

# Analysis on the Relationship between Emotional Intelligence and Mental Health of Contemporary College Students

Yunlu Xiang

Miami University, 45056, America

**Keywords:** Emotional intelligence, Mental health, College students

**Abstract:** The concept of emotional intelligence has attracted attention from all aspects since its inception. It is regarded as the most important factor for individual success. However, with the popularization of the concept of emotional intelligence, the study of emotional intelligence has gradually become chaotic. The most deadly disease is that its content structure becomes vague and its meaning is infinitely expanded, so emotional intelligence research has been criticized for a period of time. Recently, the academic circles have proposed a way to return emotional intelligence to science, and strive to bridge the gap between emotion and intelligence, and advocate research under the framework of processing and utilization of emotional information. Due to the problem of the definition of emotional intelligence in the past, it can be believed that the study of emotional intelligence structure and its relationship with mental health requires a new investigation. It tries to explore the structure and characteristics of college students' emotional intelligence after scientifically defining emotional intelligence, and analyze whether each factor is the main effect or the buffer effect in life events-mental health.

## 1. Introduction

College students are hailed as the pride of the sky, and they are the reserve army of all kinds of high-level professionals. They are responsible for the whole society. Therefore, the development education of contemporary college students has received attention in all aspects. Psychological health is the most important part of the growth and development of college students. It not only relates to the question of whether an individual can be fully accomplished, but also relates to the more basic proposition that he can become a healthy person. However, in recent years, the survey results on the mental health of college students are not optimistic, and the mental health problems of college students have to attract attention from all sides. Emotional intelligence is seen as an individual's perception of emotions, expressions, adjustments to one's and others' emotions, and the ability to use emotional knowledge to solve problems. When people put forward emotional intelligence, they pay more attention to its influence on individual achievement and achievement. They think that it is the key to personal success. The conclusions drawn also prove that emotional intelligence can promote individual cognitive learning activities. Send and push. As a characteristic of individual ability, emotional intelligence can influence the individual's feelings and behaviors. Then, whether this kind of emotional ability has a relationship with mental health, and what kind of relationship exists, this question is worth exploring. This paper uses a questionnaire survey method to survey 500 college students. The research includes the following aspects: determining the structure and characteristics of college students' emotional intelligence; the independence of emotional intelligence concept; the relationship between emotional intelligence and life event stress, mental health and the main effect and regulating effect of emotional intelligence in life events-mental health analysis.

## 2. The concept of emotional intelligence

Emotional intelligence refers to individuals who monitor their own and others' emotions and emotions, including emotional evaluation and expression, emotional regulation, and the use of emotional knowledge to solve problems. Emotional evaluation and expression include evaluation,

expression, and evaluation of other people's emotions. the ingredient confirms and classifies one's emotions through his own words and facial expressions. For others, it is the evaluation of others' emotions by measuring and experiencing the emotions of others. important part. Emotional regulation refers to the ability to manage and change the emotional intensity and direction of oneself and others. It includes adjusting negative emotions to relieve the harmful effects on individual adaptation, while maintaining positive emotions to obtain the value of happiness. Emotional use refers to the understanding of emotions and the use of this information to solve problems. Because a positive state of mind can help the organization and problem solving of memory, and a high degree of emotional self-awareness can help people to direct attention to important matters. So the ingredient includes the use of emotions to guide individuals' attention to important aspects of the outside world, to develop creative and flexible perceptions, to maintain motivation towards the goal, and so on.

### **3. The content of this study**

There must be an appropriate choice for the definition and measurement of emotional intelligence. We believe that emotional intelligence is the most appropriate for judging, expressing, regulating, and using emotions to solve problems. Understanding emotional intelligence as an individual's behavioral tendency and characteristics in dealing with emotional problems, using the relevant emotional intelligence scales at home and abroad to compile college students' emotional intelligence questionnaires, conducting a scale survey on college students' groups, and exploring the structural problems of college students' emotional intelligence. The characteristics of emotional intelligence of college students, the emotional intelligence, the basic personality dimension and other standard scalars are put together to explore the relationship, through statistical analysis to confirm the role of emotional intelligence factors in mental health, it is to support the main effect The model is also a buffer function model, and further look at whether the effects of each factor are the same.

### **4. The structural verification of the emotional intelligence questionnaire**

The data of 500 college students were entered and the four-factor model of emotional intelligence was verified. Assume that combining the emotional regulation of emotional intelligence and helping others to adjust emotions into a factor can constitute a three-factor structure. At the same time, the possible models also have a one-factor model. In order to compare the three models, the LISEREL 8.3 analysis software is used for verification. Comparison of the three models. When using the structural equation model test, the model should be tested or selected based on which fitted index, and the researchers present different opinions. The following indicators are generally considered to be the most valuable: (1) Root mean square (RMSEA) of the approximate error, which is considered to be good if the RMSEA is 0.05 or less. (2) The overall chi-square test, we commonly use the value of  $\chi^2/df$  as the test index, which is the alternative index of the chi-square test. If  $\chi^2/df$  is less than 5, the model is acceptable, if the value is less than 3 It means that the model fits well. (3) Standard square root residuals (SRMR), the significance of which is the normalized average difference between the predicted and the observed variance and the covariance. The general recommended threshold is 0.08, which is considered to be poorly fitted. (4) Goodness of fit index (GFI), adjusted goodness of fit index (AGFI), non-conventional fit index (NNFI) and comparative fit index (CFI), which are generally considered to be between 0 and 1. Between 0.9 and above indicates a good fit. The degree of fitting of the four-factor model to the data and the comparison with other models are shown in the following table:

