

Psychological Flexibility and Academic Self-Efficacy

The Roles of Well-Being Literacy and Burnout-Driven Self-Stigma

Şeyhmus Aksoy¹ , Ayşe Konuk² , Abdulmohsen Mohammed Abdullah Alkhulayfi³ , Juan Gómez-Salgado^{4,5} , and Murat Yıldırım^{1,6} 

¹Department of Psychology, Faculty of Science and Letters, Agri Ibrahim Cecen University, Ağrı, Türkiye

²Department of Psychology, Faculty of Arts and Social Sciences, Istanbul Galata University, İstanbul, Türkiye

³Department of Business Administration, Faculty of Economics and Administration, King Abdul-Aziz University, Jeddah, Saudi Arabia

⁴Department of Sociology, Social Work and Public Health, Faculty of Labour Sciences, University of Huelva, Spain

⁵Safety and Health Postgraduate Program, Universidad Espíritu Santo, Guayaquil, Ecuador

⁶Psychology Research Center, Khazar University, Baku, Azerbaijan

Abstract: *Introduction:* Despite the beneficial effects of academic self-efficacy, there is a relatively limited focus on the academic self-efficacy of higher education students compared to studies on student self-efficacy in other educational stages. *Aim:* The present study employs a moderated mediation model to investigate whether well-being literacy mediates the relationship between psychological flexibility and academic self-efficacy, while also exploring how burnout-driven self-stigma is associated with these direct and indirect relationships. *Methods:* A cross-sectional research design was employed in the present study. The sample comprised 316 students (82.6% female; $M = 22.28$, $SD = 3.38$). Participants completed the Academic Self-Efficacy Scale, the Psychological Flexibility Scale, the Well-Being Literacy Scale, and the Burnout-Driven Self-Stigma Scale. *Results:* Our study indicated that psychological flexibility was associated with reduced academic self-efficacy both directly and indirectly through well-being literacy. However, conditional direct and indirect effect results suggested that higher levels of burnout-driven self-stigma were related to decreased positive direct and indirect effects. *Discussion/Conclusion:* This study provides evidence to improve our understanding of how psychological flexibility relates to academic self-efficacy. While research on burnout-related self-stigma and well-being literacy remains limited, this study highlights how these variables were examined within the proposed model as potential moderator and mediator constructs.

Keywords: academic self-efficacy, psychological flexibility, well-being literacy, burnout-driven self-stigma

Introduction

Drawing on Bandura's (1986) social cognitive theory, academic self-efficacy is regarded as a major factor of students' motivation, academic performance, and psychological well-being (García-Álvarez et al., 2021; Matteucci & Soncini, 2021; Zimmerman, 2000). Academic self-efficacy refers to students' beliefs in their abilities to complete tasks and attain desired results in an academic setting (Høigaard et al., 2015). According to Ye et al. (2018), a higher level of academic self-efficacy diminishes the negative effects of academic stressors on students. Consistent with this, students with academic self-efficacy are better able to deal with challenges and manage stress (Bandura, 2006). Despite the beneficial effects of academic self-efficacy,

there is a relatively limited focus on the academic self-efficacy of higher education students compared to studies on student self-efficacy in other educational stages (Greco et al., 2022). This study utilizes a moderated mediation model to explore the interconnected determinants influencing academic self-efficacy among Turkish higher education students.

Although recent studies have examined the relationship between psychological flexibility and academic self-efficacy (Jeffords et al., 2020; Valenti and Faraci, 2021; Yamazaki et al., 2025), there is still a lack of clarity regarding how and why this relationship emerges. Based on recent developments in positive psychology, we suggest that well-being literacy (Oades, Jarden, et al., 2021) may clarify why psychological flexibility relates to academic self-efficacy.

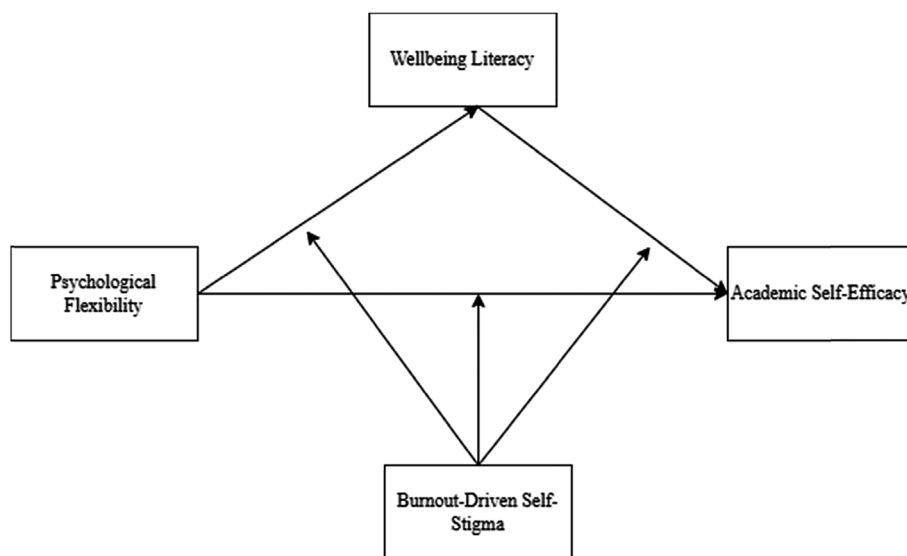


Figure 1. The proposed research model.

In contrast to health literacy and mental health literacy, which evolve in clinical contexts, well-being literacy emphasizes the intentional use of language for positive functioning, making it particularly suitable for educational settings (Hou et al., 2021; Oades, Baker, et al., 2021). Moreover, we added burnout-driven self-stigma to our model, referring to the internalization of negative beliefs about one's burnout experience, which may explain how the direct and indirect relationship between psychological flexibility and academic self-efficacy emerges. Self-stigma consists of self-esteem decrement, stereotype agreement, and self-concurrence (Corrigan et al., 2006), and can also result in the loss of positive beliefs about the self (Corrigan & Watson, 2002). As a type of self-stigma, burnout-related self-stigma may be a component that could weaken the link between psychological resources and their interrelationships. Therefore, the present study applies a moderated mediation model to examine whether the pattern of indirect associations is consistent with the proposition that well-being literacy may link psychological flexibility with academic self-efficacy, while also exploring how burnout-related self-stigma is associated with variations in the strength of these direct and indirect associations. The proposed model is presented in Figure 1.

Psychological Flexibility and Academic Self-Efficacy

Existing research consistently indicates that psychological flexibility strengthens academic self-efficacy beliefs of students. Academic self-efficacy beliefs are characterized as students' beliefs in their own capabilities to achieve academic tasks successfully (Bandura, 1997). Students with

high academic self-efficacy better manage time effectively and develop diverse learning strategies. These beliefs are not just related to positive academic outcomes but also to adaptive coping (Bandura, 2006). It is related to students' persistence in coping with a challenging academic environment. Students with confidence in their academic capabilities are more inclined to commit to academic work, manage learning, and remain strong under demanding situations (Pintrich & Schunk, 2002; Zimmerman, 2000). However, academic context often presents unexpected cognitive and emotional demands, such as fear of failure, deadline pressure, and negative teacher-student relationships that weaken the academic self-efficacy belief of students. Psychological flexibility, in such conditions, is regarded as an internal source that either upholds or diminishes academic self-efficacy.

Psychological flexibility refers to a higher-level capacity to adjust to contextual challenges while striving toward goals, facilitating the identification of coping strategies that are effective for a given situation (Hayes et al., 2011; Kashdan & Rottenberg, 2010). It enables individuals to embrace internal experiences without judgment, remain present in the moment, and act in accordance with personal values, despite the existence of demanding emotions and thoughts (Bond et al., 2006; Hayes et al., 2006). This capacity helps students to persist in academic goals. Rather than undermining their own capacity, students with higher psychological flexibility are more inclined to reinterpret academic obstacles and remain engaged with academic goals. Thus, psychological flexibility strengthens the cognitive and emotional resources required to navigate academic adversities. This idea is supported by studies conducted in both Turkish and international contexts, showing that students with

higher psychological and cognitive flexibility also have higher general and academic self-efficacy beliefs (Ateş and Sağar, 2024; Demirtaş, 2020; Jeffords et al., 2020; Liu et al., 2018; Sevari, 2020; Valenti & Faraci, 2021; Yamazaki et al., 2025).

Hypothesis 1 (H1): Psychological flexibility is positively associated with academic self-efficacy.

