The Impact of Gratitude on Coping Styles among Chinese College Students: The Mediating Effects of Perceived Social Support and Self-Esteem

Jun Zhang[1,2] iD, Liang Wang[1], Zhenxing Tang[1], Xiaowen Li[2], Qun Hu[1]
[1] Tourism College of Zhejiang, China, Hangzhou, 310000

[2] Sehan University, College of Education, Republic of Korea, Jeollanam-do, 650106

In the 21st century, facing immense pressure and challenges, people often exhibit more passive coping styles, such as avoidance or self-blame. Negative coping styles do not fundamentally reduce pressure and challenges; instead, they tend to amplify their impact. Gratitude helps promote more positive coping styles in dealing with life's challenges, making it necessary to study how gratitude influences coping mechanisms. This study used highly reliable and valid measures of gratitude, Perceived Social Support, Self-Esteem, and the Simplified Coping Style Questionnaire to conduct a cross-sectional survey of 1,666 Chinese college students. The findings were: 1) Gratitude significantly and positively predicts Perceived Social Support, Self-Esteem, and coping styles; 2) Perceived Social Support significantly and positively predicts Self-Esteem and coping styles; 3) Self-Esteem significantly and positively predicts coping styles; 4) Gratitude significantly predicts coping styles through the chain mediation effects of Perceived Social Support and Self-Esteem. This study suggests that we should address the issue at its source by enhancing gratitude education, helping individuals better recognize the social support resources around them. This approach not only helps protect their self-esteem but also leads to more positive coping styles.

Key words: gratitude, coping styles, perceived social support, self-esteem, multiple mediating roles

Introduction

Gratitude is a social emotion involving a positive response to others' behavior (Emmons & McCullough, 2003). It encompasses not only the recognition of the favor received but also a positive appraisal of the benefactor and a desire to reciprocate. Gratitude is considered to contribute to individual and societal well-being, enhancing interpersonal relationships and social cohesion. Structurally, grati-

tude comprises cognitive, emotional, and behavioral dimensions. The cognitive dimension involves recognizing oneself as a recipient of favor; the emotional dimension is reflected in the feelings of appreciation for the favor; and the behavioral dimension manifests in the desire or actual actions to repay the favor. These three dimensions together constitute the complete experience of gratitude (McCullough, Emmons & Tsang, 2002).

Broaden-and-build theory posits that gratitude can broaden an individual's cognitive pattern, breaking conventional mental sets, and build substantial personal resources, thus changing coping styles and adopting different approaches to stress (Fredrickson, 2004). Specifically, grateful individuals, when facing life's stressors and challenges, are more inclined to use these positive strategies instead of negative coping, such as avoidance or self-blame. Additionally, gratitude is closely related to better social support and interpersonal relationships (Algoe, Haidt, & Gable, 2008).

However, the impact of gratitude may be influenced by individual differences and cultural backgrounds. For example, different cultures vary in how they accept and express gratitude, which may affect how gratitude influences coping mechanisms (Chen et al., 2020). In China, gratitude as a value and cultural tradition is deeply rooted in both societal and individual behaviors (Tian, Du, & Huebner, 2015). Parents often educate their children to always treat those around them with a grateful heart (Lan, 2022). In school education, teachers teach students to respect their elders. When parents grow old, children have the responsibility to provide financial support and care for them (Deng & Lin, 2019).

Coping styles are cognitive and behavioral ways individuals use to deal with setbacks and stress, playing a crucial role in the psychological stress process (Ye et al., 2017). Avoidance or evasion is a common maladaptive coping style, where individuals attempt to avoid or escape the stressor rather than confronting and resolving the problem (Jones, 2019). Another maladaptive coping style is self-blame or negative self-evaluation, where individuals excessively criticize or blame themselves when facing difficulties, often leading to a decline in self-acceptance and self-esteem (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). Additionally, substance abuse is also a common maladaptive coping style in today's society (Bian et al., 2023), such as drinking, smoking, or drug abuse (He & Guo, 2023). Although maladaptive coping styles may provide temporary relief in the short term, they can exacerbate an individual's stress and health issues in the long run (Yang, Lu, & Kong, 2022).

