Journal of Social Sciences & Humanities
Publisher: Kabul University

Available at https://jssh.edu.af

The Relationship Between Gratitude and Mental Health Among Policy and Public Administration Students: The Mediating Role of Hope

Mohammad Jawad Mirzaee

Kabul University, Department of Psychology, Faculty of Psychology and Educational Sciences, Kabul, AF

Received: February 24, 2026
Revised: April 4, 2026
Accepted: June 30, 2026
Published: July 31, 2026

Keywords

- Depression
- Gratitude
- Hope
- Mediation
- Mental Health
- University students

Abstract: Given the rising prevalence of psychological distress among university populations worldwide, international health authorities have called for urgent action to pinpoint psychological assets that can safeguard student well-being. Grounded in positive psychology, this study examined the relationship between gratitude and mental health. It investigated the mediating role of hope among undergraduate students of the Faculty of Policy and Public Administration at Kabul University. A cross-sectional, correlational design was employed with a stratified random sample of 196 students (2025 academic year). A battery of validated self-report instruments was administered to all participants, comprising the Gratitude Questionnaire (GQ-6), the Adult Hope Scale (AHS), the Warwick-Edinburgh Mental Well-being Scale (WEMWBS), and the 21-item Depression Anxiety Stress Scales (DASS-21). Data were analyzed using Pearson correlations and mediation analysis (PROCESS Model 4, 5,000 bootstrap samples). Results indicated that gratitude was positively associated with hope (r = .329, p < .01) and positive mental health (r = .299, p < .01), and negatively associated with negative mental health (r = −.332, p < .01). Hope was positively related to positive mental health (r = .579, p < .01) and negatively related to negative mental health (r = −.466, p < .01). Mediation analyses revealed that hope partially mediated the relationship between gratitude and both positive (indirect effect = 0.224, 95% CI [0.129, 0.330]) and negative mental health (indirect effect = −0.118, 95% CI [−0.182, −0.063]). These findings suggest that gratitude enhances students' mental health directly and indirectly through fostering hope, underscoring the value of gratitude- and hope-based interventions in higher education settings. University counseling centers can leverage these low-cost interventions, such as gratitude journaling and hope-enhancing workshops, to improve student mental health, particularly in socioeconomically challenging contexts.

To Cite this Article: Mirzaee, M. J. (2026). The Relationship Between Gratitude and Mental Health Among Policy and Public Administration Students: The Mediating Role of Hope. *Journal of Social Sciences & Humanities 3*(3), 841-857. https://doi.org/10.62810/jssh.v3i3.290

INTRODUCTION

In the past few decades, mental health among student populations has emerged as one of the major issues affecting higher education institutions around the world. According to the

✉ Corresponding author E-mail: jawadmirzaee1371@gmail.com

Available online at https://jssh.edu.af/jssh/article/view/290

World Health Organization (2022) report, psychological disorders currently rank among the leading contributors to disability in individuals aged 18 to 29 years. In parallel, universities are increasingly recognized as pivotal venues for delivering mental health interventions to student populations. As per the report published in the current document, mental health can be described as "a state of well-being in which the person recognizes their assets, can cope with life's challenges, and can contribute to their communities." At the same time, the report also indicates that the prevalence of psychological problems among student populations is very high. As per the report published by the International Student Mental Health Project under the global program framework of the WHO, around one-third of student populations have been identified to suffer from a common mental disorder in the past 12 months (Auerbach et al., 2018). Moreover, a meta-analysis published in the Journal of Affective Disorders revealed that during the COVID-19 pandemic, anxiety and depression levels of students increased considerably (Li et al., 2021). The above findings emphasize the importance of finding factors that facilitate mental health. In this context, the positive psychology approach, which was introduced by Martin Seligman and colleagues (Seligman & Csikszentmihalyi, 2000), is focused on enhancing individuals' strengths. Positive psychological factors can be used as mental health buffers. Within this approach, two factors, namely gratitude and hope, have gained importance.

The construct of gratitude was described as a "stable dispositional construct characterized by a tendency to recognize and appreciate the positive aspects of one's experiences" (McCullough et al., 2002). The first empirical studies demonstrated that people who focused on the positive aspects of their lives had more well-being, positive emotions, and fewer symptoms of depression (Emmons & McCullough, 2003). In addition, other research reviews and meta-analytic studies have confirmed this relationship. For example, Davis et al. (2016) found that gratitude interventions have a significant effect on well-being and depression. In addition, other research reviews have shown that gratitude can play a role in mental health by enhancing social relationships and emotions and reducing negative ruminations (Wood et al., 2010). Studies on students have shown that gratitude can be associated with life satisfaction, academic adjustment, and stress reduction (Wood et al., 2008).

Hope is another important construct that has been discussed in the positive psychology literature. Snyder's (2002) theory of hope has identified two components of hope: agency (motivation to achieve goals) and pathways (capacities to find means to achieve goals). Previous studies have found that hope has a positive correlation with various mental health-related factors, including depression, resilience, and life satisfaction (Gallagher & Lopez, 2009).