Mediating Role of Well-Being Literacy

Despite the consistent link between psychological flexibility and academic self-efficacy, one essential question remains: What are the possible dynamics associated with this relationship? Well-being literacy may serve as a potential mediator between psychological flexibility and academic self-efficacy. To the best of our knowledge, no previous study investigated these relationships. Well-being literacy is a new concept in positive psychology. Oades, Jarden, et al. (2021) define well-being literacy as the capability to compose and comprehend well-being language across various contexts. This capability entails intentional use of language to sustain or enhance the well-being of oneself, others, or the world. It involves the ability to consciously communicate for well-being, the ability to use language contextually with the aim of creating well-being, and to understand and act in ways that support growth (Hou et al., 2021; Oades et al., 2025).

This perspective is consistent with Linguistic Relativity Theory (Whorf, 1956), which posits that language shapes individuals' cognitive processes and their view of the world. As stated by Barton (2007), language functions not merely as a tool for conveying information, but also gives meaning to human experiences. Moreover, well-being literacy equips individuals with the capacity to recognize and navigate well-being opportunities available in their environments. Individuals with a higher level of well-being literacy are better at transforming both internal and external well-being opportunities into meaningful well-being outcomes. They show the capability to reposition their well-being-related communication interactions, modify their language to fit the situation, and be aware of differences across contexts (Oades, Baker et al., 2021). As a core process of adaptive and regulative functioning, psychological flexibility may be associated with well-being literacy. Psychological flexibility can modify language, fitting various contexts, transforming well-being opportunities, and reframing communication interactions. Hayes et al. (2006) indicated that psychological flexibility facilitates individuals' capability to adaptively interact with others and the environment. Thus, psychological flexibility can help students to become more attuned to their internal well-being experiences and environmental cues. As stated by Kashdan and Rottenberg

(2010), psychological flexibility enables individuals to make adjustments to direct their behavior and tolerate their thoughts and feelings to attain optimal outcomes. These adaptive regulations of thoughts and feelings through psychological flexibility may serve as a foundation of well-being literacy. Moreover, psychological flexibility covers several capabilities: observing thoughts as mere mental events rather than absolute truths, sustaining an open stance toward internal experiences, maintaining present-moment awareness with non-judgmental mindfulness, and accepting distressing thoughts and feelings without altering them (Flaxman et al., 2013; Hayes et al., 2012). Capabilities required for psychological flexibility may equip students with the necessary cognitive and emotional tools they need. These tools enable them to construct well-being-relevant meanings.

Consequently, this process is expected to influence students' beliefs about their academic self-efficacy. Literacy strengthens coping skills in a modern environment (Falzon, 2019) and supports learning processes (OECD, 2016). Building well-being literacy capability is associated with higher student engagement (Oades, Baker et al., 2021) and academic capabilities (Lemon et al., 2025). Through the intentional use of well-being-related language, students may reinterpret academic challenges more adaptively. According to Oades, Baker, et al. (2021), building future capabilities for students to flourish within an education context requires well-being literacy. It enables students to construct positive narratives about their well-being. These positive perception about their well-being is link to the individual seeing themselves as a proficient student and strengthening their self-efficacy beliefs. Rather than merely addressing well-being, well-being literacy also focuses on capabilities that strengthen positive functioning (Oades, Baker et al., 2021). Similar to well-being literacy, mental health literacy was found to be associated with self-efficacy beliefs of college students. Well-being literacy and mental health literacy are not mutually exclusive concepts (Chng et al., 2022). Taken together, we thus expect that well-being literacy is indirectly linked to higher levels of self-perceived competence and success in an academic environment.

Hypothesis 2 (H2): Well-being literacy has a mediating role between psychological flexibility and academic self-efficacy.

Moderating Role of Burnout-Driven Self-Stigma

In the current study, burnout-related self-stigma is theorized to act as a boundary condition, shaping the extent to which psychological flexibility is associated with academic self-

efficacy, both directly and indirectly. Specifically, we expect that burnout-driven self-stigma will weaken both the direct effect of psychological flexibility on academic self-efficacy and the indirect effect through well-being literacy. Self-stigma refers to the internalization of negative beliefs and attitudes as a result of stigmatized attributes such as mental health difficulties (Bharadwaj et al., 2017). Prior studies on mental health stigma and self-stigma showed their relations with negative psychological outcomes such as shame and self-criticism (Chan & Mak, 2015), low self-esteem (Livingston & Boyd, 2010), and diminished life satisfaction and a reduced sense of meaning in life (Smith-Palmer et al., 2020). When considered in the context of higher education students, stigma still remains a widespread phenomenon with high prevalence rates (Gervas et al., 2020). Although prior research regards burnout as a risk factor contributing to adverse health conditions, scholars also emphasize the persistent challenges that complicate its prevention. Among these, one considerable barrier is burnout-driven self-stigma (Bianchi et al., 2016). It refers to the internalization of negative beliefs and attitudes associated with experiencing burnout (e.g., “If I feel burnt out, it means I am weak,” “If I feel burnt out, I think no one will want to be close to me.”) (Favre & Richard-Lepouriel, 2023). As a particular form of self-stigma, burnout-driven self-stigma involves the internalization of dishonor, shame or penalty (Economou et al., 2020), regarding burnout. An individual with burnout-driven self-stigma is discredited and rejected by themselves due to the perceived burnout-driven weakness or inadequacy. They perceive themselves as socially unacceptable and undesirable (Goffman, 2009). Thus, burnout-driven self-stigma may undermine the beneficial influence of psychological sources and their interrelations.

Even when students exhibit psychological flexibility, their burnout-driven internalized stigma may override the motivational impact of flexible coping, weakening their belief in their academic self-efficacy. A study conducted by Jeffords et al. (2020) showed that students with higher psychological flexibility with stigmatizing thoughts reported greater college self-efficacy beliefs in terms of college-related tasks. Here, self-stigma functions as a cognitive pattern that shapes various aspects of individuals’ mental schemas, particularly those associated with perceived weakness and feelings of social inadequacy (Smith-Palmer et al., 2020; Wong et al., 2019). Masuda et al. (2009, 2011) suggested that self-concealment and self-stigma are negatively related to psychological flexibility. Conversely, psychological inflexibility positively relates to avoidance, undesirable or stigmatizing thoughts (Hayes et al., 2006). This notion is supported by Acceptance and Commitment Therapy (ACT) interventions, indicating that psychological flexibility-based models reduce self-stigma (Masuda et al., 2012).

In line with this, Luoma and Platt (2015) implied that this emerges through decreasing avoidance and reducing self-disparaging thoughts. In this context, self-stigma may act as a maladaptive cognitive schema that reframes psychological effort as a sign of low academic self-efficacy. Existing research demonstrated that self-stigma is associated with diminished self-efficacy both among higher education students and adult samples (Beasley et al., 2020; Mills et al., 2020; Pasmuzzi et al., 2016). Similar to existing self-stigma research, we expect that despite the potential contribution of psychological flexibility, students experiencing burnout-driven self-stigma feel lower academic self-efficacy.

In addition to the direct relationship between psychological flexibility and academic self-efficacy, the indirect relationship through well-being literacy may be diminished by burnout-driven self-stigma. As claimed above, flexible individuals are more likely to engage in reflective thinking and meaningful communication about their well-being, which in turn is positively associated with a stronger sense of competence in academic settings. Drawing on social constructionism (Oades, Jarden, et al., 2021), language plays a key role in constructing the meaning of experiences (Barton, 2007; Raskin, 2012). Thus, well-being literacy is not only the ability to discuss well-being but involves the capacity to use language as a resource to reframe psychological realities and well-being-related communication interactions (Oades, Jarden, et al., 2021). With higher well-being literacy, individuals are more likely to control the language used in expressing well-being-related experiences, giving them more options to convert the well-being opportunities in their internal or external environment into meaningful well-being outcomes (Oades, 2017). However, the internalization of burnout-driven self-stigma may restrict this linguistic capacity. Burnout-driven self-stigma can be significantly negatively associated with the constructive use of the language of well-being. Students affected by this form of stigma may avoid articulating distress or seeking social connection. Therefore, they limit opportunities for reflective dialogue and meaning-making of well-being. Students’ withdrawal associated with shame or internalized stigma may be related to lower use of well-being language. The shame, dishonor, penalty, fear experience, or withdrawing from activities (Cazan, 2015; Economou et al., 2020) caused by experiencing burnout may result in fewer chances to reframe one’s well-being-related communication interactions. Given that well-being literacy develops through interaction and co-construction of meaning, burnout-driven self-stigma impairs the formation and use of well-being-related language, thus limiting the conversion of well-being resources into meaningful well-being experiences.

Hypothesis 3 (H3): Burnout-driven self-stigma moderates the direct and indirect relations between psychological flexibility and academic self-efficacy.