Research suggests that individuals with a tendency toward gratitude are more likely to perceive the social support resources around them (Algoe, Haidt, & Gable, 2008), and there is a strong correlation between social support and self-esteem. For example, social support is a significant predictor of the development and maintenance of high self-esteem, highlighting the critical role that the quality and quantity of support received from one's social network play in cultivating and sustaining self-esteem (Orth, Robins, & Roberts, 2008). Furthermore, an individual's level of self-esteem often influences their behavioral tendencies; high self-esteem tends to lead to more proactive behaviors, while individuals with low self-esteem often engage in more negative behaviors due to a lack of confidence (Danielsson & Bengtsson, 2016).

Researchers conducted a survey on gratitude, coping styles, and aggression among 589 Chinese adolescents and found that gratitude significantly positively predicted coping styles. Additionally, coping styles mediated the relationship between gratitude and problem behavior. The authors suggest that grateful people have more resources, a broader

mindset, actively discard unrealistic delusions and social withdrawal, sincerely reevaluate their negative experiences, and face reality with positive coping styles (Sun et al., 2019). Based on this, the present study proposes Hypothesis 1: Gratitude among college students positively predicts coping styles.

The Mediating Role of Perceived Social Support

Social support is an individual's perception or experience of the external environment, meaning they feel cared for and valued, are part of a social network, and can seek help when needed (Chen et al., 2022). Perceived social support refers to the emotional experience of being respected, understood, and supported by others (Zhao et al., 2021). Perceived social support emphasizes an individual's subjective evaluation of the presence or absence of support, rather than the actual amount of support received. Specifically, perceived social support is typically manifested in the belief that others will offer help when needed, feeling accepted by a social group, and believing that others will provide emotional and material support (Ye & Zhu, 2022). This belief can be reflected in an individual's positivity in social interactions, help-seeking behavior, and sharing of experiences.

Extensive research has found that gratitude and social support are considered part of the process of providing or exchanging resources with others (Gabert-Quillen et al., 2011). Individuals with higher levels of gratitude tend to feel respected and cared for, are more emotionally stable, and are more welcomed in social interactions (Swickert et al., 2019), often possessing higher levels of social support (Yu, Wang, & Wu, 2022). At the same time, expressing gratitude to others also brings more recognition and support from others (Sarason & Sarason, 2009). In other words, grateful individuals tap into their inner potential and actively increase their social support and well-being.

Researchers conducted a study with 330 nursing staff and found that those with religious beliefs consistently believed they could receive unlimited support and help from God, were always grateful to God and those around them, and had relatively low levels of depression. In terms of gender differences, the levels of anxiety and depression in women were significantly higher than in men (Ates et al., 2018). There is a significant correlation between social support and coping styles (Zdemir et al., 2021). However, from existing research, it's not fully determined whether perceived social support can predict coping styles, and this needs to be verified by subsequent research. Based on this, the present study proposes Hypothesis 2: Perceived social support mediates the relationship between gratitude and coping styles in college students.

The Mediating Role of Self-esteem

Self-esteem is an individual's overall evaluation or attitude towards their own worth and abilities, and is an important component of personal self-concept (Marshall et al., 2021). Social investment theory suggests that after interacting with the social environment, individuals assume certain roles expected by others. Once individuals enter these roles, they exhibit corresponding cognition, emotions, and behaviors, which in turn affect their personality and self-esteem (Tong et al., 2023). Extensive research has found that individual self-esteem is closely related to career development, physical and mental health, and interpersonal relationships (Johnson et al., 2017). Individuals with high self-esteem tend to be more confident, approach challenges positively, and have higher levels of happi-

ness (Wu et al., 2015), while those with low self-esteem may tend to avoid challenges and be more sensitive to criticism (Leary & Baumeister, 2000). However, individuals with excessively high or unrealistic self-esteem often resist accepting failure or criticism and may even exhibit aggressive behavior (Lee, 2014).

