enhancing self-compassion or improving emotion regulation leads to reductions in psychological distress.

Further research may benefit from examining individual cognitive emotion regulation strategies separately rather than relying solely on composite measures. In addition, incorporating variables such as childhood trauma—an established risk factor for emotional disorders (Hopfinger et al., 2016; Hovens et al., 2015)—or social support, which has been shown to play a protective role (Tartaro et al., 2024), could provide a more comprehensive understanding of the factors contributing to anxiety and depressive symptoms.

Finally, the development and empirical evaluation of psychological interventions aimed at enhancing self-compassion and adaptive emotion regulation may represent promising directions for future research. Such interventions could offer practical implications for improving mental health outcomes, particularly among individuals vulnerable to depressive and anxiety symptoms.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Conflict of interest. On behalf of all authors, the corresponding author states that there is no conflict of interest.

Ethical Approval. The research adhered to the ethical guidelines established by the Master's Degree program in Clinical Psychology at Babeş-Bolyai University and the Code of Ethics of the Romanian College of Psychologists.

Acknowledgement

We would like to express our deepest appreciation to all the participants who kindly participated in this study for donating their effort and time to help scientific research.

Data availability Statement

The information needed to reproduce all of the reported results is available at <https://figshare.com/s/6780ae0780bc98932461>

BIBLIOGRAPHY

- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, 30(2), 217–237. doi:10.1016/j.cpr.2009.11.004
- Allen, A. B., & Leary, M. R. (2010). Self-Compassion, Stress, and Coping. *Social and Personality Psychology Compass*, 4(2), 107–118. doi:10.1111/j.1751-9004.2009.00246.x
- Barnard, L. K., & Curry, J. F. (2011). The Relationship of Clergy Burnout to Self-Compassion and Other Personality Dimensions. *Pastoral Psychology*, 61(2), 149–163. doi:10.1007/s11089-011-0377-0.
- Bastin, C., Harrison, B. J., Davey, C. G., Moll, J., & Whittle, S. (2016). Feelings of shame, embarrassment and guilt and their neural correlates: A systematic review. *Neuroscience & Biobehavioral Reviews*, 71, 455–471. doi:10.1016/j.neubiorev.2016.09.019
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: an interpersonal approach. *Psychological bulletin*, 115(2), 243.
- Bitsko, R. H., Holbrook, J. R., Ghandour, R. M., Blumberg, S. J., Visser, S. N., Perou, R., & Walkup, J. T. (2018). Epidemiology and Impact of Health Care Provider–Diagnosed Anxiety and Depression Among US Children. *Journal of Developmental & Behavioral Pediatrics*, 39(5), 395–403. doi:10.1097/dbp.0000000000000571
- Bluth, K., & Blanton, P. W. (2013). Mindfulness and self-compassion: Exploring pathways to adolescent emotional well-being. *Journal of Child and Family Studies*, 22(7), 1298–1309.

