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Everyday discrimination and life satisfaction: Turkish adaptation of the Everyday Discrimination Scale (EDS) and the mediating role of depression

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Abstract

Background Perceived discrimination is recognized as a chronic psychosocial stressor associated with adverse mental health outcomes and reduced well-being. However, the psychological mechanisms linking discrimination to life satisfaction remain insufficiently explored in non-Western contexts, and validated measures of everyday discrimination in Türkiye are limited. This study aimed to adapt the Everyday Discrimination Scale (EDS) into Turkish and examine whether depressive symptoms are associated with the link between perceived discrimination and life satisfaction.

Methods The research consisted of two studies. Study 1 examined the psychometric properties of the Turkish version of the nine-item EDS using exploratory and confirmatory factor analyses. Study 2 tested a mediation model examining whether depressive symptoms play a mediating role in the relationship between perceived discrimination and life satisfaction among undergraduate students enrolled in a faculty of education. Mediation analyses were conducted using bootstrapping procedures while controlling for demographic variables.

Results The Turkish EDS demonstrated a single-factor structure with good reliability and acceptable model fit. Perceived discrimination was positively associated with depressive symptoms and negatively associated with life satisfaction. Mediation analysis indicated a significant indirect effect of perceived discrimination on life satisfaction through depressive symptoms.

Keywords Everyday discrimination, Depression, Life satisfaction, Mediation model, Scale adaptation

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Introduction

Everyday social interactions can become a psychological burden when people repeatedly experience forms of unfairness, such as disrespect, exclusion, or discrimination. In a broad sense, discrimination refers to unfair or poorer treatment based on personal characteristics such as race, ethnicity, sex, religion, or age [1]. *Everyday discrimination*, however, refers more specifically to routine and recurrent interpersonal mistreatment in ordinary settings, including being treated with less courtesy or respect, receiving poorer service, being insulted, or being treated as if one is dishonest or inferior [2]. This distinction is important because everyday discrimination captures chronic and cumulative experiences that may not appear as major life events but can nevertheless become persistent psychosocial stressors.

Perceived discrimination is recognized as a social determinant of health and has been associated with physical health, mental health, and well-being outcomes [3–5]. Unlike acute traumatic events, everyday discrimination may become embedded in repeated social interactions and broader institutional or structural practices [6]. From a psychological perspective, such experiences may threaten belonging, self-esteem, personal value, and social identity, thereby increasing psychological strain and vulnerability to depressive symptoms [7–10]. Empirical studies across different cultural contexts support this concern. Meta-analytic evidence indicates that perceived discrimination is negatively associated with psychological well-being [9], and population-based studies have linked discrimination with lower life satisfaction, psychological distress, depressive symptoms, anxiety disorders, suicidal ideation, and psychiatric disorders across diverse groups [11–14].

Despite this robust empirical evidence, the mechanisms through which everyday discrimination is associated with broader evaluations of life, such as life satisfaction, remain insufficiently specified [9, 15]. Although the relationship between perceived discrimination and mental health problems is well documented, the psychological processes connecting everyday discrimination to life satisfaction require clearer theoretical grounding. The minority stress model proposes that members of stigmatized groups are exposed to chronic social stressors, including discrimination, that increase vulnerability to psychological distress and mental health problems [16]. Complementing this view, the psychological mediation framework suggests that distal social stressors may influence well-being through proximal emotional and cognitive processes such as rumination, threat appraisal, and depressive symptoms [17]. Building on these frameworks, depressive symptoms can be conceptualized as a potential explanatory pathway linking

everyday discrimination to life satisfaction, rather than as a definitive causal mechanism.

Consistent with the literature on well-being, life satisfaction reflects a global cognitive judgment about individual's life, whereas depressive symptoms reflect emotional distress and negative affective functioning [18]. Therefore, depressive symptoms are examined as a possible statistical mediator in the association between everyday discrimination and life satisfaction, rather than as evidence of a definitive causal mechanism. Previous research has shown that depressive symptoms are associated with lower life satisfaction and well-being [19, 20], and empirical studies have begun to support models linking discrimination, depressive symptoms, and life satisfaction [15, 21, 22]. The extent to which these associations apply in non-Western contexts remains unclear, because discrimination experiences and psychological responses may be shaped by cultural norms, social hierarchies, and local patterns of group relations [23, 24].

Present study

Türkiye presents an important context for examining everyday discrimination because of its sociocultural diversity and evolving demographic landscape. Research conducted in Türkiye has documented discrimination-related experiences among groups differentiated by ethnicity, religion, gender, sexual orientation, disability status, and refugee status [25–28]. However, many local studies are group-specific, and the broader assessment of everyday discrimination across different Turkish-speaking populations remains limited by the lack of validated instruments. Specifically, there is currently no validated adaptation of the nine-item Everyday Discrimination Scale for the general adult population residing in Türkiye. Existing Turkish-language work has focused on transgender and gender diverse people [29], which limits opportunities to assess routine discrimination experiences across more diverse demographic groups and to compare Turkish findings with international research.

A second gap concerns the limited evidence on how everyday discrimination is associated with life satisfaction in the Turkish context. Depressive symptoms have been proposed as a possible mediating variable linking discrimination to reduced life satisfaction [9, 15], but direct empirical tests of this association in Türkiye remain scarce. Examining this issue is important because the sources, meanings, and psychological consequences of everyday discrimination may be shaped by social relations, cultural expectations, and institutional conditions. Accordingly, the present study combines a Turkish adaptation of the EDS with a cautious cross-sectional examination of whether depressive symptoms have a mediating role in the association between everyday discrimination and life satisfaction.

