

## How Automatic Thoughts Influence Self-Hate and Self-Efficacy: The Role of Emotion Regulation

### Otomatik Düşüncelerin Öz Nefret ve Öz Yeterlilik ile İlişkisi: Duygu Düzenlemenin Aracı Rolü

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#### ABSTRACT

This study aimed to examine the effect of automatic thoughts on self-hate and the mediating roles of self-efficacy and difficulties in emotion regulation in this relationship. The study sample consisted of 610 participants, 461 females and 149 males, aged between 18 and 60. Data collection tools included the Demographic Information Form, Automatic Thoughts Scale, Difficulties in Emotion Regulation Scale, General Self-Efficacy Scale, and Self-Hate Scale. Correlation analyses showed that automatic thoughts were positively correlated with self-hate and difficulties in emotion regulation, while self-efficacy was negatively correlated with automatic thoughts, difficulties in emotion regulation, and self-hate. Regression and sequential mediation analyses revealed that automatic negative thoughts directly increased the level of self-hate. However, the strength of this relationship decreased when self-efficacy was included in the model, indicating that low self-efficacy partially mediated the link between automatic thoughts and self-hate. Although emotion regulation difficulties initially appeared to be a significant mediator, their effect diminished when self-efficacy was added. This finding suggests that emotion regulation difficulties indirectly contribute to increased self-hate by weakening self-efficacy. Overall, the findings highlight the importance of strengthening self-efficacy and targeting negative automatic cognitions in psychological interventions related to self-hate.

**Keywords:** Automatic Thoughts, Emotion Regulation, Self-hate, Self-efficacy.

#### ÖZET

Bu çalışmanın amacı, otomatik düşüncelerin öz nefret üzerindeki etkisini ve bu ilişkide öz yeterlilik ile duygu düzenleme güçlüklerinin aracılık rollerini incelemektir. Çalışmanın örneklemini, yaşları 18 ile 60 arasında değişen 461'i kadın ve 149'u erkek olmak üzere toplam 610 katılımcıdan oluşmaktadır. Veri toplama aracı olarak Demografik Bilgi Formu, Otomatik Düşünceler Ölçeği, Duygu Düzenleme Güçlüğü Ölçeği, Genel Öz Yeterlilik Ölçeği ve Öz Nefret Ölçeği kullanılmıştır. Korelasyon analizleri sonucunda, otomatik düşüncelerin öz-nefret ve duygu düzenleme zorlukları ile pozitif yönde; öz-yeterliliğin ise otomatik düşünceler, duygu düzenleme zorlukları ve öz-nefret ile negatif yönde anlamlı ilişkili olduğunu göstermiştir. Regresyon ve ardışık aracılık analizleri, otomatik negatif düşüncelerin doğrudan olarak öz-nefret düzeyini artırdığını ortaya koymuştur. Ancak öz-yeterlilik modele dahil edildiğinde bu ilişkinin gücü azalmış, bu da düşük öz-yeterliliğin, otomatik düşünceler ile öz-nefret arasındaki bağlantıya kısmen aracılık ettiğini göstermiştir. Duygu düzenleme zorlukları başlangıçta anlamlı bir aracı olarak görülse de öz-yeterlilik eklendiğinde etkisini kaybetmiştir. Bu bulgu, duygusal düzenleme zorluklarının öz-yeterliliği zayıflatarak öz-nefretin artmasına dolaylı biçimde katkıda bulunduğunu göstermektedir. Genel olarak, elde edilen bulgular, öz-nefretle ilişkili psikolojik müdahalelerde öz-yeterliliği güçlendirmenin ve olumsuz otomatik bilişleri hedeflemenin önemini vurgulamaktadır.

**Anahtar Kelimeler:** Otomatik Düşünce, Duygu Düzenleme, Öz Nefret, Öz Yeterlilik.

## 1. INTRODUCTION

When current situations are considered and monitored, thoughts that spontaneously appear in the mind are called automatic thoughts. These thoughts, expressed as “what is happening in the mind,” can appear in the form of verbal or visual images (Türkçapar, 2018). When an individual faces an unpleasant situation, automatic thoughts appear spontaneously without any conscious effort (Persons, 1989). According to Savaşır and Batur (2003), these thoughts are mental processes that suddenly appear without the individual judging the situation they are in or consciously making sense of it. They appear quickly and uncontrollably without the person realizing it (Savaşır & Batur, 2003).

