

Impact of Moral Elevation on College Students' Sense of Meaning of Life: The Mediating Roles of Gratitude and Perceived Social Support

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Purpose: The current study examined the association between moral elevation and college students' sense of meaning of life, along with the potential mediating effects of gratitude and perceived social support on this relationship.

Methods: Using the convenience sampling method, the Moral Elevation Scale, the Sense of Meaning of Life Questionnaire, the Gratitude Questionnaire, and the Multidimensional Scale of Perceived Social Support were used to conduct questionnaire surveys on 1088 college students ($M_{\text{age}}=19.59$ years, $SD=1.46$). SPSS25.0 data statistics software was used to analyze the data, and the PROCESS macro for SPSS was used to conduct the mediation effect test.

Results: (1) Moral elevation was significantly and positively associated with college students' sense of meaning of life ($\beta = 0.43$, $p < 0.001$). (2) Both gratitude and perceived social support partially mediated the relation between moral elevation and sense of meaning of life. The indirect effect of moral elevation on sense of meaning of life via gratitude was 0.11 (95% CI = [0.0709, 0.1453]), and the mediating effect accounted for 52.71%. The indirect effect of moral elevation on sense of meaning of life via perceived social support was 0.06 (95% CI = [0.0385, 0.0863]), and the mediating effect accounted for 29.41%. (3) Gratitude and perceived social support sequentially mediated the association between moral elevation and sense of meaning of life, the indirect effect through gratitude and perceived social support was 0.04 (95% CI = [0.0237, 0.0512]) and accounted for 17.88%.

Conclusion: This study revealed the chain mediating roles of gratitude and perceived social support in the relation between moral elevation and sense of meaning of life for Chinese college students, which is of great theoretical and practical significance for the formation of a positive sense of meaning of life and the cultivation of moral elevation among college students.

Keywords: moral elevation, sense of meaning of life, gratitude, perceived social support, college students

Introduction

The study of the sense of meaning of life originated with Frankl,¹ who proposed that human beings possess the freedom to pursue a sense of meaning at every stage of life, and that due to the uniqueness of individuals, individuals grow up to achieve a sense of meaning in their own unique manner. A sense of meaning of life refers to an individual's understanding of the meaning of their life and the search for one's purpose in life.² If a person experiences a meaningless life, they are more likely to lead a decadent, dull, and boring life. Numerous studies have indicated that the stronger the sense of meaning of life, the higher the level of mental health of the individual,^{3,4} and that individuals who lack a sense of meaning of life are more susceptible to depression⁵ exhibit a high risk of mental illness,⁶ and even commit suicide.^{7,8} Therefore, it is of theoretical and practical importance to explore the factors affecting the sense of meaning of life through empirical research.

With the emergence of positive psychology, the field of psychology now expands its focus beyond the relationship solely between negative emotions like anxiety, fear, and stress, and the sense of meaning of life. Thus, the relationship between positive psychology and the sense of meaning of life has emerged as a new and noteworthy research topic. The influence of positive emotions on individuals' sense of meaning of life has been demonstrated through both cross-sectional

sampling and diary studies. For instance, positive emotions significantly predict the sense of meaning of life, with higher levels of positive emotions in individuals corresponding to a stronger sense of meaning of life.⁹ That is to say, positive emotions enable individuals to build a sense of meaning of life, whereas negative emotions negatively affect the sense of meaning of life.¹⁰ King et al's research further suggests that positive emotions create a context where individuals perceive life as meaningful, increasing their sensitivity to meaning-related emotions.¹¹ Moral elevation, identified as a positive emotion triggering prosocial behavioral responses, remains relatively under-researched emotion to date.¹² It is less clear, however, whether and how moral elevation potentially increases sense of meaning of life. Consequently, the present study was to extend existing research by examining the mediating effects of gratitude and perceived social support on the association between college students' moral elevation and sense of meaning of life.