Addressing these critical gaps, the present research was conducted in two stages.

Study 1

The primary aim of Study 1 was to adapt the nine-item Everyday Discrimination Scale (EDS; [2]) to Turkish culture and examine its psychometric properties in a Turkish adult sample. Therefore, Study 1 aimed to: (a) translate and culturally adapt the EDS for use among adults living in Türkiye, (b) examine the scale's factor structure through exploratory factor analysis (EFA) and confirmatory factor analyses (CFA), and (c) assess internal consistency and split-half reliability. Based on previous validation studies of the EDS, the following hypothesis was tested for Study 1:

H₁: The Turkish version of the EDS will demonstrate a single-factor structure.

H₂: The Turkish version of the EDS will demonstrate acceptable model fit in CFA.

H₃: The Turkish version of the EDS will demonstrate measurement invariance across gender.

H₄: The Turkish version of the EDS will demonstrate acceptable internal consistency and split-half reliability.

Table 1 Sample 1 and sample 2 sociodemographic characteristics

Characteristic	Study 1 (N=540)		Study 2 (N=270)	
	n	%	n	%
Gender				
Female	326	60.4	127	47
Male	214	39.6	143	53
Ethnicity				
Turk	215	39.8	112	41.5
Kurd	108	20	81	30
Arab	88	16.3	41	15.2
Circassian	47	8.7	15	5.6
Laz	26	4.8	2	0.7
Armenian	19	3.5	5	1.8
Other	37	6.9	14	5.2
Religion affiliation				
Islam	434	80.4	202	74.8
No religious affiliation	64	11.9	56	20.7
Other	42	7.7	12	4.4
Disability status				
Yes	36	6.7	17	6.3
No	504	93.3	253	93.7
Employment status				
Employed	232	43	47	17.4
Unemployed	286	53	223	82.6
Retired	22	4	-	-

Study 2

Building on the validated Turkish version of the EDS from Study 1, Study 2 aimed to test whether depressive symptoms mediate the relationship between perceived everyday discrimination and life satisfaction among undergraduate students in a Faculty of Education. Drawing on the minority stress model [16], the following hypotheses were tested while controlling for key demographic variables (gender, ethnicity, religious affiliation, disability status, and employment status):

H₁: Perceived everyday discrimination negatively and significantly predicts life satisfaction.

H₂: Perceived everyday discrimination positively and significantly predicts depression symptoms.

H₃: Depression symptoms negatively and significantly predict life satisfaction.

H₄: Depression symptoms have a mediating role between perceived everyday discrimination and life satisfaction.

Method

Participants

The first part of the research (Study 1) focused on the adaptation of the Everyday Discrimination Scale (EDS). Participants aged 18 years and older were recruited through an online survey. Data were collected through convenience sampling from volunteer participants living in Türkiye. The final sample consisted of 540 participants (200 for EFA, 340 for CFA, 60.4% female, 39.6% male) aged between 18 and 65 years ($M = 29.81$, $SD = 9.76$). Following the scale adaptation study, the second phase of the research (Study 2) was initiated, in which mediation analysis was conducted to examine the direct and indirect relationships among life satisfaction, depression, and discrimination. To obtain a diverse and representative sample, questionnaires were distributed to students enrolled in faculties of education across various regions of Türkiye. University students represent a socially diverse population and may frequently encounter interpersonal discrimination during early adulthood. Understanding the experiences of future teachers is therefore important for promoting inclusive educational environments [30]. Therefore, sample 2 consisted of undergraduate students ($N = 270$) with a mean age of 23 years ($SD = 4.6$). The inclusion criteria for participation in the study 2 were being between 18 and 30 years of age, having no diagnosed mental health disorders, and being an undergraduate student in a faculty of education. The descriptive statistics for all samples are presented in Table 1.

Ethics

The study procedures were carried out in accordance with the Declaration of Helsinki and approved by Siirt

University Ethics Board (Date 14 June 2024 and decision number 2024/06/01/03). Additionally, all participants took part in the study voluntarily and provided informed consent. They were fully informed about the purpose and scope of the study and were guaranteed the right to withdraw at any time.

Procedure

In the adaptation of Everyday Discrimination Scale (EDS) into Turkish, permission was first obtained from the original developers of the instrument prior to the translation process. Then, each item was translated into Turkish by two experts with PhD qualification in public health and education. Backtranslation procedures were carried out by two experts in English language education. To evaluate the clarity, comprehensibility, and content relevance of the Turkish version of the EDS, expert opinions were obtained from two academics holding doctoral degrees in education and public health. The experts assessed each item in terms of clarity and appropriateness for the Turkish context. Following the expert review, a pilot study was conducted with 50 participants aged 18 years and older (22 males and 28 females). In addition to completing the scale items, participants were asked to rate the clarity and comprehensibility of each item on a Likert-type scale. As a result of the pilot study, Cronbach's alpha correlation coefficient of the EDS was found to be 0.81. As the participants indicated that the items were clear and easy to understand, no modifications were required, and the scale was retained in its original form for the main data collection. Participants included in the pilot study were not included in the main analyses.

For scale adaptation, participants were recruited through convenience sampling. Within the scope of the research, all volunteers living in Türkiye over the age of 18 and anyone who could be reached were included in the research. The data were collected from volunteer participants via Google Forms. Participants were asked to fill out the form by thinking about their own experiences. All participants were assured that their replies would be kept confidential, and they were told that sincere and frank replies were of great importance for the research results as there were no correct or incorrect answers. The data for both EFA and CFA were obtained from the same online survey, and participants were randomly assigned to the EFA ($n = 200$) and CFA ($n = 340$) groups using a simple randomization procedure. In line with the guidelines proposed by Hair et al. [31], which recommend including at least ten participants per scale item, a minimum sample size of 90 participants was determined for the 9-item EDS. The participants filled in the scale in about 5 min.