Method

Participants

A total of 316 participants were included in the study, the majority of whom were female ($n = 261$, 82.6%), comprising a minority of the participants of male participants ($n = 55$, 17.4%). The mean age of the participants was 22.28 years ($SD = 3.38$). Regarding educational background, the majority of participants were pursuing a bachelor's degree ($n = 205$). Most participants were studying in social sciences ($n = 183$), predominantly in psychology ($n = 75$). In comparison, 133 participants were studying in health sciences programs, most of whom were studying nursing ($n = 81$). In terms of academic grade, the largest group of participants was second-year students ($n = 124$). Moreover, most of the participants reported living with their families ($n = 164$). Finally, the majority of participants were enrolled in public universities ($n = 227$), while a smaller group of participants attended private universities ($n = 89$).

Measures

Academic Self-Efficacy

The Academic Self-Efficacy Scale was originally developed by Jerusalem and Schwarzer (1981). The Turkish version of this scale was adapted into Turkish by Yılmaz, Gürçay, and Ekici (2007). The scale consists of a total of 7 items rated on a 4-point Likert-type scale (1 = *completely fits me*, 4 = *does not fit me at all*). It has a unidimensional structure. Higher scores on the scale indicate greater levels of academic self-efficacy. Jerusalem and Schwarzer (1981) reported a Cronbach's alpha reliability coefficient of 0.87 for the original scale. In the Turkish student sample, Yılmaz et al. (2007) found the Cronbach's alpha internal consistency coefficient to be 0.79; in the present study, Cronbach's alpha was 0.78.

Psychological Flexibility

The Psychological Flexibility (Psy-Flex) Scale is a brief measurement designed to assess contextually sensitive psychological flexibility (Gloster et al., 2021). It comprises 6 items that specifically reference Acceptance and Commitment Therapy. The Turkish adaptation of the scale was performed by Yıldırım and Aziz (2023). They found that the Cronbach's alpha reliability coefficient of the scale was 0.80. A 5-point Likert scale (1 = *very rarely*, 5 = *very often*) was used to rate each item. A higher score on the scale indi-

cates a greater level of psychological flexibility. In the present study, Cronbach's alpha was 0.77.

Well-Being Literacy

The original version of the Well-Lit 6 scale was developed by Hou et al. (2021). Well-Lit 6 was adapted into Turkish by Yıldırım et al. (2025). The scale assesses well-being-related vocabulary, knowledge, and language capacity with 6 items. A 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*) was used to rate each item. An example item from the scale is: "I have many words I can think of to communicate about well-being." The Cronbach's alpha coefficient for the original version of the scale was reported as 0.89, indicating high internal consistency. Similarly, the Turkish adaptation demonstrated strong reliability, with Cronbach's alpha 0.89. In the current study, Cronbach's alpha was 0.92.

Burnout-Driven Self-Stigma

The Burnout-Driven Self-Stigma Scale was adapted using previously employed self-stigma measures (Ritsher et al., 2003; Vogel et al., 2006; Klinefelter et al., 2021; Docksey et al., 2022). The items were generated by adapting items commonly used in self-stigma measurements to burnout by researchers. It comprises five items that reflect individuals' experiences of failure, inadequacy, and humiliation associated with experiences of burnout. An example item from the scale states, "If I feel psychologically burned out, I feel ashamed of it." The scale was rated on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with a higher score indicating a greater level of self-stigma. In the present study, Cronbach's alpha was 0.80, indicating satisfactory internal consistency.

Procedure

This study was approved by the Ethics Review Board of Ağrı Ibrahim Çeçen University on 28 February 2025 (Approval No. E.127603). Participants were reached using convenience sampling. Questionnaires were delivered to participants via social networking platforms such as WhatsApp or email. Data collection was conducted between February and April 2025. Participation was voluntary, with respondents completing the online questionnaire according to their own discretion. The electronic survey system was designed to require responses to all questions before submission. However, it was not possible to track how many participants did not complete the survey or to determine the time each participant spent on the survey due to the software design. Participants provided informed consent on the first page of the electronic survey, where they were required to consent or were allowed to exit before proceeding. The informed consent form explained the purpose of

the study, rights of withdrawal during and after participation, data anonymity, data storage procedures, storage period, how participants can access the results, intended use, and disposal of the data

Data Analysis

Statistical analyses were carried out using SPSS (v.25). Firstly, descriptive statistics (i.e., *M*, *SD*) were computed for all variables, followed by an examination of bivariate associations among them. Data screening analysis indicated that the dataset contained neither missing values nor outliers. Moreover, the analysis was performed to determine whether the mediation process was moderated by burnout-driven self-stigma. Moderated mediation is frequently assessed to determine whether the magnitude of a mediation effect is contingent on the value of a moderating variable (Muller et al., 2005). The moderated mediation model was tested using Hayes' PROCESS macro (Hayes, 2013). Model 59 was used to test the moderated mediation roles of the variables. The current study assumes that burnout-driven self-stigma may not only strengthen or weaken the direct relationship between psychological flexibility and academic self-efficacy, but also the relationships between psychological flexibility and well-being literacy, and between well-being literacy and academic self-efficacy. Thus, Model 59 was selected since it is a conditional process (moderated mediation) model that simultaneously shows the effect of the moderator variable on both the direct effect and the mediating effect. All continuous variables were standardized prior to analysis, and interaction terms were calculated using these standardised values. Furthermore, the bootstrapping method was employed to assess the significance of all effects and to obtain robust standard errors for parameter estimation. The bootstrapping method, based on 5,000 resamples of the data, generates 95% bias-corrected confidence intervals for the examined effects, with intervals that do not include zero indicating statistically significant effects.

Results

Factor Structure of the Burnout-Driven Self-Stigma

Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed to test the factor structure of the Burnout-Driven Self-Stigma Scale. The AMOS results showed a good model fit [$\chi^2/df = 2.349$, IFI = 0.985, CFI = 0.985, TLI = .985, RFI = 0.95, NFI = 0.975, RMSEA = 0.065], with standardized factor loadings as follows: item 1 = 0.69, item 2 = 0.65, item 3 = 0.79, item 4 = 0.84, item

5 = .75. These results support the perfect fit of the factor structure of the Burnout-Driven Self-Stigma Scale (İlhan & Çetin, 2014). Item analysis results of the Burnout-Driven Self-Stigma Scale are given in Table 1.

Preliminary Analysis

Descriptive statistics, reliability of scales, and correlations among all study variables are presented in Table 2. Descriptive statistics were computed for the independent variable (psychological flexibility), the mediator (well-being literacy), the moderator (burnout-driven self-stigma), and the outcome variable (academic self-efficacy). Skewness and Kurtosis statistics were performed to test the normality of the variables. Values falling within the ± 1 range are considered an indication of a well-symmetrized univariate normal distribution (Curran et al., 1996). The results showed that the data were normally distributed. In addition, Cronbach's alpha coefficients were computed to evaluate the internal consistency reliability of the scales. Cronbach's alpha coefficient above .70 indicates that the scale was reliable (Field, 2013). The Cronbach's alpha coefficients ranged from .77 to .92, indicating satisfactory internal consistency (noted in Table 2). Correlation analysis indicated that psychological flexibility was positively related to well-being literacy and academic self-efficacy ($r = 0.53$, $p < .01$ and $r = 0.38$, $p < .01$, respectively). In addition, well-being literacy showed a positive association with academic self-efficacy ($r = 0.51$, $p < .01$). However, burnout-driven self-stigma was not found to be related to any of the study variables.

Mediation Analysis

The analysis of direct effects indicated that psychological flexibility was significantly linked to academic self-efficacy ($\beta = .53$, $p < .001$), it explains 28% of the variance in literacy ($R^2 = .28$, $F = 123.85$, $p < .001$). When we added well-being literacy, higher levels of psychological flexibility were associated with well-being literacy ($\beta = .15$, $p < .001$), and well-being literacy related to increased academic self-efficacy ($\beta = .43$, $p < .001$). The model was significant, $R^2 = .27$, $F = 60.25$, $p < .001$.

Mediation analysis indicated that the standardized indirect effects fall outside the non-zero intervals. The path from psychological flexibility to academic self-efficacy through well-being literacy has an effect size of .23 (BootLLCI = .16; BootULCI = .30; see also Table 3). The result showed that well-being literacy is a mediator between psychological flexibility and academic self-efficacy. In conclusion, psychological flexibility was associated with well-being literacy, which, in turn, was positively related to academic self-efficacy.