Moral Elevation and Sense of Meaning of Life

Moral elevation manifests as a positive moral emotion elicited in individuals upon perceiving virtuous conduct by others, subsequently leading to an elevation of their own emotional states through an appreciation of the observed virtues.¹³ According to broaden-and-build theory, positive emotions not only broaden the thought-action repertoire in the short term but also have the long-term effect of building enduring personal resources.¹⁴ Specifically, moral elevation, as a positive emotion, has the capacity to broaden habitual modes of thinking or acting and construct enduring personal resources, facilitating individuals in achieving personal growth and well-being.¹⁵ Moral Elevation indirectly affects psychological well-being by influencing an individual's social resource constructs.¹⁶ Previous study on moral elevation in depressed and anxious adults has found that high levels of moral elevation were associated with less interpersonal conflict and stress.¹⁷ Numerous researchers have also indicated that high levels of moral elevation contribute to an increase in interpersonal trust,¹⁸ foster greater individual motivation for interaction, and stimulate prosocial behavior.¹⁹ When levels of interpersonal trust increase due to moral elevation, individuals accept out-groups with more ease, and positive psychological states and traits within individuals are increased.²⁰ In addition, researchers have observed that moral elevation can increase one's sense of meaning of life and benevolent worldview, thereby enhancing spirituality and elevating the soul.²¹ Consistent with this view, previous cross-sectional study has demonstrated that moral elevation, as a self-transcendent positive emotion, positively predicted Chinese undergraduates' experience of life meaning.²² Moreover, a review of the empirical literature has indicated moral elevation induces feelings of connectedness to other humans and broadens people's prosocial actions,²³ which helps enhancing meaning in life.²⁴ Based on the literature discussed above, we assumed that moral elevation would be positively associated with sense of meaning of life.

The Mediating Role of Gratitude

Gratitude is defined as a positive emotion experienced by individuals upon recognizing benevolent actions by others or deriving benefit from such actions.²⁵ In an analysis of suicidal ideation, gratitude was observed to increase sense of meaning of life and thus reduce suicidal ideation.²⁶ Chinese scholar has found that gratitude influenced the individuals' sense of meaning of life.²⁷ Highly grateful individuals exhibit high life satisfaction, exhibit more optimistic thoughts about life, are more energetic, and also reduce negative emotions such as depression and jealousy.²⁸ Research indicates that there is a significant correlation between moral elevation and gratitude. In a neuroanatomical study on the traits of gratitude and elevation, a significant neuroanatomical correlation was observed between gratitude and elevation.²⁹ Previous research has indicated that positive virtues such as gratitude, kindness, courage, and loyalty can induce a sense of elevation in individuals, leading to more positive emotions and more positive life experiences.²⁸ Fredrickson's research indicates that gratitude, similar to other positive emotions, exhibits a broadening and building function that not only enables individuals to build lasting social resources but also encourages them to think about problems from multiple perspectives, thereby enhancing their mental health.³⁰ Thus, it is reasonable to expect that gratitude would mediate the relation between moral elevation and sense of meaning of life.

The Mediating Role of Perceived Social Support

An individual's cognitive changes are influenced by moral elevation. This emotion not only enables an individual to exhibit a more positive and optimistic self-perception but also enables the individual to perceive human nature in a more

optimistic manner, thus forming positive evaluations of others.³¹ Perceived social support, on the other hand, is an individual's perception of support from others, which can be real, potential, or only subjectively perceived.³² Researchers have observed that as long as individuals feel that someone cares about them, even if the support is nonexistent or false, they can obtain strength to endure difficult times.³² Currently, there is limited research on the relation between perceived social support and moral elevation, and the direction of its influence is not apparent; however, the main effects model theory of social support provides a theoretical basis for examining the influence of social support on moral elevation.³³ The theory proposes that individuals who possess an effective social support system can derive positive emotional experiences from it and can receive stable social feedback. Studies have confirmed that an effective social support effectively enhances individuals' psychological well-being,³⁴ which not only enables individuals to adapt to society more optimally,³⁵ but also enables them to establish positive and healthy interpersonal relationships,³⁶ which ultimately enhances their subjective well-being;³⁷ moreover, subjective well-being is also a key indicator for assessing individuals' sense of meaning of life. Social support and individuals' sense of meaning of life are closely related.^{38,39} On the one hand, individuals with social support tend to exhibit a harmonious family atmosphere and effective interpersonal relationships, which contribute to a high sense of meaning of life. On the other hand, individuals with high social support can reduce their risk of or prevent themselves from falling into depression,⁴⁰ which leads to higher subjective well-being and increases the sense of meaning of life. Therefore, it is reasonable to expect that perceived social support would mediate the association between moral elevation and sense of meaning of life.