For the mediation analysis in Study 2, the researcher asked university instructors for permission to collect new

and separate data from undergraduate students during class time. Data were collected online in the classroom through a survey form that included the Demographic Information Form, the Turkish Everyday Discrimination Scale, the Beck Depression Inventory for Primary Care, and the Satisfaction with Life Scale. The participants were informed about the purpose of the study and asked to complete an informed consent form before the scales were distributed. A total of 270 eligible undergraduate students completed the Study 2 survey. It took about 10 min for participants to complete the online scales.

Measures

Demographic information form

The Demographic Information Form developed by the researcher collected data on participants' descriptive characteristics, including age, gender, educational status, ethnic origin, religious affiliation, disability status, and employment status. These variables were used to describe the samples and, in Study 2, to control for demographic characteristics that associated with perceived discrimination, depressive symptoms, and life satisfaction.

Everyday Discrimination Scale (EDS)

The EDS [2], a nine-item self-report measure, has been used to assess experiences of discrimination and unfair treatment in daily life on a 6-point Likert-type scale ranging from never (1) to almost every day (6) with higher mean scores indicating greater perceived discrimination (e.g., "You are treated with less courtesy than other people are", "You are treated with less respect than other people are", "You receive poorer service than other people at restaurants or stores", "You are called names or insulted"). Cronbach's alpha of the original version 0.88 and in this study Cronbach's alpha was 0.85.

Beck Depression Inventory for Primary Care (BDI-PC)

The BDI-PC, developed by Beck et al. [32] and adapted into Turkish by Aktürk et al. [33], was derived from the Beck Depression Inventory (BDI), one of the most widely used self-report instruments for assessing and screening depression. The BDI-PC consists of seven items; each rated on a four-point scale ranging from 0 to 3 and focuses on the cognitive and emotional symptoms of depression. In the Turkish adaptation of the scale, the Cronbach's alpha was reported as 0.85, while the Spearman–Brown coefficient was 0.86 and the Guttman split-half coefficient was 0.82. In the present study, the Cronbach's alpha reliability coefficient of the scale was found to be 0.81.

The satisfaction with life scale

To measure undergraduate students' life satisfaction, the present study employed the Turkish version of the

Satisfaction with Life Scale adapted by Dağlı and Baysal [34], which was originally developed by Diener et al. [18]. The Turkish adaptation of the 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), consists of one dimension with a total of five items (e.g. In my most ways my life is close to my ideal, I am satisfied with my life, If I could live my life over, I would change almost nothing.) as in the original version. As a result of the CFA, the fit indices of the scale were at an acceptable level ($\chi^2/df = 1.37$, RMSEA = 0.03, GFI = 0.99, NFI = 0.99, CFI = 0.99). Cronbach's alpha was 0.97. In this study, Cronbach's alpha was found to be 0.88.

Data analysis

Descriptive analyses were conducted to summarize the participants' sociodemographic characteristics using SPSS Statistics 25. In line with the recommendation that EFA and CFA should be conducted in scale adaptation research [35], first these analyses were carried out in scale adaptation study. CFA was conducted to examine the factorial validity of the EDS as part of the adaptation process. CFA analyses were performed using AMOS version 24 with the maximum likelihood estimation method, and multi-group confirmatory factor analysis (MG-CFA) was conducted to test measurement invariance. Model fit was evaluated using the chi-square/degree of freedom (χ^2/df), the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Consistent with recommended cutoff criteria, CFI values above 0.90 and RMSEA and SRMR values below 0.08 and 0.06, respectively and χ^2/df value less than 3 were interpreted as indicating acceptable fit [36, 37]. As recommended by Kenny et al. [38], unstandardized coefficients are reported. For reliability Cronbach's alpha and split-half reliability were examined. Zero order correlations were conducted to examine the relationships among the main study variables [39, 40]. Subsequently, mediation analysis was employed to test the study hypotheses regarding the

direct and indirect relationships among discrimination, depression, and life satisfaction. SPSS PROCESS macro version 4 was employed to analyze mediation, with perceived discrimination as the independent variable and life satisfaction as the dependent variable. The significance of the mediation model was examined using a bias-corrected nonparametric bootstrap procedure with 5,000 resamples to generate 95% confidence intervals (CIs).

Results

Study 1

The first phase of the study aimed to adapt the EDS to Turkish culture. The Kaiser–Meyer–Olkin (KMO) coefficient, calculated to assess sampling adequacy, was found to be 0.864 ($\chi^2 = 683.57$, $p < .01$), indicating that the data were suitable for factor analysis. Furthermore, skewness and kurtosis values showed that the data were normally distributed [31]. EFA identified a single factor, accounting for 65.6% of the total variance. All nine items demonstrated good to excellent factor loadings on this factor, ranging from 0.52 to 0.88. The Cronbach's alpha coefficient for the scale was calculated as 0.83, demonstrating satisfactory internal consistency. CFA was conducted using AMOS 24 to evaluate the factor structure and test the construct validity of the model. The analysis considered several fit indices, including the Goodness of Fit Index (GFI), Incremental Fit Index (IFI), Tucker–Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA). In the initial model, some of the fit indices (TLI = 0.840, IFI = 0.882, CFI = 0.880, RMSEA = 0.112) did not meet the recommended criteria, indicating that the model fit was not acceptable. Therefore, modification indices were examined. The results suggested a covariance between Item 1 and Item 2. Conceptually, these two items capture closely related aspects of interpersonal disrespect in daily social interactions, namely being treated with less courtesy and less respect. A similar covariance between these two items has also been reported in the Turkish adaptation of the eight-item health version of the Everyday Discrimination Scale for healthcare staff [41]. Therefore, allowing their error terms to correlate was theoretically justified and resulted in improved model fit (see Fig. 1). Following this modification, the fit indices (CMIN/df = 2.107; GFI = 0.949; IFI = 0.957; TLI = 0.940; CFI = 0.956; RMSEA = 0.069) indicated that the model demonstrated good level of fit.