Table 1. Item analysis of Burnout-Driven Self-Stigma Scale

Language	Item	Mean	SD	Scale mean if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted
English	1. I would feel ashamed if I felt psychologically burned out.	2.64	1.65	15.70	0.51	0.78
Turkish	1. Kendimi psikolojik olarak tükenmiş hissedersen bundan utanırım.					
English	2. If I felt burned out and failed to solve my problems, I would feel bad about myself.	4.98	1.74	13.37	0.48	0.79
Turkish	2. Eğer kendimi tükenmiş hissedersen ve sorunlarımı çözemezsem kendimi kötü hissedirim.					
English	3. If I felt burned out, I would think that no one would want to be close to me.	3.13	1.87	15.21	0.63	0.74
Turkish	3. Tükenmiş hissedersen kimsenin bana yakın olmak istemeyeceğini düşünürüm.					
English	4. When I feel burned out, I believe I would be a burden to those around me.	3.78	2.07	14.56	0.70	0.72
Turkish	4. Tükenmiş hissettiğimde çevremdekilere yük olacağımı düşünürüm.					
English	5. If I felt burned out, I would evaluate myself as a failure.	3.8	1.96	14.54	0.59	0.76
Turkish	5. Eğer kendimi tükenmiş hissedersen kendimi başarısız olarak değerlendiririm.					

Table 2. Descriptive statistics, reliability, and correlation analysis

Variable	Descriptive statistics						Reliability	Correlations			
	Min	Max	Mean	SD	Skewness	Kurtosis	α	1	2	3	4
1. Psychological flexibility	1.00	5.00	3.22	0.76	-0.57	0.59	0.77	-	0.53**	0.01	0.38**
2. Well-being literacy	1.00	7.00	4.54	1.36	-0.46	0.03	0.92		-	-0.07	0.51**
3. Burnout-driven self-stigma	1.00	7.00	3.68	1.36	0.11	-0.66	0.80			-	0.08
4. Academic self-efficacy	1.00	4.00	2.74	0.58	-0.53	0.47	0.78				-

Moderated-Mediation Analysis

The hypothesis that burnout-driven self-stigma would moderate the direct and indirect relationships between psychological flexibility and academic self-efficacy via well-being literacy was tested using Model 59 (Hayes, 2013). Although burnout-related self-stigma did not show significant correlations with the other variables, it was incorporated into the model as a potential moderator within the theoretical framework, based on the proposition that it might be associated with variations in the strength or direction of relationships among the primary variables. Moderation analyses examine interaction effects; therefore, a variable can be considered as a moderator within a research model even if it is not directly correlated with the outcome variable. In this context, we examined the conditional direct and indirect effects of psychological flexibility on academic self-efficacy at three levels of the burnout-driven self-stigma. Table 4 shows the moderated mediation results. First, when well-being literacy is considered as the dependent variable, psychological flexibility ($b = 1.92$, CI [1.55, 2.29]) and burnout-driven self-stigma ($b = 0.81$, CI [0.50,

1.12]) had a predictive effect on well-being literacy. Moreover, the interaction of psychological flexibility and burnout-driven self-stigma was a significant predictor of well-being literacy ($b = -0.28$, CI [0.36, 0.92]). The model was significant, $R^2 = .35$, $F = .60$, $p < .001$. Second, when we regarded academic self-efficacy as the dependent variable, well-being literacy ($b = 0.16$, CI [0.02, 0.29]) was significantly associated with academic self-efficacy. However, psychological flexibility ($b = 0.22$, CI [-0.01, 0.46]) and burnout-driven self-stigma ($b = 0.04$, CI [-0.08, 0.23]) did not show significant predictive effects. In addition, while the interaction of psychological flexibility and burnout-driven self-stigma ($b = -0.07$, CI [-0.12, -0.02]) was significantly associated with academic self-efficacy, the interaction between well-being literacy and burnout-driven self-stigma ($b = 0.01$, CI [-0.02, 0.03]) was not a significant predictor of academic self-efficacy. The entire model is statistically significant ($R^2 = .28$, $F = .53$, $p < .001$).

As Table 4 indicates, the direct effect of psychological flexibility on academic self-efficacy at different levels of burnout-driven self-stigma was as follows: at low burnout-driven self-stigma (SD-), the boot effect was 0.16 (CI

Table 3. Indirect effects of the proposed mediation model

Variable	Outcome variable			
	<i>M</i> (Well-being literacy)			
	Coeff.	SE	t	%95 CI
Constant	1.47	0.28	5.19	[0.91, 2.02]
X (Psychological Flexibility)	0.95	0.08	11.12	[0.78, 1.12]
	$R^2 = 0.28$ $F = 123.85; p < .001$			
Variable	<i>Y</i> (Academic self-efficacy)			
	Coeff.	SE	t	%95 CI
	Coeff.	SE	t	%95 CI
Constant	1.53	0.13	12.02	[1.28, 1.78]
X (Psychological flexibility)	0.12	0.04	2.66	[0.03, 0.20]
M (Well-being literacy)	0.19	0.02	7.60	[0.13, 0.23]
	$R^2 = 0.27$ $F = 60.25; p < .001$			
Model pathways	Standardized coefficient (β)	SE	%95 CI	
Total effect of X on Y	0.61	0.04	[0.21, 0.37]	
Psychological flexibility → Academic self-efficacy	0.38	0.04	[0.03, 0.20]	
Psychological flexibility → Well-being literacy → Academic self-efficacy	0.23	0.03	[0.16, 0.30]	

Note. SE = standard error. Coeff = unstandardized coefficient. X = independent variable; M = mediator variable; Y = dependent variable. Number of bootstrap samples for percentile bootstrap confidence intervals: 5,000.

[0.03, 0.29]); at the mean level, the boot effect was 0.13 (95% CI [0.03, 0.22]); and at high burnout-driven self-stigma (SD+), the boot effect was 0.08 (95% CI [-0.02, 0.19]). Regarding the indirect effect, the relationship between psychological flexibility and academic self-efficacy through well-being literacy at different levels of burnout-driven self-stigma was as follows: at low burnout-driven self-stigma (SD-), the boot effect was 0.21 (95% CI [0.11, 0.32]); at the mean level, the boot effect was 0.15 (95% CI [0.09, 0.21]); and at high burnout-driven self-stigma (SD+), the boot effect was 0.08 (95% CI [-0.02, 0.15]). These results indicate how the relationship between psychological flexibility and academic self-efficacy is associated with burnout-driven self-stigma, both directly and indirectly through well-being literacy. Burnout-related self-stigma was associated with a reduction in the positive conditional direct and indirect associations between psychological flexibility and academic self-efficacy.

Figure 2a and 2b show a visual presentation of the single interactions within the conditional model pathways. A negative interaction was observed between psychological flexibility and burnout-driven self-stigma that is related to well-being literacy and academic self-efficacy. Figures indicated that higher levels of burnout-driven self-stigma diminish the positive effect of psychological flexibility on both well-being literacy and academic self-efficacy. In addition, Figure 3a and 3b depict how the direct effect of psychological flexibility and academic self-efficacy and the

indirect effect through well-being literacy are diminished in the presence of burnout-driven self-stigma.

Discussion

We examined a moderated mediation model among higher education students, in which the observed pattern of indirect associations suggested that well-being literacy may link psychological flexibility with academic self-efficacy, while burnout-related self-stigma was associated with a reduction in the strength of both the direct and indirect associations between psychological flexibility and academic self-efficacy. Our study showed that psychological flexibility was significantly associated with academic self-efficacy both directly and indirectly through well-being literacy. However, conditional direct and indirect effect results suggested that burnout-driven self-stigma is related to a reduction in the positive direct and indirect effects. While psychological flexibility and well-being literacy were positively associated with academic self-efficacy at low and moderate levels of burnout-related self-stigma, these associations diminished and became nonsignificant at high levels of burnout-related self-stigma. We further found that both the direct effect of psychological flexibility on academic self-efficacy and the indirect effect through well-being literacy diminished as values of burnout-driven self-stigma increased.