Previous studies have also found that hope is a major predictor of the mental health of university students. Hope allows people to achieve their goals and cope with barriers. Previous studies on university students have found that hope has a positive correlation with

their academic and psychological well-being. For example, Rand et al. (2011) found that hope was a major predictor of grade point averages of students, controlling for personality factors.

Moreover, longitudinal and intervention studies indicate that hope can predict future changes in psychological well-being. For instance, Marques et al. (2011) showed in their intervention study that an increase in hope can lead to future increases in life satisfaction and decreases in negative psychological symptoms. Moreover, Gallagher and Lopez (2009) confirmed in their meta-analysis that hope adds uniquely to the prediction of mental health and that this prediction extends beyond optimism. This shows that not only can hope be linked to current mental health outcomes, but it can also be a predictor for future mental health outcomes.

Theoretically, Fredrickson's (2001) broaden and build theory of positive emotions may also be useful in explaining the relationship between gratitude and hope. Positive emotions broaden thinking and cognition, which can result in the development of long-lasting psychological resources. Gratitude, being a positive emotion, may broaden thinking and cognition and increase the perception of paths to goals, thereby increasing hope.

Empirical evidence also supports the relationship between gratitude and hope. Wood et al. (2008) study demonstrated a significant positive relationship between gratitude and hope. Another study using a structural equation model also demonstrated the relationship between hope and positive psychological constructs and mental health outcomes (Gallagher et al., 2020). Although there is extensive literature on the relationship between gratitude and mental health and the relationship between hope and well-being, the joint study of the three variables in a mediational model among student samples is limited. Many studies examined the relationship between the two variables, but the mediational mechanism between gratitude and mental health is not well studied.

Given that the prevalence of psychological issues is high among students and gratitude-based interventions are increasingly popular in higher education institutions, understanding the role of hope as a mediating factor has significant theoretical and practical implications. Identifying this mediating factor will help develop more targeted interventions to improve students' mental health. Based on the above, the current study seeks to investigate the link between gratitude and mental health and to determine the mediating role of hope among students. It is proposed that, in addition to its direct impact on mental health, gratitude has a significant indirect effect through the promotion of hope.

The selection of students from the Faculty of Policy and Public Administration is particularly strategic. These students are the future policymakers, public administrators, and civil service leaders of Afghanistan. Their mental health and cognitive resilience directly influence the quality of their decision-making, ethical judgment, and capacity to manage national-level crises. In a country facing ongoing socioeconomic and political transitions, investing in the psychological capital of this specific cohort is not merely an academic concern but a national priority. Therefore, understanding how positive psychological resources like

gratitude and hope can be cultivated among these future leaders holds both theoretical and applied significance.

Specific Hypotheses

Drawing upon the theoretical framework and existing empirical evidence outlined above, the present study was designed to evaluate the following formal hypotheses:

H_1: Gratitude is positively related to the mental health of students.

H_2: Gratitude is positively related to students' hope.

H_3: Hope is positively related to students' mental health.

H_4: Hope mediates the relationship between gratitude and students' mental health.

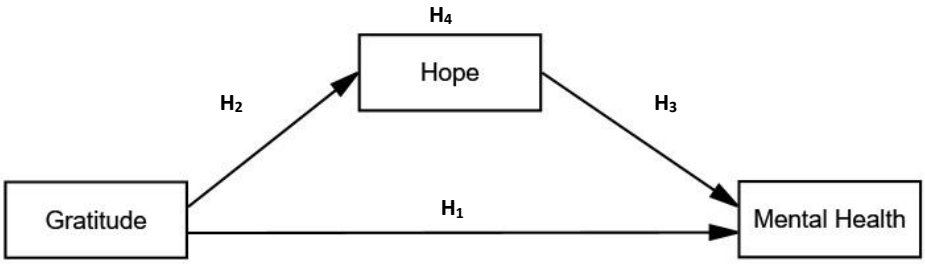

Figure 1. *Hypothetical model*

Exploratory Analysis

Although the basic relationships among these constructs have been well established in previous research, the cultural and contextual patterns among Afghan university students have not been known. An exploratory analysis was, therefore, carried out to provide a deeper and more unique insight into these patterns. The results of the exploratory analysis are presented in the discussion section.

RESEARCH METHOD

This investigation employed a quantitative, cross-sectional, correlational-predictive design. The primary aim was twofold: first, to examine the direct association between gratitude and mental health among students at Kabul University's Faculty of Policy and Public Administration; and second, to evaluate whether hope mediates this relationship. The core objective centered on analyzing both the direct and indirect pathways through which gratitude may influence mental health outcomes via the cultivation of hope. Key methodological features of the study are detailed in the subsequent sections.

Population and Sampling

"Our target group for this study was all undergraduate students at Kabul University's Faculty of Policy and Public Administration—380 students in total for the 2025 academic year. To determine how many participants we needed, we used the well-known Krejcie and Morgan table, which indicated we needed at least 196 students. Since we expected some

questionnaires might be incomplete, we distributed 220 surveys. In the end, we received 196 fully completed questionnaires, giving us a response rate of 92.7%. We used stratified random sampling, ensuring the number of students we selected from each department matched their actual proportions. From the selected classes, we invited every student who met our criteria to participate. Our inclusion criteria were simple: students had to give their informed consent, be between 18 and 35 years old, and report no severe mental health conditions. On the other hand, we excluded anyone whose questionnaire had more than 20% missing answers, as well as those who were currently taking antidepressants."