According to Beck (2019), automatic thoughts are closely related to individuals' emotions and behaviors, and emotions and behaviors affect the way we perceive and interpret events in our lives. Automatic thoughts are usually not noticed because they appear quickly and suddenly in our minds, but emotions and behaviors that occur as a result of these thoughts can be noticed more easily (Beck, 2019). People often experience automatic and unconscious processes without realizing it (Nisbett & Wilson, 1977). As Öncü and Sakarya (2013) mentioned, automatic thoughts can trigger strong emotions such as anger, lead to aggressive attitudes in interpersonal relationships, and cause the individual to exhibit self-harming behaviors. It is also stated that these thoughts negatively affect the individual's ability to cope with stress (Öncü & Sakarya, 2013).

According to DeRubeis and colleagues (2001), emotions and behaviors emerge as a result of events experienced by individuals; the situations they encounter are not directly affected and shaped by the events themselves, but by the interpretations they make about these events and the automatic thoughts that occur during these interpretations (DeRubeis et al., 2001). Automatic thoughts are generally negative and contain prejudices and logical errors. According to cognitive theory, these faulty ways of thinking are explained as the main causes of psychological problems (Foa et al., 2002).

Difficulties in regulating emotions have been shown to negatively impact individuals' overall health and psychological well-being; and these challenges are commonly linked to lower levels of happiness and life satisfaction, along with heightened emotional instability (Saxena et al., 2011). Moreover, emotion regulation problems are associated with the presence and severity of various psychological disorders, indicating that difficulties in managing emotions may play a role in broader psychopathological outcomes (Yıldırım et al., 2018). When individuals struggle to regulate their emotions effectively, they may experience more frequent and intense emotional reactions, which can hinder their ability to cope with everyday stressors (Yıldız & Eldeleklioğlu, 2020). Research also highlights that difficulties in emotion regulation are related to an increased presence of automatic negative thoughts, further impairing emotional functioning and contributing to psychological distress (Alipour et al., 2025). Additionally, individuals with lower emotion regulation capacities tend to report reduced self-efficacy, especially during adolescence, which may weaken their perceived ability to manage emotional challenges (Doménech et al., 2024).

The concept of self-efficacy was defined by Bandura (1994) as an important factor shaping human behavior within the framework of Social Cognitive Theory. Self-efficacy is defined as the belief of an individual that he/she can influence his/her environment by starting and successfully completing a skill (Bandura, 1994). As Bandura (1986) states, it can also be explained as the belief in his/her own ability to successfully present the actions required for a certain performance by planning and organizing them. People tend to focus on tasks in which they feel competent and secure, while they tend to avoid tasks in which they feel incompetent, and they are reluctant to take action when they do not believe they can accomplish a task. While the effort they put in varies according to the expected outcome, their choices and behaviors are generally affected by their self-efficacy beliefs (Bandura, 1986).

Importantly, Mills and colleagues (2007) assert that the concept of self-efficacy relates to individuals' beliefs about their perceived competence or incompetence in completing a particular task. These beliefs do not directly reflect their actual abilities or performances (Mills et al., 2007). Individuals who perceive their capacities as low may be using their skills ineffectively. On the other hand, individuals who perceive their capacities as high may have better performance in most cases (Tschannen-Moran et al., 1998).

According to Turnell and colleagues (2019), self-hate is a state in which an individual has negative, hostile, and destructive feelings toward themselves; it is generally related with low self-worth, excessive critical self-talk, and self-punishing thoughts. According to Freud (1923), the superego is a mechanism that internalizes the voices of parents, society, and authority during childhood. When the superego is rigid and disciplinary, individuals may harshly judge and blame themselves, which over time can lead to feelings of worthlessness and self-hate (Freud, 1923). Turnell and colleagues (2019) defined self-hate as a dysfunctional and destructive form of self-evaluation, involving feelings of inadequacy, failure, and worthlessness due to unmet internalized standards. According to Smith and Petty (1995), this condition can be associated with mental problems such as depression and anxiety disorders due to perception of being inadequate or unsuccessful. According to Büge and Bilge (2022), this state is associated with increased psychopathological symptoms, particularly in individuals with high levels of self-hate, which may negatively affect their mental health.