The Chain Mediating Role of Gratitude and Perceived Social Support

Gratitude is a crucial factor in promoting social support.⁴¹ A study on nursing students' sense of meaning of life has indicated that individuals with high levels of gratitude exhibited a stronger sense of social belonging and appreciated more social support.⁴² Gratitude also enables individuals to increase social and emotional functioning and reduce anxiety and depression.⁴³ Using adolescent survivors of the Ya'an earthquake as subjects, Wang et al examined changes in prosocial behavior in post-disaster adolescents and observed that empathy-triggered gratitude facilitated the increase in social support for posttraumatic adolescents, thereby promoting prosocial behavior.⁴⁴ The aforementioned observation is consistent with the expanded construct theory of positive emotions, which proposes that gratitude is a positive emotion that expands human behavior and awareness, thereby enhancing the interaction between people and the external environment, which in turn leads to the formation of a mutually supportive social system between people and the outside world.¹⁹ Consequently, we proposed that gratitude and perceived social support would mediate sequentially the link between moral elevation and sense of meaning of life.

The Current Study

Based on the above literature, the aims of the current study were threefold (Figure 1). The first aim was to explore whether moral elevation would significantly and positively predict sense of meaning of life among college students. The second aim was to test the mediators of gratitude and perceived social support in the relation between moral elevation and sense of meaning of life. The third aim was to examine the sequential mediating role of gratitude and perceived social support in the relation between moral elevation and sense of meaning of life. These three questions

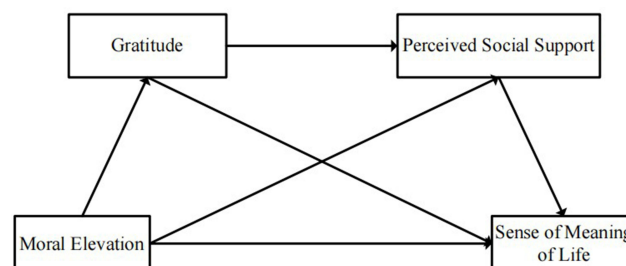


Figure 1 The Proposed Serial Mediation Model.

about the potential mediating mechanisms of the relation between moral elevation and sense of meaning of life would form a serial mediation model (Figure 1). Based on the literature review, the following hypotheses were proposed:

Hypothesis 1: Moral elevation would positively predict sense of meaning of life.

Hypothesis 2: Both gratitude and perceived social support would partially mediate the relation between moral elevation and sense of meaning of life.

Hypothesis 3: Gratitude and perceived social support would sequentially mediate the relation between moral elevation and sense of meaning of life.

Methods

Participants

This study used the questionnaire survey method to select full-time college students from universities in Anhui Province as subjects, and used Questionnaire Star (Wenjuanxing, an online survey platform in China) to create electronic versions of the questionnaires, which were scanned using a two-dimensional code for on-site administration. A total of 1178 questionnaires were distributed to different types of majors, and 1088 valid questionnaires were collected after eliminating invalid questionnaires that did not meet the requirements, such as short response time and blank options, with an effective rate of 92.36%. There were 452 male subjects and 636 female subjects. The age of the subjects ranged from 17 to 24 years, with a mean age of 19.59 ± 1.46 years.

Measures

Sense of Meaning of Life

Sense of meaning of life was measured using the Chinese revised version of the Sense of Meaning of Life Questionnaire (MLQ-C).⁴⁵ It consists of two sub-scales: the presence of meaning (five items; ie, “I understand the meaning of my life”) and the search for meaning (five items; ie, “I am searching for the meaning of my life”). College students rated each item on a seven-point scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*), with the second item rated in reverse. Higher scores indicate perceiving a stronger sense of life meaning. In this study, the overall internal consistency coefficient of the scale was 0.86, the internal consistency coefficient of the presence of meaning subscale was 0.90, and the internal consistency coefficient of the search for meaning subscale was 0.87.

Moral Elevation

Moral elevation was evaluated using the Chinese version of the Moral Elevation Scale (C-MES).⁴⁶ A representative item was “The world is full of kindness and generosity”. The scale comprises 21 items distributed across four dimensions: emotion and outpouring, cognition for own, cognition for others, and behavior intention. In the current study, the overall internal consistency coefficient of the scale was 0.96, the internal consistency coefficient of the subscale of emotion and outpouring was 0.93, the internal consistency coefficient of the subscale of cognition for own was 0.95, the internal consistency coefficient of the subscale of cognition for others was 0.84, and the internal consistency coefficient of the subscale of behavior intention was 0.91.