Data Collection

Data were collected in person. Necessary approvals were obtained from faculty authorities. Participation was voluntary, and confidentiality and anonymity were guaranteed. Participants were informed about the study objectives, the questionnaire completion process, and their right to withdraw, and written consent was obtained. Completion of the questionnaire took approximately 15–20 minutes.

Instrumentation

All scales were administered using standardized self-report instruments that have demonstrated acceptable reliability and validity in international and regional research.

Gratitude was measured using the Gratitude Questionnaire–Six Item Form (Emmons & McCullough, 2003). This 6-item unidimensional scale assesses individuals' tendency to recognize and appreciate positive aspects of life, received benefits, and social support. Items are rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), with total scores ranging from 6 to 42. Higher scores indicate higher levels of gratitude. The GQ-6 has been widely used in positive psychology and mental health research across cultures (Garg et al., 2021; McCullough et al., 2002). Since no previously validated Persian version exists, a rigorous forward–backward translation procedure was conducted following Brislin's (1970) guidelines. This included translating the scale from English to Persian by a bilingual psychologist, back-translating it into English by a second bilingual expert, and reviewing discrepancies to ensure linguistic and conceptual equivalence. The internal consistency of the scale in the present study was good (Cronbach's $\alpha = .84$).

Hope was assessed using the Adult Hope Scale (Snyder et al., 1991), a 12-item instrument measuring two components of hope: agency (goal-directed motivation) and pathways (planning to achieve goals). Items are rated on an 8-point Likert scale from 1 (strongly disagree) to 8 (strongly agree), with total scores ranging from 8 to 64. Higher scores reflect greater hope. The AHS has been validated in diverse cultural contexts and remains a standard instrument in positive psychology research (Gallagher et al., 2020). For the present study, a Persian version validated by Vakili et al. (2022) was used. The scale demonstrated good reliability in the current sample (Cronbach's $\alpha = .86$).

Mental health was conceptualized based on Keyes' (2007) dual-factor model, including both positive and negative dimensions. Positive mental health was measured using the 14-item Warwick-Edinburgh Mental Well-being Scale (Tennant et al., 2007), rated on a 5-point Likert scale from 1 (never) to 5 (always), with total scores ranging from 14 to 70. Higher scores indicate greater psychological well-being. The Persian version validated by Mavali et al. (2020) was employed. The internal consistency in this study was excellent (Cronbach's $\alpha = .89$).

Negative mental health was assessed using the Depression Anxiety Stress Scales–21 (Lovibond & Lovibond, 2011), comprising three subscales for depression, anxiety, and stress. Responses are rated on a 4-point Likert scale from 0 (did not apply to me at all) to 3 (applied to me very much), with higher scores indicating greater distress. The Persian version validated by Kakemam et al. (2022) was used. The internal consistency of the scale in the present study was high (Cronbach's $\alpha = .90$).

The satisfactory reliability coefficients obtained for all scales in this study support their appropriateness and utility for research in the Afghan university context.

Data Analysis

All data were analyzed using SPSS version 26 and the PROCESS macro (v4.2) for mediation analysis. Descriptive statistics, such as mean, standard deviation, minimum and maximum, skewness, and kurtosis, were employed to explore the distribution of the data. Pearson correlation coefficients were used to determine the bivariate correlation between gratitude, hope, and mental health. The mediating effect of hope on the relationship between gratitude and mental health was evaluated using Model 4 in the PROCESS macro, with 5,000 bootstrap samples and a 95% confidence interval for indirect effects. The assumptions of linearity, normality of residuals, and multicollinearity (VIF < 2) were checked. Control variables of age and department were included in the model and then dropped if they failed to demonstrate significant effects. The level of significance for all tests was set at 0.05.

Ethical Considerations

Before we started, we obtained ethical approval from the internal research committee at Kabul University. All procedures followed the ethical standards laid out in the Declaration of Helsinki (World Medical Association, 2013). These are recognized internationally. We were upfront with our participants—we explained the purpose of the study clearly before they took part. They were also told that they could leave the study at any point, with no questions asked. To protect their privacy, we didn't collect any personal identifying information.

FINDINGS

The study sample consisted of 196 undergraduate students from the Faculty of Policy and Public Administration at Kabul University. Participants' age was categorized into three groups: 45.9% were 18–21 years old, 39.3% were 22–25 years old, and 14.8% were 26–30 years old. Regarding department, 32.1% were from Management and Development, 34.7% from Public

Policy, and 33.2% from Public Administration. Class year distribution was as follows: first year 21.9%, second year 23.5%, third year 21.4%, and fourth year 33.2%. Income level was reported as low by 55.1% of students, medium by 39.3%, and high by 5.6%. In terms of living arrangement, 42.3% lived in a dormitory, 33.2% lived alone, and 24.5% lived with their parents. Finally, the majority of participants were single 88.8%, while 11.2% were married.

