

# The Effect of Gratitude Level on Academic Performance of Junior Middle School Students: The Moderating Role of Perceived Teacher Expectations

Ruiqi Zhu

Qufu normal university

\*Corresponding author. Email: 1733173421@qq.com

## ABSTRACT

Gratitude is a traditional virtue of our Chinese nation. In the context of Chinese culture, adolescents' gratitude to important people in their life is more reflected in their efforts to study and academic success, and adolescents with higher levels of gratitude were more likely to report academic success work, but few studies have explored what factors may influence the effect of gratitude on academic success. Using teacher expectations as a moderator, this study reveals "how" gratitude affects academic achievement and "when" the effect is stronger or weaker. Eleven adolescents were investigated with a gratitude questionnaire, perceived teacher expectation questionnaire and academic achievement questionnaire. The results show that gratitude tendency has positive prediction function on academic achievement; teacher expectation has no significant positive moderating effect on the relationship between gratitude and academic achievement.

**Keywords:** teacher expectations; gratitude; academic achievement, teacher expectations

## 1. INTRODUCTION

Gratitude refers to the individual who has grateful cognitive emotions and behavior in order to understand or respond for their own benefit to others or things, or to assist in making their positive experience or access the results of a psychological tendency. Gratitude is a traditional virtue of the Chinese nation and is a basic moral standard that all Chinese people should have. Teacher expectation is a kind of predictive cognition of the behavioral results generated by teachers based on their knowledge of students. The level of teacher expectations perceived by students can influence their learning performance to some extent. This study takes gratitude as the independent variable, academic achievement as the dependent variable, and perceived teacher expectation as the moderating variable. It explores the influence of gratitude level on academic achievement and the moderating effect of teacher expectation through a questionnaire survey. Understanding the influence of gratitude on academic performance and the moderating effect of perceived teacher expectations will help educators realize the importance of cultivating students' internal good qualities and teachers' attitudes. It is beneficial to the

development of students' mental health and educational business.

## 2. THEORETICAL FRAMEWORK AND HYPOTHESIS

### 2.1. Background

In recent years, with the rise of positive psychology, positive mood has become an important research branch of positive psychology, including gratitude which is an important factor as a positive mood and also begin to be widely studied. The good development of the quality of gratitude contributes to the cultivation of responsibility consciousness, self-reliance consciousness, self-esteem consciousness and sound personality, which in turn contributes to the all-round development of people. Therefore, it is of great significance to discuss how to promote the development of teenagers' personalities, cultivate their sense of social responsibility, improve national cohesion, and promote the construction of a harmonious socialist society in China. Grateful for broadening construction theory [1] shows that gratitude, as an individual positive emotion, can broaden the scope of cognition and enhance cognitive flexibility. The

theory of achievement Motivation [2] points out that gratitude can stimulate the struggle and pursuit of goals, promote teenagers' participation in school, and thus improve their academic achievements. Therefore, it can be seen that gratitude has a great positive impact on individual development, and under the background of the gradual development of China's education level, gratitude education is particularly important. Previous studies have shown that gratitude has an impact on adolescents' academic achievement, that is, adolescents with higher level of gratitude are more likely to show academic success [3, 4].

Teacher expectation refers to a certain predictive cognition of behavioral results generated by teachers based on their knowledge of students. The research results of Crano, W. D. et al. [5] shows that teacher expectation refers to a certain predictive cognition of behavioral results generated by teachers based on their knowledge of students: Teachers' evaluations of children's social performance affected later achievement to an extent exceeding that attributable to academic expectations. Liu Lihong et al.'s research also shows that teachers' expectations have a significant impact on students' sense of learning ability and academic achievement motivation [6]. With the increase of teachers' expectations, students' sense of learning ability and academic achievement are both improved. Therefore, this study believes that the teacher's expectation effect also plays a crucial role in the process of gratitude. Under the expectation and encouragement of teachers, students could be more likely to feel grateful. On the contrary, if they could not feel the expectation of teachers, students could hardly feel grateful to teachers. Therefore, perceived expectations of teachers may actually regulate the relationship between gratitude and academic achievement.