Table 4. Moderated mediation results of the model

Variable	Outcome variable			
	M (Well-being literacy)			
	Coeff.	SE	t	95% CI
Constant	−1.26	0.61	−2.08	[−2.46, −0.07]
X (Psychological flexibility)	1.92	0.18	10.29	[1.55, 2.29]
W (Burnout-driven self-stigma)	0.81	0.16	5.10	[0.50, 1.12]
X*W (Psychological flexibility * Burnout-driven self-stigma)	−0.28	0.04	−5.77	[0.36, 0.92]
	$R^2 = 0.35$			
	$F = 0.60 ; p < .001$			
	Y (Academic self-efficacy)			
Constant	1.28	0.28	4.49	[0.72, 1.84]
X (Psychological flexibility)	0.22	0.12	1.85	[−0.01, 0.46]
M (Well-being literacy)	0.16	0.06	2.29	[0.02, 0.29]
W (Burnout-driven self-stigma)	0.04	0.08	0.76	[−0.08, 0.23]
X*W (Psychological flexibility * Burnout-driven self-stigma)	−0.07	0.03	−0.99	[−0.12, −0.02]
M*W (Well-being literacy * Burnout-driven self-stigma)	0.01	0.01	0.36	[−0.02, 0.03]
	$R^2 = 0.28$			
	$F = 0.53 ; p < .001$			
Conditional direct effect				
(W) Burnout-driven self-stigma	Effect	SE	95% CI	
− SD	0.16	0.06	[0.03, 0.29]	
Mean	0.13	0.04	[0.03, 0.22]	
+ SD	0.08	0.05	[−0.02, 0.19]	
Conditional indirect effect				
(W) Burnout-driven self-stigma	Effect	BootSE	BootCI	
− SD	0.21	0.05	[0.11, 0.32]	
Mean	0.15	0.03	[0.09, 0.21]	
+ SD	0.08	0.03	[−0.02, 0.15]	

Note. SE = standard error. Coeff = unstandardized coefficient. X = independent variable; M = mediator variable; Y = dependent variable. Number of bootstrap samples for percentile bootstrap confidence intervals: 5,000.

First, our data indicated that psychological flexibility is positively associated with academic self-efficacy. Psychological flexibility may be related to academic self-efficacy, not only supporting goal-directed behavior but also enhancing cognitive and emotional resources. Kashdan and Rottenberg (2010) suggested that psychologically flexible individuals direct their behaviors toward a valued goal. Engaging their behaviors in personally valued goals, psychologically flexible students may develop a stronger sense of agency and competence. They are more likely to interpret past academic setbacks as learning opportunities rather than failures. Moreover, psychological flexibility involves accepting distressing thoughts and feelings without altering them (Hayes et al., 2012). The capacity to accept and regulate cognitive and emotional states might support students in managing anxiety, frustration, or stress in academic settings. Therefore, through psychological flexibility, the capacity to accept and regulate internal experiences without

judgment and commit to valued actions allows students to engage in academic goals. Prior research supports the notion that psychological flexibility is related to academic self-efficacy (e.g., Valenti & Faraci, 2021; Yamazaki et al., 2025).

Second, consistent with our hypothesis, the observed pattern of indirect associations suggests that well-being literacy may play a role in linking psychological flexibility with academic self-efficacy. Psychological flexibility is associated with both psychological regulation and adaptability to various contextual situations. This regulation and contextual adaptability, in turn, are associated with students' beliefs about their academic self-efficacy. When individuals become more capable of regulating their psychological states (Flaxman et al., 2013; Hayes et al., 2012), they also gain the capacity to comprehend well-being-related communications (Oades, Baker et al., 2021). Kashdan and Rottenberg (2010) argue that individuals with high

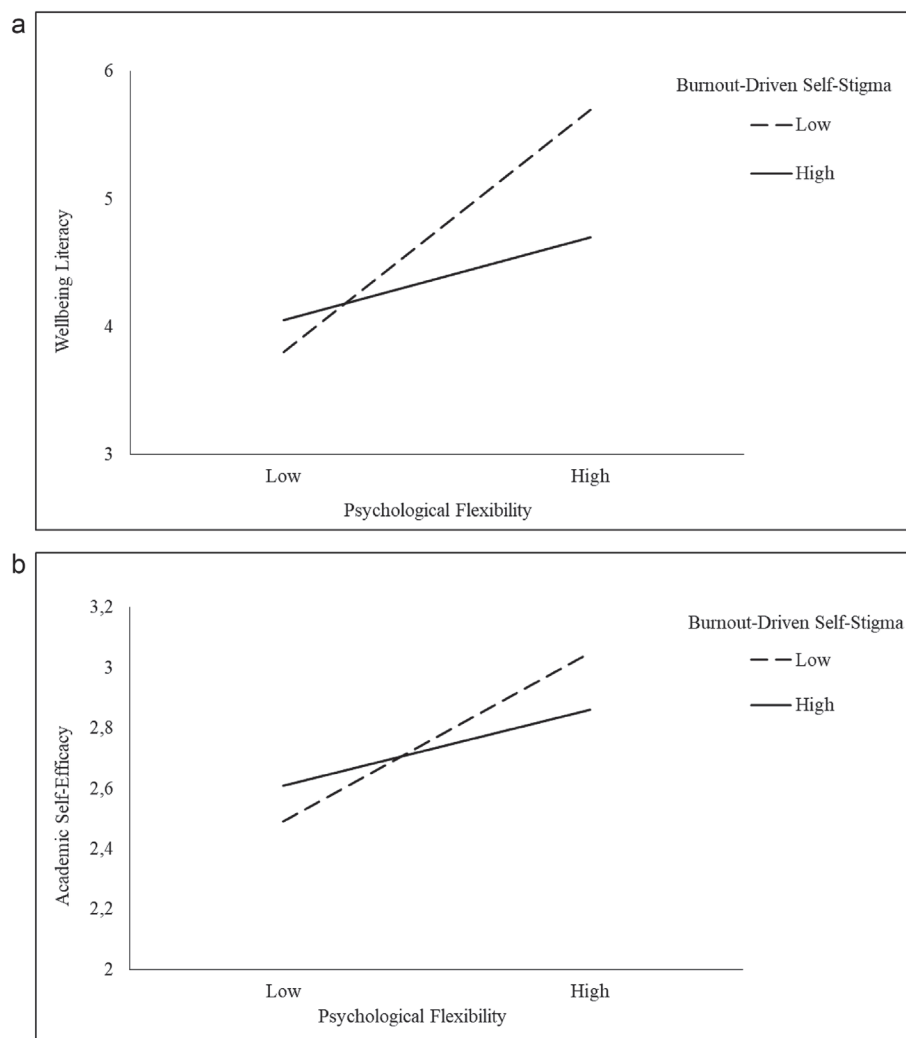


Figure 2. (a) Plot of the relationship between psychological flexibility and well-being literacy at two levels of burnout-driven self-stigma. (b) Plot of the relationship between psychological flexibility and academic self-efficacy at two levels of burnout-driven self-stigma.

psychological flexibility tolerate and adjust their thoughts and feelings. Such regulation of thought and feelings may be related to well-being literacy, such as engaging in well-being-related concepts, vocabulary, and knowledge. In addition, the contextual self-adaptability (Luoma et al., 2010; Hayes et al., 2006) inherent in psychological flexibility strengthens well-being literacy by allowing individuals to adjust their well-being-related vocabulary and expressions according to the demands of varying academic or cultural environments. These notions coincide with those of Oades, Baker et al. (2021), emphasizing that well-being literacy includes the capacity to reposition communication, modify language use based on context, and recognize cultural differences. For example, the concept of “well-being” and the language-based strategies for supporting it may vary across disciplines or cultural settings. In such situations,

psychologically flexible individuals are more adaptive to recognize these contextual differences and adapt their language-based well-being enhancement strategies accordingly (Hayes et al., 2006; Kashdan & Rottenberg, 2010). Students who intentionally use well-being-related language capacity may reframe academic challenges more adaptively with the capacity to identify well-being-related opportunities within their environments (Hou et al., 2021). Together, when channeled through well-being literacy, the regulatory and contextual adaptability functions of psychological flexibility are associated with students’ ability to deal with academic demands, thereby enhancing academic self-efficacy.