Table 1. *Demographic information of Participants (N=196)*

Characteristic	Category	Frequency	Percent
Age	18–21	90	45.9
	22–25	77	39.3
	26–30	29	14.8
Department	Management & Development	63	32.1
	Public Policy	68	34.7
	Public Administration	65	33.2
Class Year	First year	43	21.9
	Second year	46	23.5
	Third year	42	21.4
	Fourth year	65	33.2
Income Level	Low	108	55.1
	Medium	77	39.3
	High	11	5.6
Living Arrangement	Dormitory	83	42.3
	Alone	65	33.2
	With parents	48	24.5
Marital Status	Single	174	88.8
	Married	22	11.2

Descriptive statistics for the main study variables are presented in Table 2. The total score for gratitude ranged from 10 to 35, with a mean of 24.38 (*SD* = 4.92), showing a slightly negative skew (-0.41) and low kurtosis (0.21). Hope scores ranged from 17 to 60 (*M* = 36.00, *SD* = 7.73) with near-zero skewness (0.13) and low kurtosis (0.10). Positive mental health scores ranged from 28 to 62, with a mean of 42.39 (*SD* = 6.22), indicating a slight positive skew (0.32) and low kurtosis (0.36). Negative mental health scores ranged from 5 to 33, with a mean of 20.45 (*SD* = 4.40), showing approximately symmetrical distribution (skew = -0.02, kurtosis = 0.64).

***Table 2**. Descriptive statistics among variables (N = 196)*

Variable	*M*	*SD*	Range	Number of Items	*α*	Skewness	Kurtosis
Gratitude	24.38	4.92	25	6	.84	-0.41	0.21
Hope	36.00	7.73	43	12	.86	0.13	0.10
Positive mental health	42.39	6.22	34	14	.89	0.32	0.36
Negative mental health	20.45	4.40	28	21	.90	-0.02	0.64

Note. *SD* = standard deviation. Skewness and kurtosis values are based on the population data.

Pearson correlation coefficients among the main study variables are presented in Table 3. Gratitude was positively correlated with hope (r = .329, p < .01) and positive mental health (r = .299, p < .01), and negatively correlated with negative mental health (r = -.332, p < .01). Hope was strongly positively associated with positive mental health (r = .579, p < .01) and negatively associated with negative mental health (r = -.466, p < .01). Positive mental health and negative mental health were strongly inversely correlated (r = -.590, p < .01). Among demographic variables, Department was negatively correlated with WEMWBS (r = -.158, p < .05) and Marital Status was negatively correlated with hope (r = -.147, p < .05). Other demographic variables showed no significant associations with the main study variables.

***Table 3**. Correlations among variables (N = 196)*

Variables	1	2	3	4	5	6	7	8	9	10
1. Age	—									
2. Department	.006	—								
3. Class Year	.106	-.007	—							
4. Income Level	-.062	-.032	-.045	—						
5. Living Arrangement	.010	.042	-.050	-.025	—					
6. Marital Status	-.026	-.024	-.077	-.057	-.082	—				
7. Gratitude	-.028	-.073	.007	.027	.056	.002	—			
8. Hope	-.025	-.005	.013	-.087	-.033	-.147	.329	—		
9. Positive mental health	.000	-.158	.133	-.025	-.085	.032	.299	.579	—	
10. Negative mental health	-.059	.088	-.117	.104	.089	.026	-.332	-.466	-.590	—

Note. N = 196. p < .05, p < .01.

Control Variables in Mediation Analysis

Although demographic variables showed weak correlations with the main study variables, preliminary analyses indicated that Department (r = -.158, p < .05) and Marital Status (r = -.147, p < .05) were significantly associated with positive mental health and hope, respectively. To rule out potential confounding effects, these variables—along with age, class year, income level, and living arrangement—were entered as covariates in all subsequent mediation models using PROCESS (Model 4). The pattern of results remained unchanged after controlling for these demographic factors.

To test the mediating effect of hope between gratitude and mental health outcomes, Model 4 of the PROCESS procedure (Hayes, 2022) was used with 5,000 bootstrap samples and 95% confidence intervals. The findings of the mediation analyses are shown in Table 4. The

mediation model for positive mental health is depicted in Figure 2, while the mediation model for negative mental health is shown in Figure 3.

As shown in Table 4 and Figure 2, gratitude significantly predicted hope (*B* = 0.517, *SE* = 0.107, *t* = 4.85, *p* < .001). When both gratitude and hope were entered simultaneously into the model predicting positive mental health, hope emerged as a strong positive predictor (*B* = 0.434, *SE* = 0.050, *t* = 8.76, *p* < .001). The direct effect of gratitude on positive mental health remained significant, although reduced in magnitude (*B* = 0.154, *SE* = 0.078, *t* = 1.97, *p* = .050), indicating partial mediation. The indirect effect of gratitude on positive mental health through hope was 0.224 (BootSE = 0.051, 95% CI [0.129, 0.330]). Because the bootstrap confidence interval did not include zero, the indirect effect was statistically significant. The model explained 34.8% of the variance in positive mental health (R^2 = .348, *F* (2, 193) = 51.56, *p* < .001).