Perceived Social Support

Perceived social support was measured by the Chinese version of the Multidimensional Scale of Perceived Social Support (MSPSS).⁴⁷ It comprises 12 items (eg, “There is a special person who is around when I am in need”). The scale utilizes a seven-point scale with three dimensions, including support from family, support from friends, and support from others. Higher scores indicate higher levels of perceived social support. In the current study, the overall internal consistency coefficient of the scale was 0.93, the internal consistency coefficient of the subscale of support from family was 0.91, the internal consistency coefficient of the subscale of support from friends was 0.94, and the internal consistency coefficient of the subscale of support from others was 0.87.

Gratitude

Gratitude was assessed by the Chinese version of the Gratitude Questionnaire (CGQ-6).⁴⁸ The questionnaire comprises 6 questions and is scored on a seven-point scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). An example item is “there are so many things in life that I need to be thankful for”. High scores indicated high levels of gratitude tendency. In this study, the questionnaire exhibited an internal consistency coefficient of 0.77.

Data Analysis

SPSS 25.0 was used for all data entry and analysis. First, because the instrument utilized herein was a self-report scale and the data collected were self-reported by the subjects, the present study computed common method biases in SPSS 25.0. Second, the present study computed the correlation matrix among moral elevation, perceived social support, gratitude, and sense of meaning of life. Third, we utilized Hayes’s PROCESS macro for SPSS (Model 6) to examine the mediating roles of perceived social support and gratitude in the link between moral elevation and sense of meaning of life. According to Hayes, the analyses of Model 6 in PROCESS will reveal direct effects and indirect effects. Moreover, the current study randomly sampled 5000 times from the data using the bootstrapping method. And 95% bootstrap confidence interval (CI) without zero suggests a significant effect. All continuous variables were standardized prior to analysis.

Results

Common Method Deviation Test

Because the instrument utilized herein was a self-report scale and the data collected were self-reported by the subjects, the study was prone to common method bias. The Harman one-way test was utilized to test for common method bias, and all items on the four scales utilized herein were subjected to exploratory factor analysis. The results indicated that there were nine factors with eigenvalues greater than 1, and that the percentage of variance explained by the first common factor was 37.38%, which was less than the critical criterion of 40%,⁴⁹ indicating that no crucial common method bias was observed herein. Thus, the data could be analyzed in the next step.

Bivariate Analyses

Correlations of all variables are shown in Table 1. Moral elevation was significantly and positively associated with sense of meaning of life, perceived social support, and gratitude. Sense of meaning of life was significantly and positively associated with perceived social support and gratitude. Perceived Social Support was positively correlated with gratitude.

Testing for the Mediation Effects

Model 6 of PROCESS macro was conducted to examine the mediating effects of gratitude and perceived social support. As shown in Table 2 and Figure 2, all the pathways were significant. The total effect of moral elevation on sense of meaning of life was significant ($\beta = 0.43$, $p < 0.001$, 95% CI = [0.38, 0.48]). Furthermore, the direct effect of moral elevation on sense of meaning of life was significant ($\beta = 0.22$, $p < 0.001$, 95% CI = [0.16, 0.29]), indicating that moral elevation can significantly and positively predict sense of meaning of life. Thus, Hypothesis 1 was supported. Furthermore, results indicated that moral elevation was positively associated with gratitude ($\beta = 0.53$, $p < 0.001$, 95%

Table 1 Correlations Among Variables

	1	2	3	4
1. Moral Elevation	1			
2. Sense of Meaning of Life	0.430**	1		
3. Perceived Social Support	0.472**	0.414**	1	
4. Gratitude	0.527**	0.426**	0.493**	1

Note: ** $p < 0.01$.

Table 2 Testing the Mediation Effect of Moral Elevation on Sense of Meaning of Life

Predictors	Model 1 (Sense of Meaning of Life)		Model 2 (Gratitude)		Model 3 (Perceived Social Support)		Model 4 (Sense of Meaning of Life)	
	β	t	β	t	β	t	β	t
Moral Elevation	0.43	15.71***	0.53	20.46***	0.29	9.84***	0.22	7.02***
Gratitude					0.34	11.34***	0.21	6.38***
Perceived Social Support							0.21	6.65***
R^2	0.19		0.28		0.30		0.27	
F	246.69***		418.65***		237.89***		133.63***	

Notes: Data has been standardized; *** $p < 0.001$.