## **2.2. Hypotheses**

There have been many studies that have shown that gratitude tends to play a positive role in academic performance proposal [3], but there is little research that studies teachers' expectations as a regulating variable. Therefore, this paper studies gratitude to teachers' expectations as a regulating variable when influencing academic achievement, and puts forward the following hypotheses: 1. gratitude tendency has positive prediction function on academic achievement; 2. teacher expectations have positive moderating effect on the relationship between gratitude and academic achievement.

## **3. METHODOLOGY**

### **3.1. Participants**

By random sampling, 11 students (average age: 14,

SD=14) from grade 8 of a public middle school in Langxi were selected as the investigation objects, including 3 boys (27.2%) and 8 girls (72.7%).

### **3.2. Materials**

#### *3.2.1. gratitude questionnaire*

Gratitude was measured using the Gratitude Questionnaire-6 [10]. A sample item is, "I feel thankful for what I have received in life." Each of the six items was rated on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree), with higher scores indicating a greater endorsement of gratitude. In previous studies, the GQ-6 has been found to have adequate psychometric properties ( $\alpha=0.82$ ) [10].

#### *3.2.2. Perceived teachers' expectation scale*

A 19-item teacher behavior questionnaire compiled by Babad and revised by Ouyang Dan and Song Fengning was adopted. The questionnaire involved teachers' supportive attitudes and behaviors perceived by students in their learning and life, including three dimensions of learning support, emotional support and ability support, and each dimension included 9 questions, 6 questions and 4 questions respectively. In the form of five-point Likert scale, subjects were asked to evaluate all items from 1 (completely disagree) to 5 (completely agree) to calculate the average score. The higher the students scores on the questionnaire, the more support they perceived from teachers in various aspects.

#### *3.2.3. Academic achievement*

On the basis of the similar research [11], asking for a juvenile to oneself on the three majors of Chinese, maths, English academic performance evaluation. Although the subjective evaluation method was adopted, existing studies have shown that the perception of students about their academic achievement is closely related to actual test results. Therefore, the subjective assessment method can provide effective information. Using five points, 1 table shows very bad, 5 tables show very good to calculate the average score of the three items; the higher the average score of the three items, the better the academic performance of the teenager.

### **3.3. Procedure**

The subjects were junior middle school students, and the same instructions were used for the test. The subjects were required to read the instructions carefully, and then fill in the questionnaire as required. It took about 10 minutes to complete all the questionnaires, and all the completed questionnaires were collected on the spot.

**3.4. Data analysis**

SPSS 18.0 was used to analyze the data, including descriptive statistical correlation analysis, multiple linear regression analysis and moderating effect analysis.

**4. RESULTS**

**4.1. Gratitude, teachers' expectation and perception on academic performance in the demographic variable variance analysis**

After statistical analysis found that for men and women, there is no significant difference on gratitude tendency. On the level of perceived teacher expectancy, boys and girls score also similarly, with no significant difference. On academic achievement, the girls' school achievement is significantly higher than boys'. Since the results of subjective assessment were used in this study, there was no comparability between grades, so grade differences were not discussed.

**Table 1.** Mean and standard deviation of variables for male and female students

variable	boys ( n=3)		girls(n=8)		F	Cohen's d
	M	SD	M	SD		
Perception of teacher expectations	62.00	31.19	65.88	15.64	0.09	0.78
Gratitude	27.00	13.00	34.87	6.96	0.41	0.21
Academic achievement	6.67	3.22	11.00	2.51	0.62*	0.04

**4.2. Correlation analysis between variables**

Table 1 lists the correlation coefficients among all variables that are statistically significant. There is a significant positive correlation between total gratitude score and academic achievement ( $r=0.75$ ,  $P< 0.01$ ). That

is, the more grateful adolescents are, the higher their academic achievement will be. Therefore, hypothesis H1 of this study is supported. In addition, there is a significant positive correlation between perceived teacher expectation total score and academic achievement and total score of gratitude ( $R =0.66$ ,  $P<0.05$ ;  $R = 0.78$ ,  $p<0.01$ ).