The purpose of this study was to examine the relationship between self-hate and emotion regulation difficulties, automatic thoughts, and self-efficacy. According to cognitive-behavioral and self-regulation theories, maladaptive cognitions play a central role in emotional and self-evaluation processes. Negative or distorted thoughts, in particular, can exacerbate emotion regulation difficulties, which can reduce individuals' self-efficacy and increase levels of self-hate. Therefore, the theoretical sequencing of variables in this study is consistent with these theoretical frameworks and suggests a sequential pathway from maladaptive cognitions to emotional and self-level difficulties. The study was conducted on individuals between the ages of 18 and 60 and aimed to reveal how automatic thoughts, self-efficacy, and difficulties in emotion regulation are related to self-hate. These four variables were examined together because each plays a critical role in psychological well-being, yet their combined effects on self-hate have rarely been investigated. This study aimed to make a significant contribution to the psychology literature by addressing the relationships between these variables in a holistic framework. In particular, understanding how self-hate is associated with these variables may provide practical benefits in the fields of psychological counseling and clinical psychology. Thus, this research may help to better clarify individuals' internal processes and provide a scientific basis for intervention methods to be developed in the field of mental health.

## **2. METHOD**

### **2.1. Sample**

The sample of the current study consists of individuals between the ages of 18-60, determined by the convenience sampling method. A total of 610 people, 461 females (75.6%) and 149 males (24.4%), participated in the study. The ages of the participants ranged from 18 to 60, and the mean age was calculated as 32.45 (SD = 8.72). Descriptive statistics of this main group are presented in Table 1.

**Table 1.** Sample characteristics

Variable	N (%)
Age Group	
18-25	311 (51.0%)
26-50	271 (44.4%)
51-60	28 (4.6%)
Gender	
Female	461 (75.6%)
Male	149 (24.4%)
Education	
No formal education	2 (0.3%)
Primary school	20 (3.3%)
Middle school	22 (3.6%)
High school	94 (15.4%)
Undergraduate	426 (69.9%)
Postgraduate	46 (7.5%)
Marital Status	
Single	366 (60.0%)
Married	231 (37.9%)
Divorced	9 (1.5%)
Widowed	4 (0.6%)
Monthly Income	
0-20.000 ₺	88 (14.4%)
20.000-50.000 ₺	245 (40.2%)
50.000-70.000 ₺	137 (22.5%)
70.000-100.000 ₺	85 (13.9%)
100.000 ₺ +	55 (9.0%)
Economic Status	
Low	62 (10.2%)
Low Medium	114 (18.7%)
Medium	341 (55.9%)
Medium High	80 (13.1%)
High	13 (2.1%)

## 2.2. Measures

### Demographic Information Form

A form was developed to collect demographic information about the participants, including gender, age, number of siblings, education level, marital status, total monthly household income, and perceived economic status.

### Automatic Thoughts Scale (ATS)

Developed by Hollon and Kendall (1980), ATS was created to determine automatic thoughts associated with depressive feelings and to assess the individual's negative self-perception. The scale consists of 30 items with a 5-point Likert-type rating. High scores indicate an increase in the frequency of automatic thoughts in the mind (Hollon & Kendall, 1980). It was adapted into Turkish by Aydın and Aydın (1990). To examine the discriminant validity of ATS-30, depressed and normal groups were compared. The difference between these two groups determined by Beck Depression Inventory was analysed by t test. A significant difference was found between depressed and normal groups in terms of ATS-30 scores ( $t = 6.84$ ;  $p < .001$ ). The mean of the depressed group was 92.05, and the mean of the normal group was 53. In the study conducted to evaluate the reliability of the scale, item-total correlation coefficients were calculated. The lowest item-total correlation coefficient was found to be .37 ( $p < .001$ ), and the highest correlation coefficient was found to be .85 ( $p < .001$ ). In addition, the Pearson product-moment correlation coefficient calculated by the test-retest method

was .77 ( $p < .001$ ). These findings demonstrate the consistency of the items in the scale across scores and their stability over time.