- Brown, B. (2006). Shame Resilience Theory: A Grounded Theory Study on Women and Shame. *Families in Society: The Journal of Contemporary Social Services*, 87(1), 43–52. doi:10.1606/1044-3894.3483
- Callow, T. J., Moffitt, R. L., & Neumann, D. L. (2021). External shame and its association with depression and anxiety: the moderating role of self-compassion. *Australian Psychologist*, 56(1), 70–80. doi:10.1080/00050067.2021.1890984
- Campbell, J., Kub, J. E., & Rose, L. (1996). Depression in battered women. *Jamwa*, 51(3), 106–110.
- Cândeia, D.-M., & Szentagotai-Tătar, A. (2018). Shame-proneness, guilt-proneness and anxiety symptoms: A meta-analysis. *Journal of Anxiety Disorders*, 58, 78–106. doi:10.1016/j.janxdis.2018.07.005
- Cast, A. D., & Burke, P. J. (2002). A Theory of Self-Esteem. *Social Forces*, 80(3), 1041–1068. doi:10.1353/sof.2002.0003
- Charles, S. T. (2010). Strength and vulnerability integration: A model of emotional well-being across adulthood. *Psychological Bulletin*, 136(6), 1068–1091. doi:10.1037/a0021232
- Cisler, J. M., & Koster, E. H. W. (2010). Mechanisms of attentional biases towards threat in anxiety disorders: An integrative review. *Clinical Psychology Review*, 30(2), 203–216. doi:10.1016/j.cpr.2009.11.003
- Cisler, J. M., Olatunji, B. O., Feldner, M. T., & Forsyth, J. P. (2009). Emotion Regulation and the Anxiety Disorders: An Integrative Review. *Journal of Psychopathology and Behavioral Assessment*, 32(1), 68–82. doi:10.1007/s10862-009-9161-1
- Clark, D. A., & Beck, A. T. (2010). Cognitive theory and therapy of anxiety and depression: Convergence with neurobiological findings. *Trends in Cognitive Sciences*, 14(9), 418–424. doi:10.1016/j.tics.2010.06.007
- Clark, D. M., & Wells, A. (1995). *A cognitive model of social phobia*. In R.G. Heimberg, M.R. Liebowitz, D.A. Hope, & F.R. Schneier (Eds.), *Social phobia: Diagnosis, assessment, and treatment* (pp. 69–93). New York: Guilford Press.
- Cunha, M., Silva, P., Ferreira, C., & Galhardo, A. (2021). Measuring Shame in Adolescents: Validation Studies of the External and Internal Shame Scale in a Community Sample. *Child & Youth Care Forum*, 50(6), 971–989. doi:10.1007/s10566-021-09607-3
- Domaradzka, E., & Fajkowska, M. (2018). Cognitive Emotion Regulation Strategies in Anxiety and Depression Understood as Types of Personality. *Frontiers in Psychology*, 9. doi:10.3389/fpsyg.2018.00856
- Dorevitch, B., Buck, K., Fuller-Tyszkiewicz, M., Phillips, L., & Krug, I. (2020). Maladaptive Perfectionism and Depression: Testing the Mediating Role of Self-Esteem and Internalized Shame in an Australian Domestic and Asian International University Sample. *Frontiers in Psychology*, 11. doi:10.3389/fpsyg.2020.01272
- Dozois, D. J. A. (Ed.). (2012). *Abnormal psychology: Perspectives* (6th ed.). University of Western Ontario.
- Else-Quest, N. M., LoConte, N. K., Schiller, J. H., & Hyde, J. S. (2009). Perceived stigma, self-blame, and adjustment among lung, breast and prostate cancer patients. *Psychology & Health*, 24(8), 949–964. doi:10.1080/08870440802074664

- Etkin, A., Büchel, C., & Gross, J. J. (2015). The neural bases of emotion regulation. *Nature Reviews Neuroscience*, 16(11), 693–700. doi:10.1038/nrn4044
- Fekih-Romdhane, F., Malaeb, D., Dabbous, M., Hallit, R., Obeid, S., & Hallit, S. (2023). Psychometric properties of an Arabic translation of the external and internal shame scale (EISS). *BMC psychiatry*, 23(1), 242. <https://doi.org/10.1186/s12888-023-04729-5>
- Fergus, T. A., Valentiner, D. P., McGrath, P. B., & Jencius, S. (2010). Shame- and guilt proneness: Relationships with anxiety disorder symptoms in a clinical sample. *Journal of Anxiety Disorders*, 24(8), 811–815. doi:10.1016/j.janxdis.2010.06.002
- Fernandes, B., Newton, J., & Essau, C. A. (2021). The Mediating Effects of Self-Esteem on Anxiety and Emotion Regulation. *Psychological Reports*, 003329412199699. doi:10.1177/0033294121996991
- Ferreira, C., Moura-Ramos, M., Matos, M., & Galhardo, A. (2020). A new measure to assess external and internal shame: development, factor structure and psychometric properties of the External and Internal Shame Scale. *Current Psychology*. doi:10.1007/s12144-020-00709-0
- Garnefski, N., & Kraaij, V. (2007). The Cognitive Emotion Regulation Questionnaire. *European Journal of Psychological Assessment*, 23(3), 141–149. doi:10.1027/1015-5759.23.3.141
- Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative life events, cognitive emotion regulation and emotional problems. *Personality and Individual Differences*, 30(8), 1311–1327.
- GARNEFSKI, N., LEGERSTEE, J., KRAAIJ, V., VAN DEN KOMMER, T., & TEERDS, J. (2002). Cognitive coping strategies and symptoms of depression and anxiety: a comparison between adolescents and adults. *Journal of Adolescence*, 25(6), 603–611. doi:10.1006/jado.2002.0507
- Garnefski, N., Teerds, J., Kraaij, V., Legerstee, J., & van den Kommer, T. (2004). Cognitive emotion regulation strategies and depressive symptoms: differences between males and females. *Personality and Individual Differences*, 36(2), 267–276. doi:10.1016/s0191-8869(03)00083-7
- Germer, C. K., & Neff, K. D. (2013). Self-Compassion in Clinical Practice. *Journal of Clinical Psychology*, 69(8), 856–867. doi:10.1002/jclp.22021
- Gilbert, P. (2003). Evolution, social roles, and the differences in shame and guilt. *Social Research: An International Quarterly*, 70(4), 1205–1230.
- Gilbert, P. (2009). The compassionate mind: A new approach to the challenge of life. London: Constable & Robinson.
- Gilbert, P., & Irons, C. (2009). Shame, self-criticism, and self-compassion in adolescence. Adolescent emotional development and the emergence of depressive disorders, 1, 195–214.
- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, 13(6), 353–379. doi:10.1002/cpp.507
- Gill, C., Watson, L., Williams, C., & Chan, S. W. Y. (2018). Social anxiety and self-compassion in adolescents. *Journal of Adolescence*, 69, 163–174. doi:10.1016/j.adolescence.2018.10

- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348–362. doi:10.1037/0022-3514.85.2.348
- Hall, C. W., Row, K. A., Wuensch, K. L., & Godley, K. R. (2013). The Role of Self Compassion in Physical and Psychological Well-Being. *The Journal of Psychology*, 147(4), 311–323. doi:10.1080/00223980.2012.693138
- Halpern-Manners, A., Schnabel, L., Hernandez, E. M., Silberg, J. L., & Eaves, L. J. (2016). The Relationship between Education and Mental Health: New Evidence from a Discordant Twin Study. *Social Forces*, 95(1), 107–131. doi:10.1093/sf/sow035
- Hasin, D. S., Sarvet, A. L., Meyers, J. L., Saha, T. D., Ruan, W. J., Stohl, M., & Grant, B. F. (2018). Epidemiology of Adult DSM-5 Major Depressive Disorder and Its Specifiers in the United States. *JAMA Psychiatry*, 75(4), 336. doi:10.1001/jamapsychiatry.2017.4602
- Heimberg, R. G., Brozovich, F. A., & Rapee, R. M. (2010). *A cognitive-behavioral model of social anxiety disorder: Update and extension*. In S. G. Hofmann & P. M. DiBartolo (Eds.), *Social anxiety: Clinical, developmental, and social perspectives* (2nd ed., pp. 395–422). Elsevier/Academic Press.
- Hopfinger, L., Berking, M., Bockting, C. L. H., & Ebert, D. D. (2016). Emotion regulation mediates the effect of childhood trauma on depression. *Journal of Affective Disorders*, 198, 189–197. doi:10.1016/j.jad.2016.03.050
- Horváth, Zs., Urbán, R., Kökönyi, Gy. & Demetrovics, Zs. (2021). *Questionnaire Methods in Clinical and Health Psychology Research and Practice I*. Medicina Publishing House, Budapest. (Kérdőíves módszerek a klinikai és egészségpszichológiai kutatásban és gyakorlatban I. Medicina Könyvkiadó Zrt, Budapest.)
- Hovens, J. G., Giltay, E. J., Spinhoven, P., van Hemert, A. M., & Penninx, B. W. (2015). Impact of childhood life events and childhood trauma on the onset and recurrence of depressive and anxiety disorders. *The Journal of clinical psychiatry*, 76(7), 8559.
- Ingersoll, E. (2010). An integral understanding of the etiology of depression. *Integral theory in action: Applied, theoretical, and constructive perspectives on the AQAL model*, 149–171.
- Jacobson, N. C., & Newman, M. G. (2017). Anxiety and depression as bidirectional risk factors for one another: A meta-analysis of longitudinal studies. *Psychological bulletin*, 143(11), 1155.
- Jannati, Y., Nia, H. S., Froelicher, E. S., Goudarzian, A. H., & Yaghoobzadeh, A. (2020). Self blame attributions of patients: a systematic review study. *Central Asian Journal of Global Health*, 9(1), e419. DOI 10.5195/cajgh.2020.419
- Kamalinassab, Z., & Mohammadkhani, P. (2018). A comparison of self-compassion and self esteem based on their relationship with adaptive and maladaptive emotion regulation strategies. *Practice in Clinical Psychology*, 6(1), 9–20.
- Keltner, D., & Buswell, B. N. (1997). Embarrassment: its distinct form and appeasement functions. *Psychological bulletin*, 122(3), 250.