Third, the interaction effect of burnout-driven self-stigma and psychological flexibility on both well-being literacy and academic self-efficacy is significant. Supporting these, conditional direct and indirect effect results suggested that

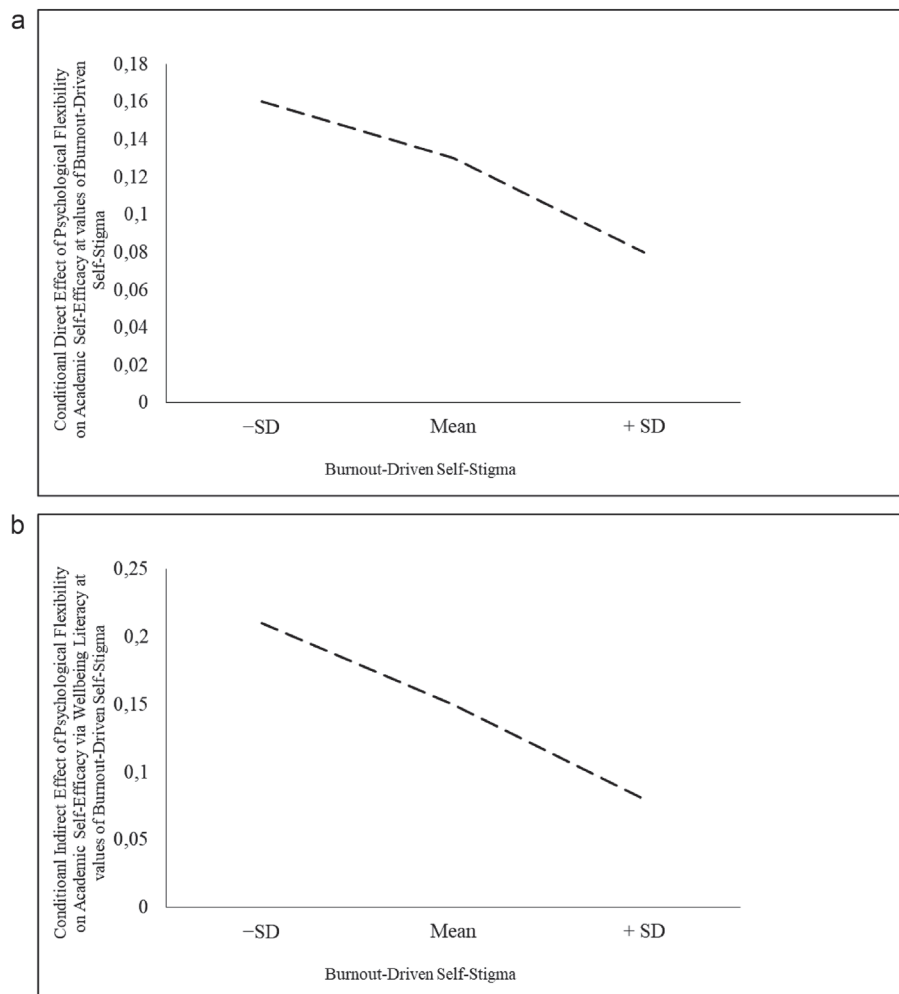


Figure 3. (a) Plot of the conditional direct effect of psychological flexibility on academic self-efficacy at values of the burnout-driven self-stigma. (b) Plot of the conditional indirect effect of psychological flexibility through well-being literacy on academic self-efficacy at values of the burnout-driven self-stigma.

burnout-driven self-stigma diminishes the positive direct effect of psychological flexibility on academic self-efficacy and the indirect effect through well-being literacy.

While psychological flexibility enables adaptive and regulative functioning (Hayes et al., 2006), this capacity did not translate into higher academic self-efficacy when burnout-driven self-stigma is elevated. Individuals experiencing self-stigma are less able to engage flexibly with their emotional and cognitive experiences (Masuda et al., 2009, 2011). They may, instead, interact with stigmatizing thoughts, which in turn limit their belief in academic self-efficacy (Beasley et al., 2020; Mills et al., 2020; Pasmatz et al., 2016). The study conducted by Jeffords et al. (2020) suggests that psychological flexibility with stigmatizing thoughts is associated with college self-efficacy beliefs. Therefore, the negative relationship between burnout-driven self-stigma and psychological flexibility may be

related to students making less use of their academic self-efficacy.

In terms of indirect effects, burnout-driven self-stigma can diminish the communicative processes necessary for developing well-being literacy by inhibiting engagement in well-being-related language use (Favre & Richard-Lepouriel, 2023; Oades, Jarden, et al., 2021). Our conditional indirect effects results showed that students experiencing burnout-driven self-stigma create barriers to meaningful engagement with well-being-related communication. Students with higher well-being literacy are more likely to manage the language used in expressing well-being-related experiences. This capacity to transform the well-being opportunities in their internal or external environment into meaningful well-being outcomes (Oades, 2017) is limited by burnout-driven self-stigma, particularly concerning psychological flexibility and academic self-efficacy. However, no

significant interaction effect was found between well-being literacy and burnout-driven self-stigma concerning academic self-efficacy. This could indicate that while burnout-driven self-stigma is related to both direct and indirect pathways, it may not necessarily change how well-being literacy directly associated with academic self-efficacy. It is also worth noting that the interaction and conditional effect sizes of burnout-driven self-stigma are generally low or moderate. This may stem from that burnout is not perceived enough as an internally attributed condition that can lead to higher levels of self-stigmatization (Bianchi et al., 2016). Supporting this, our data revealed that burnout-driven self-stigma was not high, with a mean score of 3.68 on a scale from 1 to 7.

Implications

This study investigated the associations between psychological flexibility, well-being literacy, burnout-driven self-stigma, and academic self-efficacy among Turkish higher education students. The findings contribute to the growing literature by demonstrating that psychological flexibility significantly explains academic self-efficacy. Moreover, the study extends existing knowledge by examining well-being literacy and burnout-driven self-stigma – two relatively underexplored constructs in this context – as mediator and moderator variables, respectively.

Importantly, the results indicate that while burnout-driven self-stigma is not commonly internalized, it plays a significant role in explaining the variance in well-being literacy, particularly when interacting with psychological flexibility. In line with suggestions from previous studies (e.g., Hou et al., 2021; Oades, Jarden, et al., 2021), this research indicates that the observed pattern of associations is more consistent with well-being literacy serving as a mediator rather than as a moderator within the proposed model. However, further research is needed to explore how these relationships unfold at the subdimensional level.

This study also affirms the proposition by Oades et al. (2020) that well-being literacy could serve a critical role in positive psychology interventions. Based on these findings, future research could incorporate well-being literacy into interventions targeting psychological flexibility, self-stigma, and academic self-efficacy. Moreover, the model presented in this study could be tested using different forms of internalized, nonclinical stigma and more diverse research designs, such as longitudinal or experimental approaches.

Limitations

Despite its contributions, this study has several limitations that should be acknowledged. First, the sample was predominantly composed of female students, with a substantial proportion enrolled in psychology and nursing programs. This

gender and disciplinary imbalance limits the generalizability of the findings to broader student populations. On the other hand, the gender variable was not included in the analyses as a covariate, since there was no significant difference between women and men in terms of levels of psychological flexibility, well-being literacy, burnout-driven self-stigma, and academic self-efficacy. Future studies should aim for more diverse and representative samples by balancing gender distribution and including students from a wider range of academic disciplines. Second, participants were selected using convenience sampling, and the data collection process was carried out through online platforms; this may lead to sampling bias, limiting the generalizability of the findings. In addition, while the study examined the variables at a general level, it did not investigate the specific sub-dimensions of psychological flexibility, well-being literacy, or academic self-efficacy. A more detailed analysis may yield additional evidence about the mechanisms underlying these relationships. Finally, the cross-sectional design of the present study precludes any causal interpretations. Although the proposed moderated mediation model was theoretically grounded, the temporal ordering assumed in the model cannot be established with cross-sectional data. It is therefore important to acknowledge that alternative model specifications and reverse relationships among the variables may also be theoretically plausible. Future longitudinal or experimental research is recommended to clarify the directionality of these associations and to test competing model structures.

References

- Ateş, B., & Sağar, M. E. (2024). Investigation of Academic Success, Psychological Flexibility and Self-efficacy in Teacher Candidates. *Language Teaching and Educational Research*, 7(1), 14–23. <https://doi.org/10.35207/ater.1292374>
- Bandura, A. (1986). Fearful expectations and avoidant actions as coeffects of perceived self-inefficacy. *American Psychologist*, 41(12), 1389–1391. <https://doi.org/10.1037/0003-066X.41.12.1389>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents: Vol. 5. Adolescence and education* (pp. 307–337). Information Age Publishing.
- Barton, D. (2007). *Literacy: An introduction to the ecology of written language* (2nd ed.). Blackwell.
- Beasley, L., Kiser, R., & Hoffman, S. (2020). Mental health literacy, self-efficacy, and stigma among college students. *Social Work in Mental Health*, 18(6), 634–650. <https://doi.org/10.1080/15332985.2020.1832643>
- Bharadwaj, P., Pai, M. M., & Suziedelyte, A. (2017). Mental health stigma. *Economics Letters*, 159, 57–60. <https://doi.org/10.1016/j.econlet.2017.06.028>
- Bianchi, R., Verkuilen, J., Brisson, R., Schonfeld, I. S., & Laurent, E. (2016). Burnout and depression: Label-related stigma, help-seeking, and syndrome overlap. *Psychiatry Research*, 245, 91–98. <https://doi.org/10.1016/j.psychres.2016.08.025>