Gratitude is considered an attitude of appreciation for kindness or positive things in life. Theoretically, gratitude is thought to enhance individuals' positive cognition of themselves and the external world, thereby boosting self-esteem. When people feel grateful, they tend to focus on the positive aspects of life (Hou, 2019), making it easier for them to realize that they are loved and supported, which can enhance their sense of self-worth (Froh, Sefick, & Emmons, 2008). Research has found that higher levels of gratitude are significantly correlated with higher levels of self-esteem (Algoe, Haidt, & Gable, 2008), and practices such as gratitude journals have been found to effectively boost individuals' sense of self-esteem (Rash, Matsuba, & Prkachin, 2011).

Researchers conducted a survey of 981 left-behind adolescents in Hunan Province, China. The results indicated that self-esteem significantly predicted coping styles (Luo et al., 2016). Higher levels of self-esteem had a positive impact on coping styles (Li et al., 2023). Additionally, researchers found that gratitude was positively correlated with life satisfaction. Expressing gratitude not only helps improve individuals' subjective well-being and life satisfaction, but also benefits physical health (Gallagher et al., 2021). Individuals with higher gratitude scores are more likely to receive more social support, which in turn encourages them to adopt more proactive coping styles (Keshky et al., 2023). Based on this, the present study proposes Hypothesis 3: Self-esteem mediates the relationship between gratitude and coping styles in college students.

The Chain Mediation of Perceived Social Support and Self-Esteem

Perceived social support is the availability of understanding, care, and practical help from others as perceived by the individual. Studies have shown that perceived social support has a significant positive impact on an individual's self-esteem. Perceived social support can provide emotional comfort and enhance an individual's recognition of their own value, thereby boosting self-esteem (Swickert et al., 2019). When individuals feel supported by others and see themselves as valuable members of society or perceive more social support, their level of self-esteem tends to increase, making them feel more confident and valuable when facing challenges (Liu et al., 2021).

Synthesizing existing research, we can preliminarily conclude that gratitude can positively predict coping styles (Sun et al., 2019). However, few studies elaborate on the mechanisms of gratitude's impact on coping styles. This study attempts to understand this relationship from the perspective of self-inspection. Combining existing literature, we believe that the higher the level of individual gratitude, the higher the level of perceived social support they can sense. Therefore, they objectively view and respect everyone around them and also respect themselves, making the right coping styles according to their true wishes. Based on this, the present study proposes Hypothesis 4: Perceived social support and self-esteem mediate the relationship between gratitude and coping styles in a chained manner.

Methods

Participants

This study recruited participants from students of Anhui Normal University, Nanjing

Normal University, and Suzhou University, and has been approved by the relevant ethics committee. In selecting human participants, we strictly adhered to the relevant provisions of the Declaration of Helsinki. A total of 1680 questionnaires were distributed, and 1666 valid questionnaires were recovered, with a recovery rate of 99.17%. Among them, there were 601 male participants (36.07%) and 1065 female participants (63.93%). A total of 433 participants (74.0%) came from urban areas, and 1233 participants (26.0%) came from rural areas. Before conducting the survey, we explained the purpose and methods of our questionnaire survey to the participants, ensuring that each participant was fully informed and consent was obtained through informed consent forms.

Research Tools

Gratitude Questionnaire-6

We used the Chinese revised version of the Gratitude Questionnaire-6 developed by Mc-Cullough et al. (McCullough et al., 2002). The questionnaire has now become a commonly used measurement tool for gratitude among Chinese scholars. The applied groups are very diverse, including adolescents, college students, individuals with mental health issues, and members of the general public (Zhang, Tu, Zhang, & Fu, 2024). This questionnaire comprises a single factor with 6 items and uses a 7-point Likert scale. Higher scores indicate greater understanding of gratitude (McCullough et al., 2002). In this study, the overall Cronbach's α coefficient for the scale was 0.73.