CI = [0.48, 0.58]) and gratitude was positively associated with sense of meaning of life ($\beta = 0.21$, $p < 0.001$, 95% CI = [0.14, 0.27]). Thus, gratitude mediated the link between moral elevation and sense of meaning of life, supporting Hypothesis 2. Similarly, results also indicated that moral elevation was positively associated with perceived social support ($\beta = 0.29$, $p < 0.001$, 95% CI = [0.23, 0.35]) and perceived social support was positively associated with sense of meaning of life ($\beta = 0.21$, $p < 0.001$, 95% CI = [0.15, 0.27]). Thus, perceived social support mediated the link between moral elevation and sense of meaning of life, supporting Hypothesis 2. More importantly, gratitude was positively associated with perceived social support ($\beta = 0.34$, $p < 0.001$, 95% CI = [0.28, 0.40]), which indicated that gratitude and perceived social support sequentially mediated the relation between moral elevation and sense of meaning of life. Thus, Hypothesis 3 was supported.

Furthermore, the bias-corrected nonparametric percentile bootstrap method was used to test the mediation effect with 5000 repeated samples. The results showed that the 95% confidence intervals corresponding to each tested path did not include 0, indicating that the mediation effects were all significant and that the chain mediation model was valid,⁵⁰ as shown in Table 3.

Discussion

Although previous studies suggest that moral elevation is significantly related to sense of meaning of life, issues involving the mediating mechanism (how moral elevation is related to sense of meaning of life) behind this relation are still unknown. Therefore, using the integration of existing theories, we developed and tested a serial mediation model. Our results indicated that college students with high levels of moral elevation were more likely to show high levels of sense of meaning of life, and this relation was mediated by both gratitude and perceived social support. Moreover, the mediators of gratitude and perceived social support sequentially mediated this relation.

Moral Elevation and Sense of Meaning of Life

In line with our hypothesis, moral elevation was positively related to suicidal sense of meaning of life, which is consistent with previous studies.⁵¹ Previous studies have indicated that positive emotions are related to life

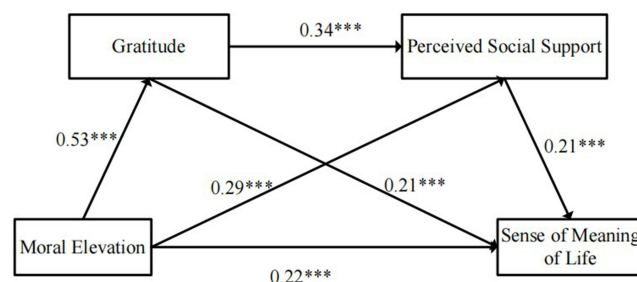


Figure 2 The Mediating Roles of Gratitude and Perceived Social Support on the Relation between Moral Elevation and Sense of Meaning of Life; *** $p < 0.001$.

Table 3 The Bootstrap Mediation Effect Test for the Relation Between Moral Elevation and the Sense of Meaning of Life

	Effect	BootSE	BootLLCI	BootULCI	Proportion of Mediation Effect
Total indirect effect	0.2064	0.021	0.1640	0.2486	
Ind1	0.1088	0.019	0.0709	0.1453	52.71%
Ind2	0.0607	0.012	0.0385	0.0863	29.41%
Ind3	0.0369	0.007	0.0237	0.0512	17.88%

Notes: Ind1: Moral Elevation → Gratitude → Sense of Meaning of Life; Ind2: Moral Elevation → Perceived Social Support → Sense of Meaning of Life; Ind3: Moral Elevation → Gratitude → Perceived Social Support → Sense of Meaning of Life.

meaning.^{52,53} That is, individuals with more positive emotions feel high levels of life meaning. Conversely, negative emotions can reduce individuals' sense of meaning of life and even lead to suicidal ideation.⁵⁴ Moral Elevation is a positive moral emotion that arises from observing the virtuous behavior of others, and when individuals experience this positive emotion, a number of physiological, cognitive, and behavioral changes follow.³¹ Cognitively, on the one hand, individuals' positive cognitive evaluation of themselves leads to a higher sense of self-identity, which enables them to better understand the meaning of life and thus promotes the pursuit of meaning in life.^{55,56} On the other hand, individuals also exhibit positive cognitive evaluations of others, which influence their reactions to people or events around them.⁵⁷ Positive cognitions lead to positive behavioral feedback, which creates a scenario in which individuals exhibit a friendly and optimistic attitude toward themselves and the outside world, effecting a more positive life meaning and a stronger motivation to pursue life meaning.