Reliability

The internal consistency of the EDS was first assessed using Cronbach's alpha, which was found to be 0.85. In addition, split-half reliability analysis was conducted using the total sample of Study 1 ($N = 540$). For the split-half reliability analysis, the data were divided into two

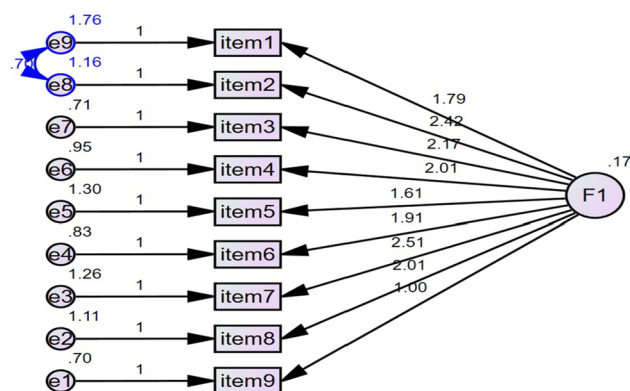


Fig. 1 Single factor model of the EDS

Table 2 Correlation matrix of the major and demographic variables

Variable	1	2	3	4	5	6	7	8
1. Gender								
2. Age	-0.23							
3. Ethnicity	-0.38	0.25						
4. Religion affiliation	0.17	-0.08	0.20**					
5. Disability status	0.12	-0.01	-0.03	0.06				
6. Employment status	0.22**	-0.26**	-0.08	0.13*	-0.06			
7. Perceived discrimination	-0.25**	-0.10	0.28**	-0.10	-0.19**	0.07		
8. Depression symptoms	-0.20**	0.04	0.30**	-0.15*	-0.28**	-0.01	0.52**	
9. Life satisfaction	0.02	0.13	-0.06	0.12	0.14**	-0.002	-0.48**	-0.60**

* $p < .05$ ** $p < .01$ *** $p < .001$

parts. The Spearman-Brown coefficient was calculated as 0.83.

Measurement invariance

Measurement invariance across gender was examined using multi-group confirmatory factor analysis (MG-CFA). First, configural invariance was tested to determine whether the same factor structure was present for female and male participants. The configural model demonstrated acceptable fit. Then, metric invariance was examined by constraining the factor loadings to be equal across groups. Finally, scalar invariance was tested by additionally constraining item intercepts across groups. The results indicated that the constrained model demonstrated acceptable model fit (RMSEA = 0.064, CFI = 0.93, TLI = 0.91, PCLOSE = 0.058), suggesting that the Turkish version of the EDS provides equivalent results across gender groups. These findings support the comparability of discrimination scores between female and male participants.

Study 2

Descriptive statistics and correlations between variables

The skewness and kurtosis values of the study variables were within the acceptable range for normality [37]. Specifically, skewness values ranged from 0.30 to 0.93 and kurtosis values ranged from 0.10 to 0.93, suggesting no substantial deviations from normality. The mean scores were 20.78 (SD = 8.61) for discrimination, 5.43 (SD = 3.81) for depression, and 13.51 (SD = 4.16) for life satisfaction. Table 2 presents zero-order correlations among the study variables. Significant correlations were observed among discrimination, depression and life satisfaction. Regarding the total scores of the three scales, discrimination was positively and significantly correlated with depression ($r = .52, p < .01$) and negatively and significantly correlated with life satisfaction ($r = -.48, p < .01$). Additionally, depression was negatively and significantly correlated with life satisfaction ($r = -.60, p < .01$).

Table 3 Direct and indirect effects of the mediation model

Pathway	Effect	SE	Bootstrap 95%CI	
			LLCI	ULCI
Total effect	-0.187	0.034	-0.254	-0.120
Direct effect	-0.047	0.033	-0.112	0.019
Indirect effect (Discrimination → Depression → Life Satisfaction)	-0.141	0.030	-0.207	-0.085

Preliminary analyses indicated that some demographic variables were significantly associated with the main study variables; therefore, these variables were included as covariates in the mediation analysis. Participants' gender, religion, ethnicity, disability status, employment status were controlled in the model.