Perceived Social Support Scale

We used the Chinese revised version of the Perceived Social Support Scale developed

by Zimet et al. (Zimet et al., 1988). Currently, the Chinese version of this questionnaire is widely used by many scholars in China. Relevant studies involve groups such as students, adults, medical professionals, military personnel, and employees (Ye & Zhu, 2022). This scale consists of 12 items across three factors: family support, friend support, and other support. It uses a 7-point Likert scale. Higher scores indicate higher perceived social support (Han et al., 2021). In this study, the overall Cronbach's α coefficient for the scale was 0.95.

Self-Esteem Scale

We used the Chinese revised version of the Self-Esteem Scale developed by Rosenberg (Rosenberg, 1965). The Chinese version of this scale has been widely used in self-esteem research in China. It involves various student groups, including elementary school students, middle school students, and college students (Meng et al., 2023). Consisting of 10 items, with 5 items being reverse-scored, it uses a 4-point Likert scale. The total score ranges between 10-40, with higher scores indicating higher self-esteem (Liu et al., 2017). In this study, the overall Cronbach's α coefficient for the scale was 0.84.

Simplified Coping Style Questionnaire

We used the Chinese revised version of the Simplified Coping Style Questionnaire originally developed by Folkman et al. (Folkman et al., 1986). As a standard measurement tool included in the Chinese Mental Health Assessment Manual, this scale has been widely used to assess various groups, including elderly individuals, healthcare workers, psychological counselors, college students, and patients (Wang, Wang, & Ma, 1999). This scale consists of 20 items across two factors: active coping

and passive coping; higher scores indicate a more active coping style (Sun et al., 2019). In this study, the overall Cronbach's α coefficient for the scale was 0.89.

Results

Data Analysis

We used SPSS 25.0 software to analyze the mean, standard deviation, and Pearson correlation coefficients of gratitude, perceived social support, self-esteem, and coping styles. Confirmatory factor analysis was conducted using Mplus 7.0 software to test the internal structure validity of the questionnaire, and the maximum likelihood estimation method was used to handle missing data in the questionnaire. Next, we construct a structural equation model to verify whether the indirect effect of perceived social support and self-esteem between gratitude and coping styles is significant.

In the constructed structural model, we used the model fit indices proposed by Wen et al. (2004): RMSEA ≤ 0.08, SRMR ≤ 0.08, CFI ≥ 0.90, TLI ≥ 0.90 (Wen, Hou, & Ma, 2004).

Control and Test of Common Method Bias

Common method biases refer to the false common variance among different traits caused by researchers using the same type of measurement tool, the same measurement environment, or the same subjects (Zhou & Long, 2004).

To overcome the problem of common method biases in questionnaire research, we adopted measures such as anonymous surveys and reverse scoring. We used the Harman single-factor method for factor analysis and extracted 8 factors with eigenvalues greater than 1, which could explain 64.48% of the total variance. The first main factor ex-

plained 33.96% of the total variance, fully satisfying the critical criterion of less than 40% (Tang & Wen, 2020).

Descriptive Statistics and Correlation Analysis

This study analyzed the differences among college students of both genders, household registrations, ages, and grades in terms of gratitude, perceived social support, self-esteem, and coping styles. For the analysis of gender and household registration differences, we employed independent samples t-tests. The results revealed that there were no statistically significant differences between male and female college students in gratitude and coping styles ($p > 0.05$), but there were statistically significant differences in self-esteem, age and perceived social support scores ($p < 0.05$). There were statistically significant differences in coping styles between urban and rural college students ($p < 0.05$), but no statistically significant differences in gratitude, perceived social support, and self-esteem scores ($p > 0.05$), as shown in Table 1.

We used one-way ANOVA to analyze the differences among college students of different ages and grades in terms of gratitude, perceived social support, self-esteem, and coping styles. There were significant differences in gratitude, perceived social support, and self-esteem scores among students of different ages ($p < 0.05$), but no significant differences in coping styles ($p > 0.05$). There were significant differences in gratitude, perceived social support, self-esteem, and coping styles scores among students of different grades ($p < 0.001$), as shown in Table 2.