#### *Difficulties in Emotion Regulation Scale (DERS-16)*

DERS-16 was developed by Bjureberg and colleagues (2016) to assess individuals' difficulties in emotion regulation. The Turkish adaptation of the scale was conducted by Yiğit and Güzey Yiğit (2017). The DERS-16 is a self-report instrument consisting of 16 items and five subscales: Clarity, Goals, Impulse, Strategies, and Non-acceptance. Items are rated on a 5-point Likert scale ranging from 1 (almost never) to 5 (almost always), with higher scores indicating greater difficulties in emotion regulation. In the Turkish validation study, the scale demonstrated good internal consistency, with Cronbach's alpha coefficients ranging from .78 to .87 for the subscales and .92 for the overall scale. Confirmatory factor analysis supported the five-factor structure, and measurement invariance was confirmed across gender. These findings indicate that the Turkish version of DERS-16 is a valid and reliable tool for assessing emotional dysregulation in Turkish samples.

#### *General Self-Efficacy Scale (GSS)*

This scale, developed by Sherer and colleagues (1982), was adapted into Turkish by Yıldırım and İlhan (2010). GSS allows the assessment of self-efficacy belief which is one of the basic concepts of the Social Cognitive Theory developed by Bandura (1986). In the reliability analysis of Yıldırım and İlhan (2010), the internal consistency coefficient (Cronbach's Alpha) of the scale was .80; the test-retest reliability (Pearson Correlation value  $r$ ) was found to be .69. According to these values, it can be said that the scale is reliable. The scale consists of 17 items, and a 5-point Likert type was used. This scale has a 3-factor structure. These are initiation, perseverance and continuation effort-persistence. Items 2, 4, 5, 6, 7, 10, 11, 12, 14, 16, and 17 on the scale are reverse scored. In line with the scores obtained from the scale, it is interpreted that as the individual's score increases, his/her self-efficacy level also increases.

#### *Self-Hate Scale (SHS)*

SHS, developed by Turnell and colleagues (2019), was created to assess an individual's level of self-hate in the past year. The scale is a short and psychometrically valid measurement tool and is effective in assessing the level of self-hate. The scale, which has a 7-point Likert-type response format, consists of a total of 7 items. Büge and Bilge (2022) adapted the scale to Turkish society and conducted validity and reliability studies. The internal consistency coefficient of the scale was found to be Cronbach's alpha = .88, and the test-retest reliability coefficient was .86. These results indicate that the scale is psychometrically strong.

### **2.3 Data Collection**

Participants were recruited through a web-based survey and were selected on a voluntary basis. The final sample consisted of adults aged 18 to 60 years. Prior to participation, all individuals were provided with detailed information about the study and signed an informed consent form. They were informed that the measures did not include sensitive or discomforting content and that they retained the right to withdraw from the study at any time without penalty. The informed consent form provided participants with information about the study process, objectives, and confidentiality guarantees. The online survey allowed participants to participate in the study from anywhere they wanted. The survey link was sent to participants via e-mail or online research channels. Ethics rules were followed at every stage of the study. Participants were informed that the results of the surveys would be used solely for research purposes and that their personal information would not be shared with third parties under any circumstances.

## 2.4. Data Analysis

All statistical analyses were conducted using IBM SPSS Statistics 25 and the PROCESS macro version 4.0 (Hayes, 2018). Prior to testing the hypothesized sequential mediation model (Model 6), a series of assumption checks and preliminary analyses were conducted to ensure the suitability of the data for mediation analysis. The normality, linearity, and homoscedasticity assumptions were examined and found to be adequately met. Multicollinearity diagnostics indicated that all predictor variables were within acceptable tolerance limits. The relationships among variables were assessed through correlation and regression analyses, which confirmed significant and theoretically consistent associations in the expected directions. The sample size was deemed sufficient for the planned analyses and provided adequate statistical power for testing indirect effects through bootstrapping procedures. In addition, the theoretical ordering of variables [automatic thoughts (ATQ), emotion regulation difficulties (DERS), self-efficacy (GSS), and self-hate (SHS)] was conceptually grounded in the cognitive-behavioral and self-regulation frameworks. These preliminary evaluations indicated that all statistical and conceptual requirements for conducting PROCESS Model 6 were satisfactorily fulfilled. Mediation analysis was conceptually informed by the causal steps framework of Baron and Kenny (1986), yet empirically tested through the contemporary bootstrapping approach recommended by Hayes (2018), which provides more accurate estimates of indirect effects and confidence intervals.