- Bond, F. W., Hayes, S. C., & Barnes-Holmes, D. (2006). Psychological flexibility, ACT, and organizational behavior. *Journal of Organizational Behavior Management*, 26(1–2), 25–54. https://doi.org/10.1300/J075v26n01_02
- Cazan, A. M. (2015). Learning motivation, engagement and burnout among university students. *Procedia-Social and Behavioral Sciences*, 187, 413–417. <https://doi.org/10.1016/j.sbspro.2015.03.077>
- Chan, K. K., & Mak, W. W. (2015). Attentional bias associated with habitual self-stigma in people with mental illness. *PLoS One*, 10(7), 1–13. <https://doi.org/10.1371/journal.pone.0125545>
- Chng, J., Burns, R., Murray, K., & Crisp, D. (2022). A community mental health and well-being literacy study among Australian adults. *Journal of Happiness and Health*, 2(1), 12–30. <https://doi.org/10.47602/johah.v2i1.13>
- Corrigan, P. W., & Watson, A. C. (2002). Understanding the impact of stigma on people with mental illness. *World Psychiatry*, 1(1), 16–20.
- Corrigan, P. W., Watson, A. C., & Barr, L. (2006). The self-stigma of mental illness: Implications for self-esteem and self-efficacy. *Journal of Social and Clinical Psychology*, 25(8), 875–884. <https://doi.org/10.1521/jscp.2006.25.8.875>
- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, 1(1), 16–19. <https://doi.org/10.1037/1082-989X.1.1.16>
- Demirtaş, A. S. (2020). Cognitive flexibility and mental well-being in Turkish adolescents: The mediating role of academic, social and emotional self-efficacy. *Anales de psicología/Annals of Psychology*, 36(1), 111–121. <https://doi.org/10.6018/analesps.336681>
- Docksey, A. E., Gray, N. S., Davies, H. B., Simkiss, N., & Snowden, R. J. (2022). The Stigma and Self-Stigma Scales for attitudes to mental health problems: Psychometric properties and its relationship to mental health problems and absenteeism. *Health Psychology Research*, 10(2), 1–13. <https://doi.org/10.52965/001c.35630>
- Economou, M., Bechraki, A., & Charitsi, M. (2020). The stigma of mental illness: A historical overview and conceptual approaches. *Psychiatrike=Psychiatriki*, 31(1), 36–46. <https://doi.org/10.22365/jpsych.2020.311.36>
- Falzon, R. (2019). Literacy and well-being. In S. Vella, R. Falzon, & A. Azzopardi (Eds.), *Perspectives on well-being* (pp. 79–95). Brill. https://doi.org/10.1163/9789004394179_007
- Favre, S., & Richard-Lepouriel, H. (2023). Self-stigma and bipolar disorder: A systematic review and best-evidence synthesis. *Journal of Affective Disorders*, 335, 273–288. <https://doi.org/10.1016/j.jad.2023.05.041>
- Field, A. (2013). *Discovering statistics using IBM SPSS Statistics* (4th ed.). Sage.
- Flaxman, P. E., Bond, F. W., & Livheim, F. (2013). *The mindful and effective employee: An acceptance and commitment therapy training manual for improving well-being and performance*. New Harbinger Publications.
- García-Álvarez, D., Hernández-Lalinde, J., & Cobo-Rendón, R. (2021). Emotional intelligence and academic self-efficacy in relation to the psychological well-being of university students during COVID-19 in Venezuela. *Frontiers in Psychology*, 12, Article 759701. <https://doi.org/10.3389/fpsyg.2021.759701>
- Gervas, R., Bueno, G., García-Ullán, L., de La Mata, R., & Roncero, C. (2020). Is there a stigma toward mental illness among medical students? A systematic review of the 1997–2018 literature. *Journal of Evolution of Medical and Dental Sciences*, 9(5), 299–303. <https://doi.org/10.14260/jemds/2020/67>
- Gloster, A. T., Block, V. J., Klotsche, J., Villanueva, J., Rinner, M. T. B., Benoy, C., Walter, M., Karekla, M., & Bader, K. (2021). Psy-Flex: A contextually sensitive measure of psychological flexibility. *Journal of Contextual Behavioral Science*, 22, 13–23. <https://doi.org/10.1016/j.jcbs.2021.09.001>
- Goffman, E. (2009). *Stigma: Notes on the management of spoiled identity*. Simon & Schuster.
- Greco, A., Annovazzi, C., Palena, N., Camussi, E., Rossi, G., & Steca, P. (2022). Self-efficacy beliefs of university students: Examining factor validity and measurement invariance of the new academic self-efficacy scale. *Frontiers in Psychology*, 12, Article 498824. <https://doi.org/10.3389/fpsyg.2021.498824>
- Hayes, A. F. (2013). *Mediation, moderation, and conditional process analysis. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford.
- Hayes, S. C., Pistorello, J., & Levin, M. E. (2012). Acceptance and commitment therapy as a unified model of behavior change. *The Counseling Psychologist*, 40(7), 976–1002. <https://doi.org/10.1177/0011000012460836>
- Hayes, S. C., Strosahl, K. D., and Wilson, K. G. (2011). *Acceptance and commitment therapy: The process and practice of mindful change*. Guilford.
- Hayes, S., Luoma, J., Bond, F., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes, and outcomes. *Behaviour Research and Therapy*, 44(1), 1–25. <https://doi.org/10.1016/j.brat.2005.06.006>
- Høigaard, R., Kovač, V. B., Øverby, N. C., & Haugen, T. (2015). Academic self-efficacy mediates the effects of school psychological climate on academic achievement. *School Psychology Quarterly*, 30(1), 64–74. <https://doi.org/10.1037/spq0000056>
- Hou, H., Chin, T.-C., Slemp, G. R., & Oades, L. G. (2021). Well-being literacy: Conceptualization, measurement, and preliminary empirical findings from students, parents and school staff. *International Journal of Environmental Research and Public Health*, 18(4), Article 1485. <https://doi.org/10.3390/ijerph18041485>
- İlhan, M., & Çetin, B. (2014). LISREL ve AMOS programları kullanılarak gerçekleştirilen yapısal eşitlik modeli (yem) analizlerine ilişkin sonuçların karşılaştırılması [Comparing the Analysis Results of the Structural Equation Models (SEM) Conducted Using LISREL and AMOS]. *Journal of Measurement and Evaluation in Education and Psychology*, 5(2), 26–42. <https://doi.org/10.21031/epod.31126>
- Jeffords, J. R., Bayly, B. L., Bumpus, M. F., & Hill, L. G. (2020). Investigating the relationship between university students' psychological flexibility and college self-efficacy. *Journal of College Student Retention: Research, Theory & Practice*, 22(2), 351–372. <https://doi.org/10.1177/1521025117751071>
- Jerusalem, M., & Schwarzer, R. (1981). Fragebogen zur Erfassung von „Selbstwirksamkeit“ [Questionnaire for the Assessment of Self-Efficacy]. In R. Schwarzer (Ed.), *Skalen zur Befindlichkeit und Persönlichkeit* [Scales for Well-Being and Personality] (Forschungsbericht No. 5). Freie Universität Berlin, Institut für Psychologie.
- Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review*, 30(7), 865–878. <https://doi.org/10.1016/j.cpr.2010.03.001>
- Klinefelter, Z., Sinclair, R. R., Britt, T. W., Sawhney, G., Black, K. J., & Munc, A. (2021). Psychosocial safety climate and stigma: Reporting stress-related concerns at work. *Stress and Health*, 37(3), 488–503. <https://doi.org/10.1002/smi.3010>
- Lemon, N., O'Brien, S., Later, N., Britton, S., & Prendergast, J. (2025). Pedagogy of belonging: Cultivating well-being literacy in higher education. *Higher Education*, 90(1), 199–213. <https://doi.org/10.1007/s10734-024-01317-8>
- Liu, R. D., Wang, J., Star, J. R., Zhen, R., Jiang, R. H., & Fu, X. C. (2018). Turning potential flexibility into flexible performance: Moderating effect of self-efficacy and use of flexible cognition.