In analyzing the mean, standard deviation, and correlation coefficients of the variables observed in this study ($N = 1666$), as shown in Table 3, there are several significant relationships noted among the demographic

Table 1 *Differences in gratitude, perceived social support, self-esteem, and coping styles among college students by gender and household registration*

Dependent variable	Independent variable		Quantity	Mean	Standard Deviation	F	Significance	t	Sig（two-tailed）
Gratitude		Male	601	29.83	6.17	6.67	0.01	-0.18	0.85
		Female	1065	29.89	5.61				
Perceived social support	Genders	Male	601	61.36	14.36	4.79	0.02	2.47	0.01
		Female	1065	59.15	12.65				
Self-Esteem		Male	601	28.60	4.58	11.27	0.00	3.26	0.00
		Female	1065	28.03	4.36				
Coping style		Male	601	31.41	10.40	10.82	0.00	1.49	0.13
		Female	1065	30.68	8.94				
Age		Male	601	19.68	0.00	78.19	0.00	10.36	0.00
		Female	1065	18.98					
Gratitude		Rural	1233	29.84	5.61	8.79	0.00	-0.31	0.75
		Urban	433	29.94	6.38				
Perceived social support	Household registration	Rural	1233	59.58	13.09	1.55	0.21	-1.90	0.05
		Urban	433	61.00	13.95				
Self-Esteem		Rural	1233	28.12	4.26	9.44	0.00	-1.74	0.08
		Urban	433	28.56	4.93				
Coping style		Rural	1233	30.64	9.20	1.46	0.22	-2.19	0.02
		Urban	433	31.81	10.25				

Table 2 *Differences in college students' gratitude, perceived social support, self-esteem, and coping styles by age and grade level*

Dependent Variable	Independent Variable		Sum of squares	Degree of freedom	Mean Square	F	Sig（two-tailed）
Gratitude		Between-group	491.27	5	98.25	2.91	0.01
		Within-group	55998.72	1660	33.73		
Perceived social support	Age	Between-group	2477.22	5	495.44	2.80	0.01
		Within-group	293552.93	1660	176.83		
Self-Esteem		Between-group	309.17	5	61.83	3.14	0.00
		Within-group	32682.33	1660	19.68		
Coping style		Between-group	862.20	5	172.44	1.91	0.08
		Within-group	149442.66	1660	90.02		
Gratitude		Between-group	545.09	2	272.54	8.10	0.00
		Within-group	55944.90	1663	33.64		
Perceived social support	Grade	Between-group	8767.69	2	4383.84	25.37	0.00
		Within-group	287262.46	1663	172.73		
Self-Esteem		Between-group	807.25	2	403.62	20.85	0.00
		Within-group	32184.26	1663	19.35		
Coping style		Between-group	3157.92	2	1578.96	17.84	0.00
		Within-group	147146.94	1663	88.48		

Note. N = 1666. Genders and Household registration are dummy variables, Male = 0, Female = 1, Rural = 0, Urban = 1. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Table 3 *Mean, standard deviation and correlation coefficients of the variables*

Variables	Genders	Age	Household registration	Gratitude	Perceived social support	Self-esteem	Coping style
Genders	1						
Age	-	1					
Household registration	5.57** （χ²/df）	0.06**	1				
Gratitude	0.00	-0.00	0.00	1			
Perceived social support	-0.08**	0.01	0.04	0.62**	1		
Self-esteem	-0.06*	0.06**	0.04	0.52**	0.56**	1	
Coping style	-0.03	0.03	0.05*	0.39**	0.502**	0.35**	1
M				29.87	59.95	28.24	30.95
SD				5.82	13.33	4.45	9.50

Note. *N* = 1666. Genders and Household registration are dummy variables, Male = 0, Female = 1, Rural = 0, Urban = 1.
*p < 0.05, **p < 0.01, ***p < 0.001

variables and the main variables of interest. Gender shows significant negative correlations with perceived social support (r = -0.08, p < 0.01) and self-esteem (r = -0.06, p < 0.05). Age is significantly positively correlated with household registration (r = 0.06, p < 0.01) and self-esteem (r = 0.06, p < 0.01). Household registration also has a significant positive correlation with coping styles (r = 0.05, p < 0.05). We used the Chi-square test to examine the relationship between gender and household registration. The results indicated that χ^2/df = 5.57 (p < 0.05), suggesting a significant relationship between gender and household registration. All four main variables – gratitude, perceived social support, self-esteem, and coping styles – show significant positive correlations with each other (r = 0.35-0.62, p < 0.01).