## 3. RESULTS

Pearson correlation analyses revealed that automatic thoughts were positively correlated with emotion regulation difficulties ( $r = .705, p < .001$ ), self-hate ( $r = .761, p < .001$ ), and negatively correlated with self-efficacy ( $r = -.535, p < .001$ ). Emotion regulation difficulties were positively associated with self-hate ( $r = .595, p < .001$ ), while self-efficacy was negatively associated with both emotion regulation difficulties ( $r = -.516, p < .001$ ) and self-hate ( $r = -.538, p < .001$ ). See Table 2 for the correlations.

**Table 2.** Correlations among main variables

Variable	M	SD	1	2	3	4
1. ATQ <sup>1</sup>	62.58	22.69	—			
2. GSS <sup>2</sup>	54.48	11.03	-.53**	—		
3. DERS <sup>3</sup>	38.45	13.31	.70**	-.52**	—	
4. SHS <sup>4</sup>	14.90	8.90	.76**	-.54**	.59**	—

<sup>1</sup>ATQ: Automatic Thoughts Questionnaire total score; <sup>2</sup>GSS: General Self-Efficacy Scale total score; <sup>3</sup>DERS: Difficulties in Emotion Regulation Scale total score; <sup>4</sup>SHS: Self-Hate Scale total score.

\* $p < .01$ ; \*\* $p < .001$

A hierarchical regression analysis was conducted to examine predictors of self-hate. In Model 1, automatic thoughts significantly predicted self-hate ( $B = 0.30, SE = 0.01, \beta = .76, t = 28.91, p < .001$ ), explaining 58% of the variance ( $R^2 = .579, F(1, 608) = 835.74, p < .001$ ). In Model 2, self-efficacy was added and significantly improved model fit ( $\Delta R^2 = .024, F \text{ change} = 36.62, p < .001$ ). Both automatic thoughts ( $B = 0.26, p < .001$ ) and self-efficacy ( $B = -0.15, p < .001$ ) were significant predictors, with lower self-efficacy corresponding to higher self-hate. Emotion regulation difficulties, although initially significant ( $\beta = .12, p = .002$ ), became nonsignificant once self-efficacy entered the model ( $\beta = .07, p = .058$ ), indicating that its influence operates indirectly through self-efficacy.



**Table 3.** Hierarchical multiple regression predicting self-hate

Model	Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	<i>F(df)</i>	<i>Sig. F Change</i>
1	(Constant)	-3.78	0.69	-	-5.49	.579	-	835.74** (1, 608)	< .001
	ATQ <sup>1</sup>	0.30	0.01	.76	28.91				
2	(Constant)	6.69	1.86	-	3.61	.603	.024	460.66** (2, 607)	< .001
	ATQ <sup>1</sup>	0.26	0.01	.66	21.88				
	GSS <sup>2</sup>	-0.15	0.02	-.18	-6.05				

<sup>1</sup>ATQ: Automatic Thoughts Questionnaire total score; <sup>2</sup>GSS: General Self-Efficacy Scale total score; <sup>3</sup>DERS: Difficulties in Emotion Regulation Scale total score; <sup>4</sup>SHS: Self-Hate Scale total score.