- Frontiers in Psychology*, 9, Article 646. <https://doi.org/10.3389/fpsyg.2018.00646>
- Livingston, J. D., & Boyd, J. E. (2010). Correlates and consequences of internalized stigma for people living with mental illness: A systematic review and meta-analysis. *Social Science & Medicine*, 71(12), 2150–2161. <https://doi.org/10.1016/j.socscimed.2010.09.030>
- Luoma, J. B., & Platt, M. G. (2015). Shame, self-criticism, self-stigma, and compassion in acceptance and commitment therapy. *Current Opinion in Psychology*, 2, 97–101. <https://doi.org/10.1016/j.copsyc.2014.12.016>
- Luoma, J. B., Hayes, S. C., & Walser, R. D. (2010). *Learning ACT: An acceptance and commitment therapy skills training manual for therapists*. New Harbinger Publications.
- Masuda, A., Anderson, P. L., Wendell, J. W., Chou, Y. Y., Price, M., & Feinstein, A. B. (2011). Psychological flexibility mediates the relations between self-concealment and negative psychological outcomes. *Personality and Individual Differences*, 50(2), 243–247. <https://doi.org/10.1016/j.paid.2010.09.037>
- Masuda, A., Hill, M. L., Morgan, J., & Cohen, L. L. (2012). A psychological flexibility-based intervention for modulating the impact of stigma and prejudice: A descriptive review of empirical evidence. *Psychology, Society, & Education*, 4(2), 211–223. <https://doi.org/10.25115/psye.v4i2.492>
- Masuda, A., Price, M., Anderson, P. L., Schmertz, S. K., & Calamaras, M. R. (2009). The role of psychological flexibility in mental health stigma and psychological distress for the stigmatizer. *Journal of Social and Clinical Psychology*, 28(10), 1244–1262. <https://doi.org/10.1521/jscp.2009.28.10.1244>
- Matteucci, M. C., & Soncini, A. (2021). Self-efficacy and psychological well-being in a sample of Italian university students with and without specific learning disorder. *Research in Developmental Disabilities*, 110, Article 103858. <https://doi.org/10.1016/j.ridd.2021.103858>
- Mills, H., Mulfinger, N., Raeder, S., Rüsche, N., Clements, H., & Scior, K. (2020). Self-help interventions to reduce self-stigma in people with mental health problems: A systematic literature review. *Psychiatry Research*, 284, Article 112702. <https://doi.org/10.1016/j.psychres.2019.112702>
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89(6), 852–863. <https://doi.org/10.1037/0022-3514.89.6.852>
- Oades, L. G. (2017). Well-being literacy: The missing link in positive education. In M. White, G. Slemp, & A. Murray (Eds.), *Future directions in well-being* (pp. 169–173). Springer. https://doi.org/10.1007/978-3-319-56889-8_29
- Oades, L. G., Baker, L. M., Francis, J. J., & Taylor, J. A. (2021). Well-being literacy and positive education. In M. L. Kern & M. L. Wehmeyer (Eds.), *The Palgrave handbook of positive education* (pp. 325–343). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-64537-3_13
- Oades, L. G., Jarden, A., Hou, H., Ozturk, C., Williams, P., R. Slemp, G., & Huang, L. (2021). Well-being literacy: A capability model for well-being science and practice. *International Journal of Environmental Research and Public Health*, 18(2), Article 719. <https://doi.org/10.3390/ijerph18020719>
- Oades, L. G., Lemon, N., & Francis, J. (2025). What Is the theory underpinning well-being literacy? In L. G. Oades, N. Lemon, & J. Francis (Eds.), *Wellbeing literacy* (pp. 9–18). Routledge.
- Oades, L. G., Ozturk, C., Hou, H., & Slemp, G. R. (2020). Well-being literacy: A language-use capability relevant to well-being outcomes of positive psychology intervention. *The Journal of Positive Psychology*, 15(5), 696–700. <https://doi.org/10.1080/17439760.2020.1789711>
- Organisation for Economic Co-operation and Development (OECD). (2016). *The survey of adult skills: Reader's companion* (2nd ed.). OECD Publishing. <https://doi.org/10.1787/9789264258075-en>
- Pasmatzis, E., Koulterakis, G., & Giaglis, G. (2016). Self-stigma, self-esteem and self-efficacy of mentally ill. *Psychiatrike = Psychiatriki*, 27(4), 243–252. <https://doi.org/10.22365/jpsych.2016.274.243>
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications*. Prentice Hall.
- Raskin, J. D. (2012). Evolutionary constructivism and humanistic psychology. *Journal of Theoretical and Philosophical Psychology*, 32(2), 119–133. <https://doi.org/10.1037/a0025158>
- Ritsher, J. B., Otilingam, P. G., & Grajales, M. (2003). Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Research*, 121(1), 31–49. <https://doi.org/10.1016/j.psychres.2003.08.008>
- Sevari, K. (2020). The mediating role of academic, social and emotional self-efficacy in the relationship between cognitive flexibility and psychological well-being. *Rooyesh-e-Ravanshe-nasi Journal (RRJ)*, 9(5), 39–50. Retrieved from <http://frooyesh.ir/article-1-2010-en.html>
- Smith-Palmer, J., Cerri, K., Sbarigia, U., Chan, E. K. H., Pollock, R. F., Valentine, W. J., & Bonroy, K. (2020). Impact of stigma on people living with chronic hepatitis B. *Patient Related Outcome Measures*, 11, 95–107. <https://doi.org/10.2147/PROM.S226936>
- Valenti, G. D., & Faraci, P. (2021). Predicting university adjustment from coping styles, self-esteem, self-efficacy, and personality: Findings from a survey in a sample of Italian students. *European Journal of Investigation in Health, Psychology and Education*, 11(3), 894–907. <https://doi.org/10.3390/ejihpe11030066>
- Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, 53(3), 325–337. <https://doi.org/10.1037/0022-0167.53.3.325>
- Whorf, B. L. (1956). *Language, thought, and reality*. In J. B. Carroll (Ed.), *Selected writings of Benjamin Lee Whorf*. MIT Press.
- Wong, C. C. Y., Knee, C. R., Neighbors, C., & Zvolensky, M. J. (2019). Hacking stigma by loving yourself: A mediated-moderation model of self-compassion and stigma. *Mindfulness*, 10(3), 415–433. <https://doi.org/10.1007/s12671-018-0984-2>
- Yamazaki, Y., Toyama, M., & Wijayanti, M. D. (2025). Flexible thinking and its influence on academic satisfaction, academic self-efficacy, and study time: A case of Indonesian undergraduate students. *Journal of Public and Private Management*, 11(1), 1–30.
- Ye, L., Posada, A., & Liu, Y. (2018). The moderating effects of gender on the relationship between academic stress and academic self-efficacy. *International Journal of Stress Management*, 25(S1), 56–61. <https://doi.org/10.1037/str0000089>
- Yıldırım, M., Aziz, I. A. (2023). Turkish validation of the Psy-Flex Scale and its association with resilience and social support. *Environment and Social Psychology*, 8(1), Article 1513 <https://doi.org/10.18063/esp.v8.i1.1513>
- Yıldırım, M., Dilekçi, Ü., Aksoy, Ş., & Mohammed Abdullah Alkhulayfi, A. (2025). Investigating the impact of well-being literacy on psychological adjustment problems, life satisfaction, and psychological well-being in Turkish undergraduate students: The mediating role of optimism. *BMC Psychology*, 13(1), 1–10. <https://doi.org/10.1186/s40359-025-03618-8>
- Yılmaz, M., Gürçay, D., & Ekici, G. (2007). Akademik öz yeterlik ölçeğinin Türkçe'ye uyarlanması [Adaptation of the Academic Self-Efficacy Scale to Turkish]. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 33, 253–259.
- Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25(1), 82–91. <https://doi.org/10.1006/ceps.1999.1016>

History

Received June 12, 2025

Accepted June 8, 2026

Published online July 28, 2026

Acknowledgments

We thank all participants who voluntarily contributed to this study.

Open Science

The data and material are available on request from the author(s).

Publication Ethics

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. This study was approved by the Ethics Review Board of Ağrı Ibrahim Çeçen University on 28 February 2025 (Approval No. E.127603). Consent was obtained from all participants included in the study.

Authorship

Study conception/design: ŞA, MY; Methodology: ŞA, AK; Data collection: AK, ŞA; Formal analysis: MY, ŞA; Writing – original draft preparation: ŞA, AK, MY; Review and editing: ŞA, MY, AK, AMAA, JGS. All authors read and agreed to the published version of the

manuscript. During the preparation of this work, the authors used the GPT-5 language model in order to enhance language readability, grammar, and style. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

ORCID

Şeyhmus Aksoy

 <https://orcid.org/0000-0001-6637-4126>

Ayşe Konuk

 <https://orcid.org/0000-0002-6220-7715>

Abdulmohsen Mohammed Abdullah Alkhulayfi

 <https://orcid.org/0009-0009-7333-8161>

Juan Gómez-Salgado

 <https://orcid.org/0000-0001-9053-7730>

Murat Yıldırım

 <https://orcid.org/0000-0003-1089-1380>

Dr Murat Yıldırım

Department of Psychology

Faculty of Science and Letters

Agri Ibrahim Cecen University

Firat Mahallesi Yeni Üniversite Caddesi No: 2 AE/1

04100 Merkez, Ağrı

Turkey

muratyildirim@agri.edu.tr