As presented in Table 4 and Figure 3, gratitude also significantly predicted hope (*B* = 0.517, *SE* = 0.107, *t* = 4.85, *p* < .001). In the model predicting negative mental health, both gratitude (*B* = −0.179, *SE* = 0.059, *t* = −3.04, *p* = .003) and hope (*B* = −0.228, *SE* = 0.038, *t* = −6.08, *p* < .001) were significant predictors. The indirect effect of gratitude on negative mental health via hope was −0.118 (BootSE = 0.030, 95% CI [−0.183, −0.063]), indicating a statistically significant partial mediation. The model accounted for 25.3% of the variance in negative mental health (R^2 = .253, *F* (2, 193) = 32.72, *p* < .001).

Table 4. *Direct and Indirect Effects of Gratitude on Mental Health Outcomes via Hope (N = 196)*

Outcome Variable	Effect	SE	T	P	BootLLCI	BootULCI
Positive Mental Health						
Direct (gratitude → PMH)	0.154	0.078	1.974	0.051	0.000	0.307
Indirect (via Hope)	0.224	0.051	—	—	0.132	0.330
Negative Mental Health						
Direct (gratitude → DASS)	-0.179	0.059	-3.039	0.003	-0.296	-0.063
Indirect (via Hope)	-0.118	0.030	—	—	-0.183	-0.063

Note. BootLLCI and BootULCI refer to 95% bootstrap confidence intervals based on 5,000 samples. PMH=Positive Mental Health. NMH=Negative Mental Health.

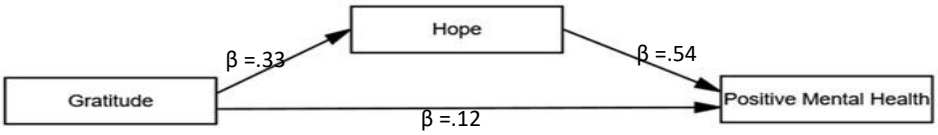

Figure 2. *Mediation model of hope in the relationship between gratitude and positive mental health. Standardized coefficients (β) are shown. All paths are significant (p < .05).*

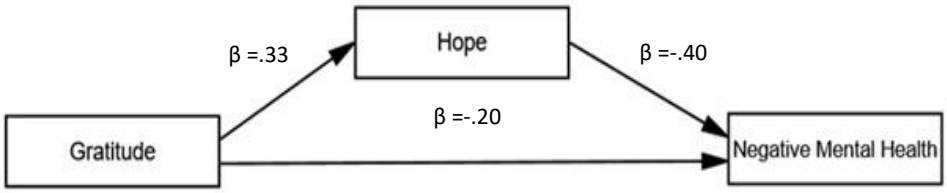

Figure 3*. Mediation model of hope in the relationship between gratitude and negative mental health. Standardized coefficients (β) are shown. All paths are significant (p < .05).*

DISCUSSION

The results of the study have verified the existence of a significant relationship between gratitude and mental health among students of the Faculty of Policy and Public Administration at Kabul University and have proven the mediating role of hope in this relationship. In the following sections, every major finding will be discussed in the context of existing theories and previous studies.

The first result of this study revealed that gratitude was positively related to positive mental health and negatively related to negative mental health. This result is consistent with a large amount of existing research. A meta-analysis conducted by Lee and Kim (2024) on 11 studies with South Korean university students revealed that gratitude promotion programs had an overall effect size of 0.667 (above average) on university students' mental health. Additionally, the result showed that long-term programs (16 weeks or longer) had the largest effect size (d = 1.61). Moreover, many studies have revealed that gratitude is related to higher positive emotions and lower negative emotions. These results can be supported by Fredrickson's (2001) broaden-and-build theory, which states that positive emotions, including gratitude, broaden an individual's attention and cognition, resulting in the building of enduring psychological resources that, in turn, promote mental health.

The second finding is that gratitude was a positive and significant predictor of hope. Various studies support this finding. A study conducted by Kaya and Kaya (2024) among 440 health sciences students in Turkey found that gratitude had a significant positive correlation with hope. Furthermore, a study conducted by Feng and Yin (2021) among front-line medical staff during the COVID-19 pandemic found that gratitude directly enhanced hope. In another study, Witvliet et al. (2019) also found that gratitude was a significant predictor of hope. From a theoretical point of view, it is likely that people who can appreciate what they have and the support they receive can also see more pathways to achieve their goals and have stronger motivation to pursue them—the two essential elements of hope according to Snyder's (2002) theory.