Mediating effect of depression

SPSS macro PROCESS developed by Hayes [42] was used to check the mediating role of depressive symptoms in the relationship between perceived discrimination and life satisfaction controlling for gender, ethnicity, disability status, religion, and employment status. The direct, indirect, and total effects are presented in Table 3; Fig. 2. The study results indicated that perceived discrimination was positively associated with depressive symptoms ($b = 0.220, p < .001$). The model explained 32.97% of the variance in depressive symptoms ($R^2 = 0.330, F(6, 263) = 16.15, p < .001$). Perceived discrimination was also found to have a significant total effect on life satisfaction. When depressive symptoms were included in the model, they were found to have a significant negative impact on life satisfaction ($b = -0.640, p < .001$). The model was significant ($R^2 = 0.402, F(7, 262) = 18.81, p < .001$), explaining 40.19% of the variance in life satisfaction. However, the direct effect of perceived discrimination on life satisfaction was not significant after depressive symptoms were included in the analysis ($b = -0.047, p = .163$). Bootstrap analyses showed that the indirect effect of perceived discrimination on life satisfaction mediated by depressive

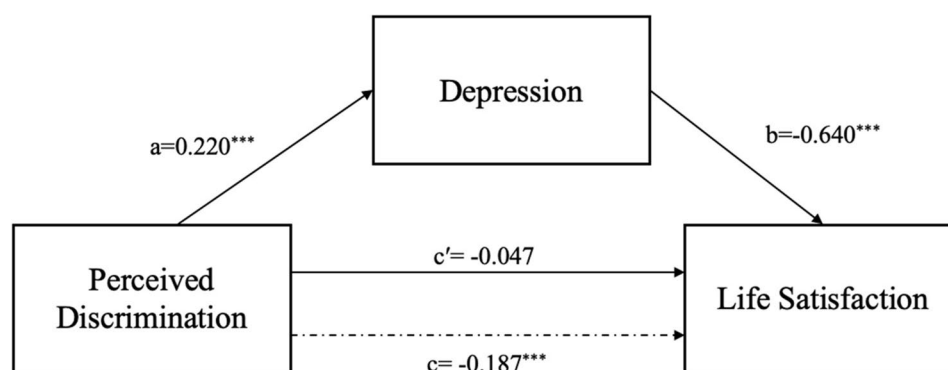


Fig. 2 Mediation model showing the mediating role of depressive symptoms in the relationship between perceived discrimination and life satisfaction. Significant effects are indicated with an asterisk (*)

symptoms was significant ($b = -0.141$, $SE = 0.031$, 95% CI $[-0.207, -0.084]$). Overall, the findings of this study suggest that perceived discrimination is associated with life satisfaction through depressive symptoms. This finding suggests that higher levels of perceived discrimination are associated with lower life satisfaction through increased depressive symptoms.

Discussion

This study, which was divided into two parts (Study 1 and Study 2), examined the psychometric properties of the EDS and its relationship with depression and life satisfaction among undergraduate students. The first part of the study makes an important contribution by confirming the validity and reliability of the EDS in the Turkish context, a widely used measure for assessing everyday and cumulative forms of discrimination that can have a detrimental psychological impact [2, 43, 44]. The results of the EFA and CFA analyses indicated that the nine-item, single-factor structure EDS demonstrated strong internal consistency ($\alpha = 0.85$) and acceptable model fit indices following minor modification, supporting its reliability and validity for assessing everyday discrimination among Turkish speaking adults aged 18–65 in Türkiye. These results are consistent with original scale and global findings from various cultural adaptation contexts [29, 45, 46].

In the second part of the study, the obtained results are consistent with earlier findings demonstrating that perceived discrimination is associated with lower life satisfaction. Previous research with immigrant and ethnic minority groups has consistently shown that minority group members tend to report lower life satisfaction. Furthermore, existing studies suggest that this difference remains significant even when controlling for variables such as income, educational level, age, and gender [e.g. 47, 48]. Building on this body of work, the present study found that higher levels of perceived discrimination were associated with lower life satisfaction among university

students, even when controlling for commonly examined demographic variables and additional factors such as ethnicity, religious affiliation, and disability status. These findings provide further evidence that experiences of discrimination may be linked to individuals' broader evaluations of their lives, potentially through their associations with belonging, self-worth, and perceived social acceptance. Therefore, the present findings extend the existing literature by demonstrating that perceived discrimination is significantly associated with reduced life satisfaction among university students in Türkiye. These results suggest that the adverse effects of discrimination on life satisfaction may be a broader psychosocial outcome affecting diverse cultural contexts.

Beyond its association with life satisfaction, perceived discrimination was also positively related to depressive symptoms. This finding is consistent with theoretical perspectives that conceptualize discrimination as a chronic psychosocial stressor capable of generating long-term psychological distress [49, 50]. According to minority stress theory, individuals who experience discrimination are exposed to persistent social stressors that increase vulnerability to mental health problems [16]. Over time, repeated exposure to discrimination may reduce individuals' psychological resilience and impair their ability to cope with stress [10]. Strong associations between perceived discrimination and depressive symptoms have been well documented in empirical studies conducted in different cultural contexts [15, 51, 52]. For instance, longitudinal research has shown that discrimination predicts increases in depressive symptoms over time among minority populations [51]. Similar patterns have also been observed among youth [53]. The present findings replicate and add these results within the Turkish context, highlighting that discrimination may function as an important risk factor for depression among university students even after controlling for ethnicity and other demographic variables.

The study further demonstrated that depressive symptoms have been found to be associated with the relationship between perceived discrimination and life satisfaction. When depressive symptoms were included in the model, the relationship between discrimination and life satisfaction was no longer significant, indicating that the association between perceived discrimination and life satisfaction appears to be linked to depressive symptoms. This finding aligns with psychological mediation models suggesting that distal social stressors influence well-being through proximal emotional processes [17]. In other words, discrimination may first increase emotional distress, which then shapes individuals' evaluations of their lives. Similar mediation patterns have been reported in previous studies examining the psychological consequences of discrimination. For example, recent longitudinal research found that everyday discrimination predicted higher depressive symptoms over time [22], and research on racial discrimination has shown that discrimination is associated with lower life satisfaction [21]. Meta-analytic evidence has also indicated that psychological distress often explains the relationship between discrimination and well-being outcomes [15]. Additional research suggests that emotional processes such as rumination, emotional dysregulation, and depressive symptoms represent key pathways linking discrimination to mental health problems [52]. By demonstrating the mediating role of depressive symptoms in the Turkish context, the present study provides further support for the potential cross-cultural relevance of these psychological mechanisms.