Construction and Testing of Structural Equation Model

In this study, the Perceived Social Support Scale contains a relatively large number of items. Direct modeling might affect the qual-ity of indicator data and the true structure of the model. Therefore, we employed the item parceling method for modeling after parceling (Wen, Huang, & Tang, 2018). Additionally, since gender, age, and household registration showed significant correlations with other variables, we included these demographic variables as control variables in the model.

We constructed a structural equation model with gratitude as the independent variable, coping styles as the dependent variable, and perceived social support and self-esteem as indirect variables. The model demonstrated good fit indices (see Table 4). Gratitude significantly positively predicted coping styles (β = 0.07, p < 0.001), gratitude significantly positively predicted perceived social support (β = 0.66, p < 0.001) and self-esteem (β = 0.23, p < 0.001), perceived social support significantly positively predicted self-esteem (β = 0.43, p < 0.001) and coping styles (β = 0.46, p < 0.001), and self-esteem significantly positively predicted coping styles (β = 0.04, p < 0.001), as shown in Figure 1.

Bootstrap resampling was employed 1000 times to test the chained mediating effects,

Table 4 *Collation of model fit indicators*

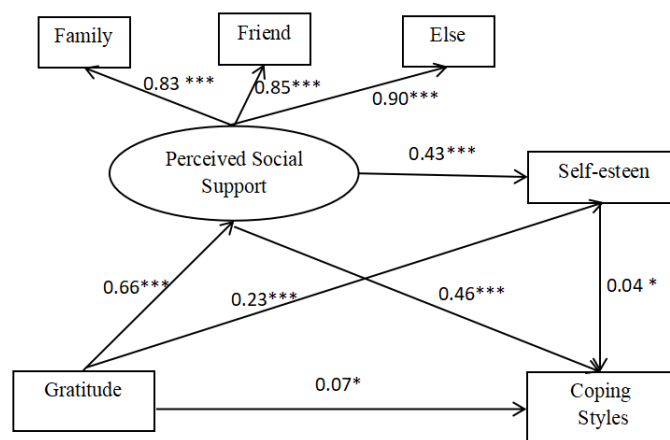| Model	Index name	Judgment value	Result
Gratitude→Perceived social support→Self-esteem→Coping style	RMSEA	0.04	Reasonable fitting
	SRMR	0.02	Overfitting
	TLI	0.97	Reasonable fitting
	CFI	0.98	Reasonable fitting

Figure 1 The impact of gratitude on coping styles among Chinese college students: the mediating effects of perceived social support and self-esteem.

Table 5 *Bootstrap analysis for significance testing of mediated effects*

Model pathways	Estimated	95%CI	
		Lower	Upper
Gratitude→Perceived social support→Coping style	0.49	0.39	0.59
Gratitude→Self-Esteem→Coping style	0.01	0.00	0.04
Gratitude→Perceived social support→Self-Esteem→Coping style	0.01	0.00	0.04

and a 95% confidence interval was calculated. The results revealed that the total effect value of the model is 0.63. Specifically, the pathways were: gratitude → perceived social support → coping styles (effect value 0.49), gratitude → self-esteem → coping styles (effect value 0.01), and gratitude → perceived social support → self-esteem → coping styles (effect value 0.01). The 95% Bootstrap confidence intervals for these indirect effects did not include zero, indicating that all three indirect effects were significant (as detailed in Table 5). Therefore, Hypotheses 2, 3, and 4 of this study were supported.