The third finding revealed that hope had a positive relationship with positive mental health and a negative relationship with negative mental health. Many empirical studies also support this finding. A study by Lee and Gallagher (2018) revealed that hope enhances well-being, and well-being is related to positive mental health. Moreover, Kaya and Kaya (2024) found that hope has a positive relationship with distress tolerance (as a measure of mental health). However, an important study in the Afghan cultural setting by Mirzaee (2026) on 450 students from four Kabul universities revealed that although spirituality and mindfulness had significant negative relationships with depression, hope did not have a significant relationship with depression. This inconsistent result with the current study may be attributed to the differences in the measurement tools, controlled variables, or specific characteristics of the studied sample. Moreover, the model used in the Mirzaee study accounted for only 5% of the variance in depression, suggesting the presence of other contextual factors in this

relationship. To further explore this inconsistency, we conducted a post-hoc subgroup analysis based on income level. The negative correlation between hope and negative mental health was substantially stronger among students with low income (r = -.51, p < .01) compared to those with medium income (r = -.38, p < .01). This suggests that the protective role of hope may be more pronounced in economically disadvantaged conditions, potentially explaining why Mirzaee's (2026) study, which included a more socioeconomically diverse sample from multiple universities, found a weaker overall effect. Additionally, differences in the measurement tools for hope (AHS vs. other scales) and sample composition may have contributed to the divergent findings.

The most significant finding of the current study was the verification of the mediating role of hope between gratitude and mental health. The path analysis showed that gratitude had a positive effect on mental health both directly and indirectly through the enhancement of hope. This finding is supported by the study of Kaya and Kaya (2024), which found that hope mediated the relationship between gratitude and distress tolerance. In this study, although the direct effect of gratitude on distress tolerance was not significant, the indirect effect was significant. Moreover, a study conducted by Yu et al. (2022) among 2,168 Chinese university students found that hope mediated the relationship between gratitude and post-traumatic growth. A study conducted by Zhou and Wu (2019) among adolescents who experienced natural disasters also found that hope could mediate the relationship between gratitude and life satisfaction. These findings supported the theoretical model proposed by Fredrickson (2001) and the structural study conducted by Zhou et al. (2019), which found that gratitude enhances positive psychological outcomes through the enhancement of hope.

The descriptive results of the study revealed that 55.1% of the students had low levels of income. This result is in line with the studies that stress the economic difficulties of the students. According to Lee and Kim (2024), young adulthood and the college years are considered to be one of the most trying times in life, during which individuals need to accomplish significant tasks to gain independence but receive little attention and support from others. Under these conditions, positive psychological resources such as gratitude and hope can have an important protective function. The study revealed that the overall effect size of gratitude promotion programs on students' mental health was 0.667, and this was achieved in long-term programs lasting 16 weeks or longer.

A study conducted by Al-Anazy (2023) at Al-Jouf University in Saudi Arabia also found that a counseling program developed using humanistic therapy could enhance hope and gratitude in postgraduate students, and this outcome was found to be stable in the long term. This result further confirms the significance of gratitude-based interventions in the context of universities in the region.

In conclusion, by providing evidence from the cultural context of Afghanistan, the results of this study enhance the external validity of positive psychology theories and illustrate that positive psychological processes are also active in non-Western cultures. However, Mirzaee's

(2026) study indicates that these processes are accompanied by certain complexities in the Afghan context that need further exploration.

CONCLUSION

The current research explored the link between gratitude and mental health and the mediating effect of hope among students of the Faculty of Policy and Public Administration at Kabul University. The results showed that gratitude has a significant positive association with positive mental health and a significant negative association with negative mental health, introducing gratitude as a protective psychological factor against psychological issues and a facilitator of positive mental health among students. Moreover, gratitude has a significant positive association with hope, showing that students with a higher ability to appreciate the positive aspects of their lives tend to have higher levels of hope, indicating that gratitude acts as an emotional basis that enhances people's motivation to achieve their goals and their ability to find ways to attain them. Moreover, hope had a significant positive association with positive mental health and a significant negative association with negative mental health, supporting the role of hope as a motivational-cognitive resource in maintaining and improving mental health. Most significantly, hope partially mediated the association between gratitude and mental health, indicating that gratitude positively affected students' mental health both directly and indirectly through the enhancement of hope, thus uncovering the mechanism by which gratitude positively affects mental health. These results can be interpreted in light of Fredrickson's (2001) broaden-and-build theory and Snyder's (2002) hope theory in the context of positive psychology, thus illustrating that positive emotions such as gratitude broaden cognitive horizons and build long-lasting psychological resources such as hope, which in turn positively affect mental health. Although in line with a vast amount of empirical evidence from a wide range of populations, the results of the current study add to this knowledge base by providing empirical evidence in the cultural context of Afghanistan, thus illustrating that positive psychological processes are universal across non-Western cultures. However, the strength and nature of these associations may be affected by cultural specificities. In view of the high prevalence of psychological issues among university students and the economic challenges evident in the sample population (with 55.1% of the participants reporting low income), the results of this study underscore the importance of investing in positive psychological resources such as gratitude and hope, which can be developed through relatively low-cost interventions. In summary, this study makes an important contribution to the existing literature on positive psychology and mental health by establishing that gratitude has a direct and indirect effect on improving mental health by developing hope, which has important implications for mental health promotion among university students, especially in challenging socio-economic environments.