**Table 2.** Correlation analysis

dimensionality	M	SD	1	2	3
Perception of teacher expectations	64.82	19.21	1.00		
Gratitude	32.73	9.01	0.78**	1.00	
Academic achievement	2.78	9.62	0.66*	0.75**	1.00

ps:\* $p<0.05$ , \*\* $p<0.01$

**4.3. Regression analysis of junior middle school students' gratitude levels and academic performance**

Table 2 shows that the fitting degree of this linear regression model is not good,  $R^2=0.58<0.6$ , which means that the calculation result at this time cannot reflect the influence of gratitude on academic performance very truly and reliably.

**Table 3.** Regression analysis between gratitude and academic performance

model	Unstandardized Coefficients		Standard coefficient Beta	t	significance
	B	Standard error			
(quantity) gratitude	0.65	2.88	0.23	0.23	0.83
	0.22	0.13	0.60	1.63	0.14

R <sup>2</sup>	0.58
F	5.41
P	<0.05

Dependent variable: Academic achievement

**4.4. An analysis of the moderating effect of perceived teacher expectations on the gratitude level of parents and academic performance of junior middle school students**

According to the test standard for the moderating effect, the independent variable and the moderating variable were centralized first, and the product term of the centralized independent variable and the moderating variable was taken as the independent variable to conduct hierarchical regression analysis. The regression

coefficient of the product term was not significant, indicating that there was no moderating effect between teachers' expectations of gratitude and academic performance.

When the interaction item was added into the regression model of gratitude to academic performance, the interaction item had no significant predictive effect on academic performance (t = -1.03). Therefore, perceived teacher expectation has no significant moderating effect on the influence of adolescents' gratitude tendencies on academic achievement.

**Table 4.** Predictive effects of interaction items on academic performance

model	Unstandardized Coefficients		Standard coefficient	t	significance
	B	Standard error	Beta		
(quantity)	6.69	4.00		1.67	0.15
interaction item	-0.01	0.01	-0.26	-1.03	0.34
		R <sup>2</sup>			0.80
		F			5.81
		P			<0.05

Dependent variable: Academic achievement

**5. DISCUSSION**

**5.1. The relationship between gratitude level and academic achievement**

Gratitude is a positive emotion, an impulse generated in the heart after receiving a favor, which urges the individual to repay the favor he has received. We believe that in the Chinese cultural context, adolescents' gratitude to significant others in their lives is more reflected in their efforts to study and achieve academic success. However, in addition to gratitude towards significant others, adolescents' gratitude towards their country or society and nature should also boost their academic achievement. The data confirmed our hypothesis, and this study found: gratitude and adolescent academic achievement are related, with higher levels of gratitude teenagers more performance for academic success. This once again confirmed that gratitude the positive role in individual development, especially in the important role of school learning, which is in line with previous research conclusion. Therefore, we should pay attention to the important role of gratitude education in the development of adolescents.

**5.2. The Moderating effect of perceived teacher expectation on on Junior High School Students' Gratitude Level and Academic Performance**

In addition to verifying the positive predictive effect of gratitude on academic achievement, we also investigated the role of perceived teacher expectations in the process of gratitude. However, it is not found that teachers' expectation has a significant moderating effect on the level of gratitude and academic performance of junior high school students.

**5.3. Suggestions**

Nowadays, our education is no longer just teaching students basic knowledge and skills, but also paying more attention to the education of students' morality and quality. As a very important psychological quality, gratitude, has been widely studied by scholars at home and abroad. This study has important theoretical value for enriching the mechanism of adolescents' gratitude influencing their academic achievement, and also has important reference value for improving adolescents' academic achievement.

First, we should pay attention to the influence of gratitude on adolescents' academic achievement.