Limitations

Despite the important contributions of the present study, several limitations should be noted. First, the mediation model tested in the present study was based on cross-sectional data. Although the statistical analyses support the proposed indirect relationships among perceived discrimination, depressive symptoms, and life satisfaction, causal interpretations cannot be made. Longitudinal research designs would be valuable for clarifying the temporal ordering of these variables and for examining whether experiences of perceived discrimination predict changes in psychological well-being over time. Second, perceived discrimination, depressive symptoms, and life satisfaction were assessed using self-report measures, which may introduce response biases such as social desirability; future research could address this limitation by employing multi-method assessments, including combinations of questionnaire-based, observational, and experimental methods. Additionally, while the present study controlled for several important demographic variables, other potentially relevant factors such as socioeconomic status, relationship status may have influenced

the observed relationships. Finally, the sample consisted of undergraduate students enrolled in education faculties, which limits the generalizability of findings to other populations within Türkiye.

Conclusion

The present study contributes to the literature by providing a validated Turkish version of the Everyday Discrimination Scale (EDS) and by examining the associations among perceived everyday discrimination, depressive symptoms, and life satisfaction in a Turkish context. The findings indicate that perceived discrimination is associated with higher levels of depressive symptoms and lower levels of life satisfaction among university students. The results further suggest that the association between perceived discrimination and life satisfaction is linked to depressive symptoms, as the direct relationship was not statistically significant when depressive symptoms were included in the model. These findings are consistent with theoretical perspectives emphasizing the role of proximal psychological processes in understanding how social stressors relate to well-being. In line with the limitations of the study, these findings should be interpreted with caution, particularly given the cross-sectional design. Despite these limitations, the study provides initial evidence that everyday discrimination is associated with both negative psychological functioning and broader evaluations of life in the Turkish context. These findings highlight the importance of considering subtle and routine forms of perceived discrimination in research on mental health and well-being and highlight the importance of developing culturally appropriate measurement tools.

Abbreviations

EDS	Everyday Discrimination Scale
BDI-PC	Beck Depression Inventory for Primary Care
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
MG-CFA	Multi-group Confirmatory Factor Analysis
SD	Standard Deviation
RMSEA	Root Mean Square Error of Approximation
CFI	Comparative Fit Index
GFI	Goodness of Fit Index
SRMR	Standardized root mean square residual
IFI	Incremental Fit Index
TLI	Tucker–Lewis Index
LLCI	Lower Limit of Confidence Interval
ULCI	Upper Limit of Confidence Interval
SE	Standard Error

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Authors' contributions

NK conceived the study, designed the methodology, collected and analyzed the data, and wrote the manuscript.

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Data availability

The datasets analysed during the current study are available from the corresponding author on reasonable request.

Declarations**Ethics approval and consent to participate**

The study procedures were carried out in accordance with the Declaration of Helsinki and approved by the Siirt University Ethics Board (14 June 2024; decision no. 2024/06/01/03). All participants voluntarily participated in the study and provided informed consent. Participants were informed about the purpose and scope of the study and were assured of their right to withdraw at any time.

Consent for publication

Not applicable.

Competing interests

The author declare no competing interests.