Limitations

The following limitations of the current study should be noted:

1. Cross-sectional design: The correlational design of the current study does not allow for conclusive causal inferences regarding the interrelations between gratitude, hope, and mental health.
2. Sampling limitations: The sampling was limited to students of a particular faculty at a single university, and thus the generalizability of the findings to other groups is restricted.
3. Self-report measures: The use of self-report measures may be subject to biases such as social desirability bias, recall bias, and current mood influences.
4. Uncontrolled confounding variables: Uncontrolled confounding variables such as social support, personality, coping styles, and negative life experiences could have influenced the findings.
5. Cultural and contextual specificity: The findings of the current study are specific to the cultural context of Afghanistan and cannot be generalized to other cultures.
6. Lack of dimensional analysis: The current study analyzed hope as a unidimensional construct. However, according to Snyder's theory, hope has two components: agency and pathways. Similarly, the current study did not analyze the dimensions of negative mental health constructs (depression, anxiety, stress) separately.

Recommendations and Future Directions

Based on these limitations, the following recommendations are proposed for future studies:

1. Develop gratitude interventions: The university counseling centers should develop and implement programs such as positive daily journaling and writing gratitude letters.
2. Use humanistic therapy approaches: Counseling programs based on humanistic therapy should be employed to improve students' gratitude and hope sustainably.
3. Enhance hope in counseling: Counselors should help students identify goal paths and boost motivation, as hope mediates the relationship between gratitude and mental health.
4. Enhance hope in economically disadvantaged students: Interventions should target students with low socioeconomic status.
5. Integrate cultural and spiritual resources: Gratitude programs should be integrated with Afghan culture and spiritual beliefs to improve their effectiveness.
6. Employ longitudinal research: Future studies should employ longitudinal research to better establish causal links.
7. Employ experimental designs: Randomized controlled trials should be used to evaluate the effectiveness of gratitude programs on hope and mental health.
8. Investigate moderating variables: Demographic and contextual variables should be investigated as potential moderators in the relationship between gratitude and mental health.
9. Investigate serial mediation models: Future studies should investigate more complex models, including the sequential mediating roles of hope and social support.

10. Replicate with diverse populations: The model should be replicated in other faculties of Kabul University and other universities in Afghanistan.

Funding information

This research did not receive any financial support from any organization or agency.

Data availability

The dataset used in this study can be made available by the corresponding author upon reasonable request.

Conflict of interest

The author declares that there are no competing interests related to this work.

Acknowledgements

The author wishes to express sincere gratitude to the administration of Kabul University for facilitating this research. Special thanks are also extended to all students from the Faculty of Policy and Public Administration who voluntarily participated in the study.

REFERENCES

Al-Anazy, M. (2023). The Effectiveness of a Counseling Program Based on Humane Therapy in Developing Gratitude and Hope among Postgraduate Students. *Journal of Umm Al-Qura University for Educational and Psychological Sciences*, *15*(4), 122–135. https://doi.org/10.54940/ep74794159

Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C. (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, *127*(7), 623–638. https://doi.org/10.1037/abn0000362

Brislin, R. W. (1970). Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology*, *1*(3), 185–216. https://doi.org/10.1177/135910457000100301

Davis, D. E., Choe, E., Meyers, J., Wade, N., Varjas, K., Gifford, A., Quinn, A., Hook, J. N., Van Tongeren, D. R., Griffin, B. J., & Worthington, E. L. (2016). Thankful for the little things: A meta-analysis of gratitude interventions. *Journal of Counseling Psychology*, *63*(1), 20–31. https://doi.org/10.1037/cou0000107

Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology*, *84*(2), 377–389. https://doi.org/10.1037/0022-3514.84.2.377

Feng, L., & Yin, R. (2021). Social Support and Hope Mediate the Relationship Between Gratitude and Depression Among Front-Line Medical Staff During the Pandemic of COVID-19. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.623873

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*(3), 218–226. https://doi.org/10.1037/0003-066X.56.3.218

Gallagher, M. W., Long, L. J., & Phillips, C. A. (2020). Hope, optimism, self-efficacy, and posttraumatic stress disorder: A meta-analytic review of the protective effects of positive expectancies. *Journal of Clinical Psychology*, *76*(3), 329–355. https://doi.org/10.1002/jclp.22882

Gallagher, M. W., & Lopez, S. J. (2009). Positive expectancies and mental health: Identifying the unique contributions of hope and optimism. *The Journal of Positive Psychology*, *4*(6), 548–556. https://doi.org/10.1080/17439760903157166

Garg, N., Katiyar, N., & Mehak. (2021). Gratitude Questionnaire (GQ-6)—Exploring Psychometric Properties in India. *Journal of Religion and Health*, *60*(5), 3716–3731. https://doi.org/10.1007/s10943-021-01419-y

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (3rd ed.)*. Guilford Press.

Kakemam, E., Navvabi, E., Albelbeisi, A. H., Saeedikia, F., Rouhi, A., & Majidi, S. (2022). Psychometric properties of the Persian version of Depression Anxiety Stress Scale-21 Items (DASS-21) in a sample of health professionals: a cross-sectional study. *BMC Health Services Research*, *22*(1), 111. https://doi.org/10.1186/s12913-022-07514-4

Kaya, E. Ü., & Kaya, G. A. (2024). The association between gratitude and distress tolerance in undergraduate students: the mediating effect of hope and fear of COVID-19. *Australian Journal of Psychology*, *76*(1). https://doi.org/10.1080/00049530.2024.2384373

Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist*, *62*(2), 95–108. https://doi.org/10.1037/0003-066X.62.2.95

Lee, J. Y., & Gallagher, M. W. (2018). Hope and well-being. In *The Oxford handbook of hope* (pp. 287–298). Oxford University Press.