Moreover, the current study supports the theory of the expansion and construction of positive emotions. This theory proposes that positive emotions can expand one's paradigm of thought and action in a given scenario, enabling individuals to overcome limitations and engage in more thought and action. Simultaneously, the expansion of thought and action also enables individuals to develop their cognitive resources in a sustainable manner.⁵⁸ Based on this theory, the positive emotion of moral elevation can expand the cognitive boundaries of college students. Those with high moral elevation are more influenced by virtuous events in daily life, leading to pro-social changes in cognition and behavior.¹² They tend to make positive evaluations of people and things, view the world as beautiful and life as worthy of respect. This positive attitude enables them to face the world positively, be kinder to others, engage more in real activities, show greater self-confidence, and consequently, exhibit a stronger sense of life's meaning. Moreover, moral elevation also enhances psychological resources and flexibility, making it easier to cope with setbacks, perceive difficulties positively, and view themselves in a more positive and flexible manner, resulting in a more diversified and objective sense of meaning of life.

The Chain Mediating Role of Gratitude and Perceived Social Support

In the current study, we found that moral elevation would indirectly affect sense of meaning of life through gratitude. In addition to the overall mediation results, each individual link in our mediation model deserves attention. For the first stage of the mediation model, moral elevation is positively correlated with gratitude. When individuals feel the same emotions as the protagonist of the event, they can be thought of as inserting themselves into the event, "thinking what others think and feeling what others feel". Gratitude is a positive emotion that an individual feels after receiving a favor from another person.⁵⁹ When individuals possess a higher moral elevation, they are more likely to develop positive perceptions of others and exhibit a correspondingly higher tendency to be grateful.⁶⁰ Second, for the relation between gratitude and sense of meaning of life, we found that gratitude significantly and positively predicted sense of meaning of life. It has been observed that gratitude motivates individuals to perceive the meaning in life.^{11,26,61} When individuals are exposed to adverse circumstances, positive psychological traits can buffer individuals from the adverse effects of stressful events and thus protect them from harm.^{62,63} Gratitude, as an implicit, stable, and positive personality trait, protects individuals during stressful events and enhances individuals' ability to cope with negative life events, which in turn enhances their positive

psychological experiences.⁶⁴ In addition, individuals with high levels of gratitude exhibit a sharper sense of positive life events, and they enjoy not only pursuing the true meaning of life but also finding joy in life.⁶⁵

Furthermore, we also found that moral elevation predicted sense of meaning of life via perceived social support. Perceived social support reflects the individual's expectations and satisfaction with social support.⁶⁶ When individuals possess high levels of moral elevation, they tend to exhibit positive evaluations of others, perceive people around them as kind and friendly, and display more open attitudes toward the outside world, and they are more likely to feel cared for and supported by others.⁶⁷ As previous research suggests, higher levels of moral elevation in sports event volunteers are associated with increased social support.⁶⁸ Perceived social support and sense of meaning of life were significantly and positively correlated. It has been indicated that effective social support can enable college students to achieve higher subjective well-being, thus increasing their personal life satisfaction and sense of meaningfulness in life.^{37,69} The results of the data analysis indicated that college students exhibited the highest family support scores, a result supported by previous studies. Scientific studies have indicated that family relationships are the main source for college students to gain meaning in life.⁷⁰ Strong family support not only provides individuals with a satisfactory life experience but also facilitates their search for meaning in life.²⁷ In particular, supportive parenting by mothers can reduce the occurrence of depression in individuals, thus enabling them to build a positive self-perception.^{71,72}