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References

- Williams DR, Lawrence JA, Davis BA, Vu C. Understanding how discrimination can affect health. *Health Serv Res*. 2019;54:1374–88. <https://doi.org/10.1111/1475-6773.13222>.
- Williams DR, Yu Y, Jackson JS, Anderson NB. Racial differences in physical and mental health: socio-economic status, stress and discrimination. *J Health Psychol*. 1997;2(3):335–51. <https://doi.org/10.1177/135910539700200305>.
- Hackett RA, Ronaldson A, Bhui K, Steptoe A, Jackson SE. Racial discrimination and health: a prospective study of ethnic minorities in the United Kingdom. *BMC Public Health*. 2020;20:1652. <https://doi.org/10.1186/s12889-020-0979-2-1>.
- Maletta RM, Daly M, Noonan R, Putra IGNE, Vass V, Robinson E. Accumulation of perceived discrimination over time and likelihood of probable mental health problems in UK adults: a longitudinal cohort study. *J Affect Disord*. 2025;369:913–21. <https://doi.org/10.1016/j.jad.2024.09.128>.
- Moradi B, Risco C. Perceived discrimination experiences and mental health of Latina/o American persons. *J Couns Psychol*. 2006;53(4):411–21. <https://doi.org/10.1037/0022-0167.53.4.411>.
- Sue DW, Capodilupo CM, Torino GC, Bucceri JM, Holder AMB, Nadal KL, Esquilin M. Racial microaggressions in everyday life: implications for clinical practice. *Am Psychol*. 2007;62(4):271–86. <https://doi.org/10.1037/0003-066X.62.4.271>.
- Carvalho M, Pelham BW. When fiends become friends: the need to belong and perceptions of personal and group discrimination. *J Personal Soc Psychol*. 2006;90(1):94–108. <https://doi.org/10.1037/0022-3514.90.1.94>.
- Major B, Dovidio JF, Link BG. *The Oxford handbook of stigma, discrimination, and health*. Oxford: Oxford University Press; 2018.
- Schmitt MT, Branscombe NR, Postmes T, Garcia A. The consequences of perceived discrimination for psychological well-being: a meta-analytic review. *Psychol Bull*. 2014;140(4):921–48. <https://doi.org/10.1037/a0035754>.
- Brown TN, Williams DR, Jackson JS, Neighbors HW, Torres M, Sellers SL, Brown KT. Being black and feeling blue: the mental health consequences of racial discrimination. *Race Soc*. 2000;41:208–30. [https://doi.org/10.1016/S1090-9524\(00\)00010-3](https://doi.org/10.1016/S1090-9524(00)00010-3).
- Zhou S, Bai X. Discrimination and psychological wellbeing in later life: Longitudinal evidence from China. *Innov Aging*. 2023;7(1):729. <https://doi.org/10.1093/geroni/igad104.2361>.
- Ikram UZ, Snijder MB, Agyemang C, Schene AH, Stronks K, Kunst AE. Perceived ethnic discrimination and depressive symptoms: the buffering effects of ethnic identity, religion and ethnic social network. *Soc Psychiatry Psychiatr Epidemiol*. 2016;51:679–88. <https://doi.org/10.1007/s00127-016-1186-7>.
- Missinne S, Bracke P. Depressive symptoms among immigrants and ethnic minorities: a population based study in 23 European countries. *Soc Psychiatry Psychiatr Epidemiol*. 2012;47(1):97–109. <https://doi.org/10.1007/s00127-010-0321-0>.
- Pérez DJ, Fortuna L, Alegria M. Prevalence and correlates of everyday discrimination among US Latinos. *J Community Psychol*. 2008;36(4):421–33. <https://doi.org/10.1002/jcop.20221>.
- Pascoe EA, Smart Richman L. Perceived discrimination and health: a meta-analytic review. *Psychol Bull*. 2009;135(4):531–54. <https://doi.org/10.1037/a0016059>.
- Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations. Conceptual issues and research evidence. *Psychol Bull*. 2003;129(5):674–97. <https://doi.org/10.1037/0033-2909.129.5.674>.
- Hatzenbuehler ML. How does sexual minority stigma get under the skin? A psychological mediation framework. *Psychol Bull*. 2009;135(5):707–30. <https://doi.org/10.1037/a0016441>.
- Diener ED, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life scale. *J Pers Assess*. 1985;49(1):71–5. https://doi.org/10.1207/s15327752jpa4901_13.
- Solhaug AK, Oppedal B, Røysamb E. Life Satisfaction, Self-Efficacy, and Depressive Symptoms Among Unaccompanied Asylum-Seeking and Refugee Minors: An Exploratory Study. *Advers Resil Sci*. 2025;6(2):139–54. <https://doi.org/10.1007/s42844-025-00169>.
- Suldo SM, Huebner ES. Does life satisfaction moderate the effects of stressful life events on psychopathological behavior during adolescence? *School Psychol Q*. 2004;19(2):93–105. <https://doi.org/10.1521/scpq.19.2.93.33313>.
- Cénat JM, Mistry S. Racial discrimination and life satisfaction among Black Canadians: the mediating role of social support and the moderating roles of gender and place of birth. *Front Psychol*. 2025;16:1663250. <https://doi.org/10.3389/fpsyg.2025.1663250>.
- Herath B, Zhang X. Everyday discrimination in young adulthood and depressive symptoms at early midlife: the moderating role of parent–child relationships. *Int J Environ Res Public Health*. 2025;26(9):1323. <https://doi.org/10.3390/ijerph22091323>.
- Ikizer EG, Ramírez-Esparza N, Quinn DM. Culture and concealable stigmatized identities: Examining anticipated stigma in the United States and Turkey. *Stigma Health*. 2018;3(2):152. <https://doi.org/10.1037/sah0000082>.
- Liu MA, Prestigiacomo CJ, Karim MF, Ashburn-Nardo L, Cyders MA. Psychological outcomes and culturally relevant moderators associated with events of discrimination among Asian American adults. *Cult Divers Ethn Minor Psychol*. 2024;30(2):363. <https://doi.org/10.1037/cdp0000568>.
- Cevik H. From open doors to closed minds: The transformation of perceptions toward Syrian refugees in Turkey. *J Race Ethn Politics*. 2025;1–27. <https://doi.org/10.1017/rep.2024.35>.
- Kuru N. Syrian children's resilience and families' social-justice-related experiences: a mixed-methods study. *OPUS J Soc Res*. 2025;22(6):1362–77. <https://doi.org/10.26466/opusj.1809848>.
- Selen E, O'Neil ML, Ergün R. Sociospatial dynamics of workplace discrimination against LGBTI+ employees in turkey: systemic implications, discursive patterns, and legal considerations. *Sexuality Res Social Policy*. 2025;27:1–27. <https://doi.org/10.1007/s13178-025-01197-2>.
- Şahin M, Salik H, Berk S, Durmuş M. In the shadow of stigmatization: The psychological effects of having a child with special needs on parents in Türkiye: A qualitative research. *J Pediatr Nurs*. 2025;85:128–34. <https://doi.org/10.1016/j.pedn.2025.07.021>.
- Pak N, Başar F. Turkish adaptation of Everyday Discrimination Scale with a trans and gender diverse sample. *Psychiatric Association of Türkiye Annual Meeting and 3rd International 27th National Clinical Education Symposium*; 2025 Apr 27–30; Türkiye. <https://doi.org/10.5080/kes27.abs114>.
- Beasy K, Kriewaldt J, Trevethan H, Morgan A, Cowie B. Multiperspectivism as a threshold concept in understanding diversity and inclusion for future teachers. *Australian Educational Researcher*. 2020;47(5):893–909. <https://doi.org/10.1007/s13384-019-00376-6>.
- Hair JF Jr, Black WC, Babin BJ, Anderson RE. *Multivariate data analysis*. 8th ed. Boston: Cengage; 2019.
- Beck AT, Guth D, Steer RA, Ball R. Screening for major depression disorders in medical inpatients with the Beck Depression Inventory for Primary Care. *Behav Res Ther*. 1997;35(8):785–91. [https://doi.org/10.1016/S0005-7967\(97\)00025-9](https://doi.org/10.1016/S0005-7967(97)00025-9).
- Aktürk Z, Dağdeviren N, Türe M, Tuğlu C. The reliability and validity analysis of the Turkish version of Beck Depression Inventory for Primary Care. *Turkish J Family Pract*. 2005;9(3):117–22.
- Dağlı A, Baysal N. Adaptation of the Satisfaction with Life Scale into Turkish: The study of validity and reliability. *Electron J Social Sci*. 2016;15(59):1250–62. <https://doi.org/10.17755/esosder.75955>.