Discussion

This study found that gratitude, perceived social support, and self-esteem can significantly predict coping styles, supporting Hypothesis 1. As an important relational virtue, gratitude is crucial to a person's relationship satisfaction, sense of happiness (Song, 2024), and prosocial behavior (Wang & Wu, 2020). An individual's grateful mindset helps make positive coping styles. Perceived social support and self-esteem, like individual gratitude, are outcomes of individuals' comprehensive assessments of their perceived social support and self-esteem status. Therefore, we believe that a person who understands gratitude is more likely to engage in prosocial behavior and receive goodwill from others, enriching their sense of social support and relatively higher self-esteem.

The study confirmed that perceived social support mediates the relationship between college students' gratitude and coping styles, supporting Hypothesis 2. Grateful emotions are thought to enhance positive interactions and relationships between individuals, thereby increasing their perceived level of social support. When individuals experience gratitude, they are more inclined to recognize and cherish the kind actions of others, which helps build and increase social support (Algoe, 2012), mitigating the negative impact of stress and directly improving individuals' psychological health and well-being (Yu, Wang, & Wu, 2022). Good social support further provides individuals with resources to obtain help and support from others when facing stress. When individuals perceive a high level of social support, they are more likely to adopt positive coping styles, such as seeking emotional support, positive reappraisal, and problem-solving, instead of negative coping (Agbaria & Mokh, 2022). Therefore, promot-ing perceived social support through grati-tude can indirectly improve individuals' overall well-being.

The study found that self-esteem mediates the relationship between college students' gratitude and coping styles, supporting Hypothesis 3. Individuals who are grateful tend to give more positive evaluations and help to others, which in turn reinforces their sense of inner worth and self-efficacy (Froh, Sefick, & Emmons, 2008). When people feel valued by others, their self-esteem levels are enhanced, thereby strengthening their confidence and ability to face life's challenges, reducing the negative impact of stress, and serving a protective role in stress situations (Mao, 2018). Generally, individuals with higher self-esteem are more inclined to adopt active and positive coping styles, such as actively solving problems and seeking emotional support, rather than engaging in passive avoidance or self-destructive behaviors (Kernis, 2003).

Further, the study confirms that college students' gratitude can predict coping styles through the chained mediating effects of perceived social support and self-esteem, supporting Hypothesis 4. Grateful emotions, by enhancing individual social relationships, increase the level of perceived social support. Individuals who are grateful are more likely to recognize and appreciate the kindness of others, promoting the formation of closer and more supportive social networks (Algoe, 2012). Perceiving higher social support not only provides practical help resources but also increases self-efficacy and achieves higher levels of self-esteem (Froh, Sefick, & Emmons, 2008), enhancing individuals' psychological resilience when facing stress, often adopting positive coping styles, such as seeking support and actively solving problems. At the same time, higher self-esteem might enhance individuals' abilities to establish and maintain supportive social relationships, fur-

ther strengthening their perceived social support (Uchino, 2006).

Limitation and Implication

This study has some limitations. Firstly, the focus of this research was on the student population, and it did not cover various social groups. Future research can build upon this study by expanding the sample to include different social groups. Secondly, the psychological measures in this study relied on participants' self-reports, and the results reported by individuals may be influenced by other factors, so the findings often require further validation. Thirdly, the data collected in this study are cross-sectional, which may not fully reflect the causal relationships between variables. Future research could benefit from collecting longitudinal data to perform cross-lagged analyses.

Despite these limitations, this study reveals how gratitude influences coping styles through internal mechanisms. In educational practice, it is recommended to incorporate gratitude education, teaching children to be grateful from an early age, which is crucial for their healthy growth and the formation of correct life perspectives, values, and worldviews.

Conclusion

Gratitude not only directly and significantly predicted coping styles, but also significantly predicted coping styles through the chain-mediated effects of perceived social support and self-esteem. This study reminds us that what truly determines whether an individual tends to adopt positive or negative coping styles is often influenced by their level of gratitude. Therefore, future school and family education should place more emphasis on gratitude education for children.

Authors' ORCID
Jun Zhang
https://orcid.org/0009-0004-1221-9920

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