- Kessler, R. C., & Wang, P. S. (2009). Epidemiology of depression. *Handbook of depression*, 2, 5-22.
- Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin*, 137(1), 68–96. doi:10.1037/a0021466
- Komlósi, V. A. (2007). An Overview of Contemporary Self-Esteem Research: Self-Esteem and/or Self-Acceptance. In Zs. Demetrovics, Gy. Kökönyei, & A. Oláh (Eds.), *From Personality Psychology to Health Psychology: Studies in Honor of Zsuzsanna Kulcsár* (pp. 20–44). (Napjaink önértékelés-kutatásainak áttekintése: önértékelés és/vagy önellfogadás. Zs. Demetrovics, Gy. Kökönyei, & A. Oláh (szerk.), *Személyiséglélektantól az egészségpszichológiáig: Tanulmányok Kulcsár Zsuzsanna tiszteletére*, 20-44.)
- Kövesdi, A. (2018). *Reziliencia a serdülőkori anorexia nervosában* (Doctoral dissertation, University of Pécs (Hungary)).
- Krieger, T., Altenstein, D., Baettig, I., Doerig, N., & Holtforth, M. G. (2013). Self-Compassion in Depression: Associations With Depressive Symptoms, Rumination, and Avoidance in Depressed Outpatients. *Behavior Therapy*, 44(3), 501–513. doi:10.1016/j.beth.2013.04.004
- Li, Y., Wang, A., Wu, Y., Han, N., & Huang, H. (2021). Impact of the COVID-19 Pandemic on the Mental Health of College Students: A Systematic Review and Meta-Analysis. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.669119>
- Liu, X.-Q., Guo, Y.-X., Zhang, W.-J., & Gao, W.-J. (2022). Influencing factors, prediction and prevention of depression in college students: A literature review. *World Journal of Psychiatry*, 12(7), 860–873. <https://doi.org/10.5498/wjp.v12.i7.860>
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour research and therapy*, 33(3), 335-343.
- Luo, Y., Meng, R., Li, J., Liu, B., Cao, X., & Ge, W. (2019). Self-compassion may reduce anxiety and depression in nursing students: a pathway through perceived stress. *Public Health*, 174, 1–10. doi:10.1016/j.puhe.2019.05.015
- MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, 32(6), 545–552. doi:10.1016/j.cpr.2012.06.003
- MacGinley, M., Breckenridge, J., & Mowll, J. (2019). A scoping review of adult survivors' experiences of shame following sexual abuse in childhood. *Health & Social Care in the Community*. doi:10.1111/hsc.12771
- Miceli, M., & Castelfranchi, C. (2018). Reconsidering the differences between shame and guilt. *Europe's Journal of Psychology*, 14(3), 710–733. doi:10.5964/ejop.v14i3.1564
- Miklósi, M. (2015). *The Role of Cognitive Emotion Regulation in Responses to Stress* (Doctoral dissertation). (A kognitív érzelmszabályozás szerepe a stresszre adott reakciókban (Doctoral dissertation).)

- Min, J.-A., Yu, J. J., Lee, C.-U., & Chae, J.-H. (2013). Cognitive emotion regulation strategies contributing to resilience in patients with depression and/or anxiety disorders. *Comprehensive Psychiatry*, 54(8), 1190–1197. doi:10.1016/j.comppsy.2013.05.008
- Mónika, M., Tamás, M., Krisztina, K. B., & Dóra, P. F. (2011). Psychometric Properties of the Hungarian Version of the Cognitive Emotion Regulation Questionnaire. (A Kognitív Érzelem-Reguláció Kérdőív magyar változatának pszichometriai jellemzői)
- Mosewich, A. D., Kowalski, K. C., Sabiston, C. M., Sedgwick, W. A., & Tracy, J. L. (2011). Self-compassion: A potential resource for young women athletes. *Journal of sport and exercise psychology*, 33(1), 103-123.
- Muris, P., Meesters, C., Pierik, A., & de Kock, B. (2015). Good for the Self: Self-Compassion and Other Self-Related Constructs in Relation to Symptoms of Anxiety and Depression in Non-clinical Youths. *Journal of Child and Family Studies*, 25(2), 607–617. doi:10.1007/s10826-015-0235-2
- Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and identity*, 2(3), 223-250. DOI: 10.1080/15298860390209035
- Neff, K. D. (2011). Self-Compassion, Self-Esteem, and Well-Being. *Social and Personality Psychology Compass*, 5(1), 1–12. doi:10.1111/j.1751-9004.2010.00330.x
- Neff, K. D., & Knox, M. C. (2020). Self-compassion. In *Encyclopedia of personality and individual differences* (pp. 4663-4670). Cham: Springer International Publishing.
- Neff, K. D., & Lamb, L. M. (2009). *Self-compassion*. Handbook of individual differences in social behavior, 561-573.
- Ngin, C., Pal, K., Tuot, S., Chhoun, P., Yi, R., & Yi, S. (2018). Social and behavioural factors associated with depressive symptoms among university students in Cambodia: a cross-sectional study. *BMJ Open*, 8(9), e019918. <https://doi.org/10.1136/bmjopen-2017-019918>
- Ni, J. (2022). Self-Compassion Reduces Depression and Anxiety: The Mediating Effects of Global Self-Esteem, Trait Shame, and Rumination (Doctoral dissertation, Fairleigh Dickinson University).
- Orth, U., Robins, R. W., & Meier, L. L. (2009). Disentangling the effects of low self-esteem and stressful events on depression: Findings from three longitudinal studies. *Journal of Personality and Social Psychology*, 97(2), 307–321. doi:10.1037/a0015645
- Orth, U., Robins, R. W., & Roberts, B. W. (2008). Low self-esteem prospectively predicts depression in adolescence and young adulthood. *Journal of Personality and Social Psychology*, 95(3), 695–708. doi:10.1037/0022-3514.95.3.695
- Pallant, J. (2020). SPSS survival manual: A step by step guide to data analysis using IBM SPSS. Routledge.
- Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). Acceptance and commitment therapy. Measures package, 61(52), 18.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Schäfer, J. Ö., Naumann, E., Holmes, E. A., Tuschen-Caffier, B., & Samson, A. C. (2016). Emotion Regulation Strategies in Depressive and Anxiety Symptoms in Youth: A Meta Analytic Review. *Journal of Youth and Adolescence*, 46(2), 261–276. doi:10.1007/s10964-016-0585-0