35. Cabrera-Nguyen P. Author guidelines for reporting scale development and validation results in the Journal of the Society for Social Work and Research. *J Soc social work Res.* 2010;1(2):99–103. <https://doi.org/10.5243/jsswr.2010.8>.
36. Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct Equation Modeling: Multidisciplinary J.* 1999;6:1–55. <https://doi.org/10.1080/10705519909540118>.
37. Kline RB. Principles and practice of structural equation modeling. 4th ed. New York: Guilford Press; 2023.
38. Kenny DA, Kashy DA, Cook WL. Dyadic data analysis. New York: Guilford Press; 2006.
39. Hayes AF, Preacher KJ. Statistical mediation analysis with a multicategorical independent variable. *Br J Math Stat Psychol.* 2014;67(3):451–70. <https://doi.org/10.1111/bmsp.12028>.
40. Lee H, Turney K. Investigating the relationship between perceived discrimination, social status, and mental health. *Soc Mental Health.* 2012;2(1):1–20. <https://doi.org/10.1177/2156869311433067>.
41. Ulusoy N, Nienhaus A, Brzoska P. Investigating discrimination in the workplace. Translation and validation of the Everyday Discrimination Scale for nursing staff in Germany. *BMC Nurs.* 2023;22(1):196. <https://doi.org/10.1186/s12912-023-01367-w>.
42. Hayes AF. Introduction to mediation, moderation, and conditional process analysis. a regression based approach. New York: Guilford Press; 2013.
43. Bi K, Yeoh D, Jiang Q, Wienk MN, Chen S. Psychological distress and everyday discrimination among Chinese international students one year into COVID-19: a preregistered comparative study. *Anxiety Stress Coping.* 2023;36(6):727–42. <https://doi.org/10.1080/10615806.2022.2130268>.
44. Lewis TT, Cogburn CD, Williams DR. Self-reported experiences of discrimination and health. scientific advances, ongoing controversies, and emerging issues. *Ann Rev Clin Psychol.* 2015;11:407–40. <https://doi.org/10.1146/annurev-clinpsy-032814-112728>.
45. Miguel-Álvaro A, Rodríguez-Medina J, González-Sanguino C. Spanish version of the everyday discrimination scale (EDS-E): factorial structure and scale invariance in Spanish adolescents. *J Clin Med.* 2025;14(9):2887. <https://doi.org/10.3390/jcm14092887>.
46. Stucky BD, Gottfredson NC, Panter AT, Daye CE, Allen WR, Wightman LF. An item factor analysis and item response theory-based revision of the Everyday Discrimination Scale. *Cult Divers Ethn Minor Psychol.* 2011;17(2):175–85. <https://doi.org/10.1037/a0023356>.
47. Knies G, Nandi A, Platt L. Life satisfaction, ethnicity and neighbourhoods: Is there an effect of neighbourhood ethnic composition on life satisfaction? *Soc Sci Res.* 2016;1(60):110–24. <https://doi.org/10.1016/j.ssrresearch.2016.01.010>.
48. Ullman C, Tatar M. Psychological adjustment among Israeli adolescent immigrants: A report on life satisfaction, self-concept, and self-esteem. *J Youth Adolesc.* 2001;30:449–63. <https://doi.org/10.1023/A:1010445200081>.
49. Criss MM, Weston JD, McGehee AL, Murray KM, Byrd-Craven J. Links between Racial discrimination and college student mental and physical health: Examination of parent-youth relationships as protective factors. *Adversity Resil Sci.* 2025;6(3):261–74. <https://doi.org/10.1007/s42844-024-00156-x>.
50. Mahoney C, Becerra BJ, Arias D, Romano JE, Becerra MB. "We've always been kind of kicked to the curb": A mixed-methods assessment of discrimination experiences among college students. *Int J Environ Res Public Health.* 2022;19(15):9607. <https://doi.org/10.3390/ijerph19159607>.
51. Lee DB, Anderson RE, Hope MO, Zimmerman MA. Racial discrimination trajectories predicting psychological well-being: From emerging adulthood to adulthood. *Dev Psychol.* 2020;56(7):1413–23. <https://doi.org/10.1037/dev000938>.
52. Sarno EL, Newcomb ME, Mustanski B. Rumination longitudinally mediates the association of minority stress and depression in sexual and gender minority individuals. *J Abnorm Psychol.* 2020;129(4):355–63. <https://doi.org/10.1037/abn0000508>.
53. Assari S, Gibbons FX, Simons RL. Perceived discrimination among black youth: An 18-year longitudinal study. *Behav Sci.* 2018;8(5):44. <https://doi.org/10.3390/bs8050044>.

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