\**p* < .01; \*\**p* < .001

Before conducting the sequential mediation analysis (PROCESS Model 6; Hayes, 2018), all statistical and theoretical assumptions were examined. All study variables were continuous and demonstrated adequate variability. Descriptive statistics indicated no extreme outliers, and the distributions were approximately normal. Pearson correlation analyses confirmed significant associations among all variables in theoretically expected directions. Regression diagnostics indicated that all assumptions for multiple regression were met. Linearity and homoscedasticity were verified through scatterplot inspection, and multicollinearity was not problematic (Tolerance = .47-.71; VIF < 2.1). Residuals were normally distributed, and no evidence of autocorrelation or influential outliers was observed. The sample size (*N* = 610) exceeded the recommended threshold for complex mediation models (Preacher & Hayes, 2008), providing sufficient statistical power ( $1 - \beta > .99$ ) for bootstrap-based indirect effect estimation. The theoretical ordering of variables was also consistent with cognitive-behavioral and self-regulation frameworks, wherein maladaptive cognitions increase emotion regulation difficulties, which in turn reduce self-efficacy and elevate self-hate. Collectively, these results indicated that all statistical, conceptual, and sample-size assumptions for testing PROCESS Model 6 were satisfactorily met.

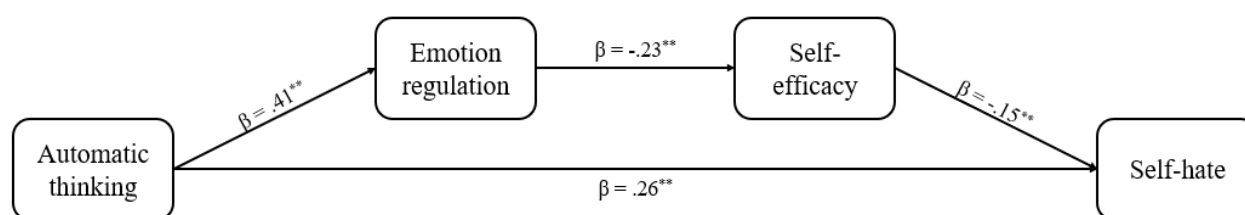
**Table 4.** Effects of Automatic Thoughts on Self-Hate Through Emotion Regulation Difficulties and Self-Efficacy

Effect Type	Path	<i>B</i>	<i>SE</i>	95% CI [LLCI, ULCI]	<i>p</i>
Total Effect (c)	ATQ → SHS	0.30	0.01	[0.28, 0.32]	< .001
Direct Effect (c')	ATQ → SHS (controlling for DERS, GSS)	0.26	0.01	[0.23, 0.29]	< .001
Indirect Effect 1 (a <sub>1</sub> b <sub>1</sub> )	ATQ → DERS → SHS	0.02	0.01	[0.00, 0.04]	-
Indirect Effect 2 (a <sub>2</sub> b <sub>2</sub> )	ATQ → GSS → SHS	0.03	0.01	[0.02, 0.05]	-
Sequential Indirect Effect (a <sub>1</sub> d <sub>21</sub> b <sub>2</sub> )	ATQ → DERS → GSS → SHS	0.04	0.01	[0.02, 0.06]	-
Total Indirect Effect	(All indirect paths combined)	0.09	0.02	[0.06, 0.12]	-

<sup>1</sup>ATQ: Automatic Thoughts Questionnaire total score; <sup>2</sup>GSS: General Self-Efficacy Scale total score; <sup>3</sup>DERS: Difficulties in Emotion Regulation Scale total score; <sup>4</sup>SHS: Self-Hate Scale total score.

A sequential mediation analysis was conducted using PROCESS Model 6 (Hayes, 2018) to examine whether emotion regulation difficulties (DERS) and self-efficacy (GSS) sequentially mediate the relationship between automatic thoughts (ATQ) and self-hate (SHS). The total effect of automatic thoughts on self-hate was significant (*B* = 0.30, *SE* = 0.01, 95% CI [0.28, 0.32], *p* < .001). When both mediators were entered, the direct effect remained significant (*B* = 0.26, *SE* = 0.01, 95% CI [0.23, 0.29], *p* < .001), indicating partial mediation. The indirect effect of ATQ on SHS through emotion regulation difficulties alone was not significant (95% CI includes zero). However, the indirect pathway through self-efficacy was significant (95% CI [0.02, 0.05]), as was the sequential indirect effect through both mediators (ATQ → DERS → GSS → SHS; 95% CI [0.02, 0.06]). These

results suggest that maladaptive automatic thoughts increase self-hate both directly and indirectly by first increasing emotion regulation difficulties, which in turn reduce self-efficacy, thereby contributing to higher self-hate levels. The total model accounted for approximately 60% of the variance in self-hate, indicating a strong overall explanatory power.