- Sedighimornani, N., Rimes, K. A., & Verplanken, B. (2019). Exploring the Relationships Between Mindfulness, Self-Compassion, and Shame. *SAGE Open*, 9(3), 215824401986629. doi:10.1177/2158244019866294
- Sheikh, S., & Janoff-Bulman, R. (2009). The “Shoulds” and “Should Nots” of Moral Emotions: A Self-Regulatory Perspective on Shame and Guilt. *Personality and Social Psychology Bulletin*, 36(2), 213–224. doi:10.1177/0146167209356788
- Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, 139(1), 213–240. doi:10.1037/a0028931
- Steindl, S. R., Matos, M., & Creed, A. K. (2018). Early shame and safeness memories, and later depressive symptoms and safe affect: The mediating role of self-compassion. *Current Psychology*. doi:10.1007/s12144-018-9990-8
- Taiharu, Q., & Malik, J. A. (2016). Is It Adaptive or Maladaptive? Elaborating Conditional Role of Shame and Guilt in Development of Psychopathologies. *Psychological Studies*, 61(4), 331–339. doi:10.1007/s12646-016-0381-7
- Tartaro, G. K., Baptista, M. N., & Raad, A. J. (2024). Social and family support, emotional dysregulation and depression: Associations and pathways. *Estudos de Psicologia (Campinas)*, 41, e210138.
- Terry, M. L., & Leary, M. R. (2011). Self-compassion, self-regulation, and health. *Self and Identity*, 10(3), 352–362. doi:10.1080/15298868.2011.558404
- Umberson, D., & Karas Montez, J. (2010). Social Relationships and Health: A Flashpoint for Health Policy. *Journal of Health and Social Behavior*, 51(1_suppl), S54–S66. doi:10.1177/0022146510383501
- Vetteese, L. C., Dyer, C. E., Li, W. L., & Wekerle, C. (2011). Does Self-Compassion Mitigate the Association Between Childhood Maltreatment and Later Emotion Regulation Difficulties? A Preliminary Investigation. *International Journal of Mental Health and Addiction*, 9(5), 480–491. doi:10.1007/s11469-011-9340-7
- Vujanovic, A. A., Zvolensky, M. J., & Bernstein, A. (2007). The Interactive Effects of Anxiety Sensitivity and Emotion Dysregulation in Predicting Anxiety-related Cognitive and Affective Symptoms. *Cognitive Therapy and Research*, 32(6), 803–817. doi:10.1007/s10608-007-9148-8
- Walker, E. F., & Diforio, D. (1997). Schizophrenia: a neural diathesis-stress model. *Psychological review*, 104(4), 667.
- World Health Organization. (2017). Depression and other common mental disorders: global health estimates. World Health Organization.
- Zhang, H., Carr, E. R., Garcia-Williams, A. G., Siegelman, A. E., Berke, D., Niles-Carnes, L. V., ... Kaslow, N. J. (2018). Shame and Depressive Symptoms: Self-compassion and Contingent Self-worth as Mediators? *Journal of Clinical Psychology in Medical Settings*. doi:10.1007/s10880-018-9548-9