More importantly, these mediating roles of gratitude and perceived social support do not work in isolation from each other, but instead, gratitude is inherently related to perceived social support. Specifically, it has been indicated that gratitude as a positive psychological trait contributes to the formation and maintenance of social support,⁷³ and highly grateful individuals perceive social support more often than less grateful ones.⁷⁴ This study observed that moral elevation not only influences the sense of meaning of life directly but also indirectly influences it through gratitude and perceived social support. This indirect effect is realized through three pathways. The first pathway: moral elevation acts on the sense of meaning of life through gratitude. College students with a high moral elevation exhibit a higher tendency to effect positive perceptions of others, and they are more likely to feel kindness from the outside world, and therefore more likely to be grateful to individuals. Their level of gratitude is thus increased, and they are more certain of the value of their own existence and the meaning of their lives. The second path: moral elevation acts on sense of meaning of life through the perceived social support. Individuals with a high moral elevation perceive greater social support and therefore exhibit more positive and open attitudes toward the outside world, and the social support main effect model proposes that when individuals receive more social support, they experience more positive emotions, which enables them to reduce their negative emotions.⁷⁵ It has been indicated that perceived social support is negatively related to depression, and that depressed mood is a crucial factor in reducing an individual's sense of meaning of life; thus, individuals with high perceived social support also exhibit an increased sense of meaning of life. The third path: moral elevation is mediated by gratitude and perceived social support. Gratitude and perceived social support exhibit a chain mediating effect. Research has indicated that individuals with high levels of gratitude also exhibit higher levels of perceived social support; high levels of perceived social support enable college students to develop positive cognition that effectively copes with negative life events and buffers emotional stress;³³ perceived social support enables individuals to enhance their sense of belonging to a group, thereby increasing their sense of meaning of life.⁷³ Therefore, gratitude and perceived social support mediated the relation between moral elevation and sense of meaning of life not only parallelly but also sequentially.

Conclusion and Implications

Limitations and Future Directions

Several limitations need to be considered in the current study. First, the cross-sectional nature of the data did not allow us to clarify the causal direction of associations and inferred alternative explanations for our findings. Future studies are suggested to use longitudinal designs to test our model. Second, the sample herein was mainly obtained from students in teacher training colleges and universities owing to time and scope constraints, and although a limited number of medical students were utilized, the results lacked a certain degree of representativeness due to the limited percentage. Therefore, future studies are supposed to include adolescents from different groups. Third, the study utilized the questionnaire method, and the data were mainly collected through self-reports by the subjects. Although irrelevant variables were controlled at the

questionnaire administration and data analysis stages, it was still difficult to ensure that college students were influenced by the social approval effect in their responses. Thus, future research can collect data from multiple information providers (eg, parents, teachers, and peers) to reduce the impact of subjectivity. Finally, the results of the study could not be followed up at a later stage due to the impact of the novel coronavirus epidemic. Therefore, the accuracy of the study results should be further explored. For future research, it may be considered to conduct follow-up studies in a more stable environment or employ alternative research designs to ensure a more in-depth exploration of the accuracy of the results.

Theoretical and Practical Implications

Notwithstanding these limitations, the current study has several theoretical and practical contributions. From the perspective of theoretical value, research on sense of meaning of life is further expanded from the angle of positive emotions, which sheds some light on the relation between moral elevation and sense of meaning of life. Furthermore, this study further extends existing studies by confirming the mediating roles of gratitude and perceived social support. This contributes to the knowledge of how moral elevation influences sense of meaning of life. From a practical perspective, our findings provide actionable insights for individuals, educators, and practitioners seeking to enhance the sense of meaning of life for college students. First, educators can embed emotions-focused pedagogical interventions into the college course to foster engagement with moral beauty and the daily experiences of elevation. Second, encouraging individuals to reflect on and express gratitude for positive experiences, both personal and witnessed. Third, schools, communities, and organizations can create platforms for individuals to build supportive relationships, fostering a sense of belonging and interconnectedness that contributes to an enriched meaning of life.

Conclusion

- (1) Moral elevation positively and significantly predicted sense of meaning of life among college students.
- (2) Both gratitude and perceived social support partially mediated the relation between moral elevation and sense of meaning in life.
- (3) Gratitude and perceived social support sequentially mediated the relation between moral elevation and sense of meaning in life.

Data Sharing Statement

The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Ethics Approval and Consent to Participate

All the methods were performed in accordance with the Declaration of Helsinki. The study was approved by the Ethical Committee of Anhui Normal University. All the participants provided written informed consent.

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Disclosure

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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