Combined with the actual situation of domestic teenagers, schools can draw lessons from foreign advanced concepts and experience, arrange gratitude education and intervention of localization, which can promote the physical and mental development of adolescents, and to improve their academic achievement. On the one hand, because adolescent academic resilience can be cultivated [12], emphasis should be placed on improving adolescent coping with academic pressure and frustration. On the other hand, people should focus on improving youth's external living environment to appropriate to the young "decompression", and create an external environment conducive to the growth of young people.

Second, in perceiving the teacher's emotional support, we should increase the intensity of teachers' support for students' emotional support, especially improve the ability of the teachers and students empathy. In the process of teaching students, many teachers tend to adopt a one-way lecturing approach and do not have the patience to listen to students' experience and ideas, resulting in blocked communication between teachers and students, tension between teachers and students, affecting students' learning enthusiasm. Therefore, it is urgent for contemporary educators to give full play to the role of teachers as listeners and enrich their humanistic care for students.

## 6. CONCLUSION

This study explores the relationship between gratitude level and academic performance as well as the moderating role of teacher expectation, and draws some practical conclusions, but also has a shortcoming: the method of selecting subjects in this study was simple random sampling. Although the number of men and women and grades were kept in balance during the questionnaire survey, the complete balance could not be achieved in the actual questionnaire survey. In addition, due to the limitations of manpower, material resources and other research conditions, the sample size of the subjects is not large enough, the selected subjects can not represent all junior high school students, and the results are not moderate.

In light of this study's shortcomings, the following recommendation for future research is made: if conditions permit, the scope of subjects should be expanded as much as possible to balance the number of people in schools of different genders and grades, so as to improve the popularity of research results.

## REFERENCES

- [1] Fredrickson, B. L., Gratitude, like other positive emotions, broadens and builds. *The psychology of gratitude*, 2004, pp. 145+166.
- [2] Bono, G., Froh, J. J., Gratitude in school: Benefits

to students and schools, *Handbook of positive psychology in schools*, Taylor & Francis Group, England, 2009, pp. 77-88.

- [3] King, R. B., & Datu, J. A. D., Grateful students are motivated, engaged, and successful in school: Cross-sectional, longitudinal, and experimental evidence. *Journal of School Psychology*, vol. 70, 2018, pp. 105-122.
- [4] Yu chengfu & Pan Yijun, Gratitude tendency and its relationship with academic achievement and problem behavior in Shenzhen Primary school students. *Educational Measurement and Evaluation (Theory Edition)*, (09), 2011, pp. 50-53+37.
- [5] Crano, W. D., & Mellon, P. M., Causal influence of teachers' expectations on children's academic performance: A cross-lagged panel analysis. *Journal of Educational Psychology*, vol. 70(1), 1978, p. 39.
- [6] Liu Lihong, Yao Qingru. The Influence of teachers' expectations on Students' academic performance [J]. *Psychological Science*, (6), 1996, pp. 348-350+384.
- [7] Jia, Z., Pygmalion Effect: The Impact of Teachers' expectations on English Classroom teaching. *Journal of Southwest Agricultural University: Social Science Edition*, vol. 10(1), 2012, pp. 215-216.
- [8] Howells, K., The role of gratitude in higher education. *Research and Development in Higher Education*, vol. 27(2), 2004, pp. 164-173.
- [9] Wen Chao, Zhang Wei, Li Dongping, Yu Chengfu, & Dai Weizhu, The Relationship between Gratitude and Academic Achievement in Junior Middle School Students: The Mediating Role of learning Engagement. *Psychological Development and Education*, vol. 26(6), 2010, pp. 598-605.
- [10] McCullough, M. E., Emmons, R. A., & Tsang, J. A., The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, vol. 82, 2002, pp. 112-127.
- [11] Fuligni, A. J. & Zhang, W., Attitudes toward family obligation among adolescents in contemporary urban and rural China. *Child Development*, vol. 74, 2004, pp. 180-192.
- [12] Waxman, H. C. & Padrón, Y. N., Shin, J.-Y., & Rivera, H. H., Closing the achievement gap within reading and mathematics classrooms by fostering hispanic students' educational resilience. *International Journal of Human and Social Sciences*, vol. 3, 2008, pp. 569-589.