**Figure 1.** Sequential mediation model (PROCESS Model 6) showing the direct and indirect effects of automatic thoughts on self-hate through emotion regulation difficulties and self-efficacy.

#### 4. DISCUSSION AND CONCLUSION

The analysis results indicated that the overall effect of automatic thoughts on self-hate was significant. However, when both difficulty with emotion regulation and self-efficacy were included in the model, the direct effect of automatic thoughts on self-hate was attenuated but remained significant. This suggests that the effect of automatic negative thoughts on self-hate operates not only directly but also through indirect mechanisms. Difficulty with emotion regulation alone did not have a significant mediating role; however, an indirect effect emerged through self-efficacy and through a sequential process (i.e., automatic thoughts → difficulty with emotion regulation → self-efficacy → self-hate). This finding suggests that individuals' negative automatic thoughts influence their self-hate levels partly through the processes of difficulty regulating their emotions and feelings of inadequacy. Regression analyses further supported these relationships. According to the mediation analysis (Model 6), automatic thoughts alone explained 57.9% of the variance in self-hate, whereas including self-efficacy increased the explained variance to 60.3%, highlighting self-efficacy's significant mediating role. Moreover, the initially significant effect of emotion regulation difficulties on self-hate became non-significant once self-efficacy was controlled for, indicating that emotion regulation affects self-hate indirectly through its impact on perceived competence. Overall, these findings suggest that self-hate is shaped not only by cognitive factors such as negative automatic thoughts but also by emotional and self-evaluative processes like emotion regulation and self-efficacy.

Compared to previous research, the findings of this study demonstrate both similarities and differences. Consistent with previous studies, the strong positive association between automatic negative thoughts and self-hate supports existing literature suggesting that persistent negative self-talk is associated with increased self-directed hostility and decreased psychological well-being (e.g., Kross et al., 2005; Smith & Alloy, 2009). Similarly, the negative association between self-efficacy and self-hate is consistent with Bandura's (1997) theory, which posits that higher self-efficacy increases resilience to negative self-perceptions. A prevention program called HateLess, developed by Wachs and colleagues (2023), aimed to reduce hate speech by increasing self-efficacy in adolescents and achieved successful results. This study demonstrates a negative association between self-efficacy and hate. However, this study did not focus on the self-hate variable. Our study, in contrast, examined the relationship between self-hate and self-efficacy, revealing a negative correlation between them. Importantly, our findings suggest that lower self-efficacy contributes to higher levels of self-hate, and this relationship is partly driven by difficulties in emotion regulation. In other words, individuals with difficulty regulating emotion have decreased self-efficacy, which increases self-directed negative emotions. This approach addresses the self-hate dimension, which has been neglected in the existing literature, and demonstrates how self-efficacy relates not only to



external hate speech but also to an individual's internal processes, mediated by emotional regulation capacities.

The strong correlation between automatic thoughts and emotion regulation difficulties ( $r = .70$ ) appears to be higher than that reported in some previous studies. For example, Aldao and colleagues (2010) found moderate associations between emotion regulation strategies and cognitive symptoms. This difference may be due to differences in measurement tools and operational definitions of emotion regulation and automatic thoughts. The current study's focus on multidimensional emotion regulation difficulties, rather than isolated strategies, allows for the consideration of a broader range of regulatory difficulties more closely linked to maladaptive automatic thoughts. These findings suggest that interventions targeting emotion regulation may have a particularly strong effect in reducing automatic negative thoughts.