Lee, N., & Kim, Y. (2024). A Meta-Analysis on the Effectiveness of Gratitude Promotion Programs for South Korean College Students. *Behavioral Sciences*, *14*(3), 240. https://doi.org/10.3390/bs14030240

Li, Y., Zhao, J., Ma, Z., McReynolds, L. S., Lin, D., Chen, Z., Wang, T., Wang, D., Zhang, Y., Zhang, J., Fan, F., & Liu, X. (2021). Mental Health Among College Students During the COVID-19 Pandemic in China: A 2-Wave Longitudinal Survey. *Journal of Affective Disorders*, *281*, 597–604. https://doi.org/10.1016/j.jad.2020.11.109

Lovibond, S. H., & Lovibond, P. F. (2011). Depression Anxiety Stress Scales. In *PsycTESTS Dataset*. https://doi.org/10.1037/t01004-000

Marques, S. C., Lopez, S. J., & Pais-Ribeiro, J. L. (2011). "Building Hope for the Future": A Program to Foster Strengths in Middle-School Students. *Journal of Happiness Studies*, *12*(1), 139–152. https://doi.org/10.1007/s10902-009-9180-3

Mavali, S., Mahmoodi, H., Sarbakhsh, P., & Shaghaghi, A. (2020). Psychometric Properties of the Warwick–Edinburgh Mental Wellbeing Scale (WEMWBS) in the Iranian Older Adults. *Psychology Research and Behavior Management*, *Volume 13*, 693–700. https://doi.org/10.2147/PRBM.S256323

McCullough, M. E., Emmons, R. A., & Tsang, J.-A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, *82*(1), 112–127. https://doi.org/10.1037/0022-3514.82.1.112

Mirzaee, M. J. (2026). The Protective Role of Spirituality, Mindfulness, and Hope in Depression: A Cross-Sectional Study Among Afghan University Students. *Journal of Social Sciences and Humanities*, *3*(1), 1–14. https://doi.org/10.62810/jssh.v3i1.222

Rand, K. L., Martin, A. D., & Shea, A. M. (2011). Hope, but not optimism, predicts academic performance of law students beyond previous academic achievement. *Journal of Research in Personality*, *45*(6), 683–686. https://doi.org/10.1016/j.jrp.2011.08.004

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*(1), 5–14. https://doi.org/10.1037/0003-066X.55.1.5

Snyder, C. R. (2002). TARGET ARTICLE: Hope Theory: Rainbows in the Mind. *Psychological Inquiry*, *13*(4), 249–275. https://doi.org/10.1207/S15327965PLI1304_01

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, *60*(4), 570–585. https://doi.org/10.1037/0022-3514.60.4.570

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation. *Health and Quality of Life Outcomes*, *5*(1), 63. https://doi.org/10.1186/1477-7525-5-63

Vakili, Y., Ghanbari, N., Nooripour, R., Mansournia, M. A., Ilanloo, H., & J. Matacotta, J. (2022). Validity of the Snyder's Adult Hope Scale (AHS) among Iranian Women with Breast Cancer. *Archives of Breast Cancer*, 96–103. https://doi.org/10.32768/abc.20229196-103

Witvliet, C. vanOyen, Richie, F. J., Root Luna, L. M., & Van Tongeren, D. R. (2019). Gratitude predicts hope and happiness: A two-study assessment of traits and states. *The Journal*

of Positive Psychology, *14*(3), 271–282. https://doi.org/10.1080/17439760.2018.1424924

Wood, A. M., Froh, J. J., & Geraghty, A. W. A. (2010). Gratitude and well-being: A review and theoretical integration. *Clinical Psychology Review*, *30*(7), 890–905. https://doi.org/10.1016/j.cpr.2010.03.005

Wood, A. M., Maltby, J., Gillett, R., Linley, P. A., & Joseph, S. (2008). The role of gratitude in the development of social support, stress, and depression: Two longitudinal studies. *Journal of Research in Personality*, *42*(4), 854–871. https://doi.org/10.1016/j.jrp.2007.11.003

World Health Organization. (2022). *World Mental Health Report: Transforming mental health for all*. https://www.who.int/publications/i/item/9789240049338

World Medical Association. (2013). World Medical Association Declaration of Helsinki. *JAMA*, *310*(20), 2191. https://doi.org/10.1001/jama.2013.281053

Yu, Q.; Wang, W.; Wu, X. (2022). Social support and hope mediates the relationship between gratitude and posttraumatic growth among college students. *Psychological Development and Education*, *38*(5), 703–710. https://doi.org/10.16187/j.cnki.issn1001-4918.2022.05.11

Zhou, X., Zhen, R., & Wu, X. (2019). Understanding the Relation between Gratitude and Life Satisfaction among Adolescents in a Post-Disaster Context: Mediating Roles of Social Support, Self-Esteem, and Hope. *Child Indicators Research*, *12*(5), 1781–1795. https://doi.org/10.1007/s12187-018-9610-z