Studies examining the effects of cognitive behavioural therapy-based interventions on university students' automatic thoughts, perceived stress, and self-efficacy levels reveal significant positive improvements. For example, a study conducted during the 2021 COVID-19 quarantine found that online cognitive behavioural therapy effectively reduced depressive symptoms and negative automatic thoughts while improving quality of life among Thai university students (Prasartpornsirichoke et al., 2025). In this context, it is understood that students with psychosocial problems such as negative automatic thoughts, high perceived stress, and low self-efficacy should be identified and supported through psychoeducation programs organized within universities. Another study reported that psychoeducation reduces students' negative thoughts and dysfunctional attitudes and increases their self-efficacy (Kaplan et al., 2023). Our study also found a negative correlation between self-efficacy and automatic negative thoughts. This consistency across studies demonstrates the robustness of the relationship and suggests that high self-efficacy may be a protective factor against maladaptive cognitive patterns.

Furthermore, our findings indicate that emotion regulation difficulties do not independently mediate the link between automatic thoughts and self-hate but contribute as part of a sequential mediating process together with self-efficacy. This pattern is also consistent with intervention-based studies. For example, Javaheripour and colleagues (2025) conducted a study with primary school students, showing that mindfulness training and cognitive behavioural play-based therapy significantly improved emotion regulation skills, with the play-based approach producing a stronger effect than mindfulness. Although this study employed a child sample and employed an experimental design, the commonality is that striking improvements in emotion regulation are significantly linked to psychological outcomes. This finding supports our study's conclusion that "emotional regulation is a critical mechanism between maladaptive cognitions and self-directed outcomes." Therefore, strengthening emotion regulation, whether through intervention programs in youth or by targeting automatic thought patterns in adults, appears to be an effective way to reduce self-hate and increase self-efficacy.

The most significant and primary limitation of the study is the sample structure. The demographic characteristics of the 610 participants were concentrated in specific groups. 75.6% ( $n=461$ ) of the participants were female and 24.4% ( $n=149$ ) were male. This significantly limits the generalizability of the findings, particularly to the male population. Furthermore, the fact that 51% of the sample was between the ages of 18 and 25, and 69.9% ( $n=426$ ) had a bachelor's degree, indicates that the study was predominantly comprised of young, highly educated individuals. Because the study sample consisted primarily of young, educated female participants, it should be noted that the findings may not be equally applicable across different age, gender, and socioeconomic groups. For future studies, conducting research with more balanced gender distributions may increase the generalizability of the findings. In addition, studies that include larger and more diverse demographic groups can provide insights into how the relationships between these variables vary across different age groups, socioeconomic statuses, and cultural contexts. Understanding the relationship between

self-hate, difficulty with emotion regulation, automatic thoughts, and self-efficacy is important in terms of assessing their effects on an individual's emotional and mental health. Specific treatment strategies can be developed to cope with automatic thoughts, difficulty with emotion regulation, and self-hate, which can help create more effective treatment plans for mental health problems.

This study aimed to examine the sequential mediating effects of self-efficacy and difficulties with emotion regulation on the relationship between self-hate and automatic thoughts. A quantitative survey was conducted with 610 participants, and the data were analyzed using statistical methods. The findings indicated that automatic negative thoughts were associated with difficulties in emotion regulation, which in turn undermined self-efficacy and contributed to higher levels of self-hate. In other words, frequent negative automatic thoughts may impair individuals' ability to manage their emotions effectively, reduce their perceived competence, and consequently intensify feelings of self-hate. Overall, these results highlight that self-hate is shaped not only by cognitive patterns but also by the interplay of emotional regulation and self-perceptions.

These findings highlight the intertwined roles of cognitive and emotional processes in the development of self-hate. Automatic negative thoughts shape self-hate in part through their impact on self-efficacy and emotion regulation skills. This study contributes to the literature by integrating these mechanisms into a unified framework, highlighting how difficulties in emotion regulation can undermine self-efficacy and, in turn, intensify self-hate. From a practical perspective, interventions focused on enhancing self-efficacy and improving emotion regulation skills may help individuals reduce the impact of maladaptive thought patterns and develop a more positive self-perception.

### ***Conflict of Interest***

The authors declare that they have no competing financial or non-financial interests that are directly or indirectly related to the work submitted for publication.

### ***Data Availability Statement***

The data that support the findings of this study are available from the corresponding author upon reasonable request.

### ***Ethical Approval***

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The study was approved by Istanbul Sabahattin Zaim University (Approval No: E.202529478).

### ***Informed Consent***

Informed consent was obtained from all individual participants included in the study.

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