Table 1 Emotional intelligence structure model verification results(N=500)

Model index	$\chi^2/df$	RMSEA	SRMR	GFI	AGFI	NNFI	CFI
Four-dimensional model	2.214	0.048	0.055	0.921	0.904	0.887	0.895
Three-dimensional model	3.502	0.072	0.068	0.872	0.846	0.672	0.704
Single dimensional model	4.364	0.086	0.075	0.837	0.807	0.558	0.597

## 5. The relationship results output

### 5.1 The relationship between emotional intelligence and basic personality traits

Emotional intelligence can be distinguished from basic personality traits, and it has its own new value as a new concept. However, the study of the relationship between emotional intelligence and personality and other important concepts still has limitations. When we look at the concept of emotional intelligence, we measure and explore it under the model of characteristics. However, for the emotional intelligence in the perspective of ability, we generally use the best performance method to measure, then explore the emotional intelligence from the perspective of ability. Whether it is different from basic personality traits, and whether it can be distinguished from traditional intelligence, these issues are still unclear. Research also needs to explore more about the connection and difference between emotional intelligence and 16PF, Big Five personality, self-esteem, self-efficacy, traditional intelligence and so on. At the same time, the study found that emotional intelligence and basic personality traits are related and different, then how to deal with the relationship between emotional intelligence and personality traits? We believe that emotional intelligence is a bridge between emotion and intelligence, which may involve a variety of content. We combine the measurement of emotional intelligence to analyze that if emotional intelligence is measured in a self-reporting manner, it is more likely to be related to personality traits; if it is evaluated with the best score, it is more likely to be similar to traditional intelligence. Therefore, the study of the relationship between emotional intelligence and traditional intelligence and basic personality traits needs to be based on accurate measurement of emotional intelligence.

### 5.2 Differences in the emotional intelligence of college students in demographic variables

The results of the study show that the emotional intelligence of college students will be affected by the grade, gender, whether they are only children and the education level of the mother. Sophomores have lower emotional intelligence scores than those in the other three grades. Among the sub-factors of emotional intelligence, sophomores have no significant difference in self-regulation of emotions and helping others to regulate emotions compared with other students. They are only worse than other students in their ability to perceive emotions and solve problems using emotions. Combined with daily life, we can understand the reasons for this difference. Freshman students just entered the university and concentrated most of their energy on the adaptation of the new environment. They may stay more concerned about the practical issues of learning, interpersonal, etc., and did not pay enough attention to emotional issues. The effects may not reflect emotional difficulties when they are measured by Chen. The second year of university is an important transition period. Students begin to pay attention to the development of all aspects of the individual, but the related emotional ability is not perfect, so it will produce more emotional problems. The third and fourth grades are the time for college students to make adjustments and perfection. They may master some skills to deal with emotional problems through learning and exploring, so the emotional intelligence will be greatly improved. Through the above analysis, in the mental health education of college students, efforts should be made to pay attention to the sophomore students in the transition period. They are paying attention to personal growth, may face more confusion, and need to give appropriate guidance, especially to help them develop emotional perception. And the ability to use emotions to solve problems. This kind of guidance can not only

help college students to develop themselves, but also benefit mental health maintenance.

The study found that the emotional intelligence of the only child is higher than that of the non-only child. Although the scores of the only child in the four factors of emotional intelligence are not different from those of the non-only child, from the total score of emotional intelligence, the emotional intelligence of the only child is higher than that of the non-only child, and the difference reaches a significant level. Under the similar definition of emotional intelligence, this conclusion is consistent with the results of domestic middle school students' emotional intelligence research. The opportunities for interaction between the only child and the compatriots are relatively small. Why is the emotional intelligence relatively high? The difference in family education between the only child and the non-only child may be an important reason for their emotional intelligence differences. A deduction is yet to be examined. Parents are important people in the growth of adolescents. The important conditions and factors of parents themselves will affect the growth of college students. This is also reflected in the emotional intelligence of college students. The influence of mother's education level on college students' emotional intelligence is more obvious. Many previous studies have also shown that mothers as important educators have greater influence on individual development. The conclusion of this study is consistent with this study. However, this effect does not have a certain trend, so the specific differences are not analyzed.

### **5.3 The role of emotional intelligence in life stress-mental health: the main effect model or the buffer model?**

Emotional intelligence has a close relationship with mental health, which is already a consensus in previous studies. However, the so-called stress management, interpersonal coordination, adaptation and other components are added to their emotional intelligence structure, so it is meaningless to examine the effect of emotional intelligence on mental health. The problem is that it is equivalent to putting some content in mental health into emotional intelligence, and then used to predict mental health, and essentially finds its own relevance. This study narrows the connotation of emotional intelligence to more essential content, abandoning some diffuse content such as stress management, interpersonal, adaptation, etc., and then discussing the relationship between emotional intelligence and mental health is persuasive, redefining emotional intelligence. The concept of research, after controlling for life events, demographic variables, the three factors of helping others to regulate emotions, using emotions to solve problems and regulating their own emotions, can directly predict mental health and achieve significant Sex level. This result supports the main effect model of past personal traits in life events-mental health. Regardless of the stress situation that individuals suffer in life events, if they have higher help to regulate emotions and use emotions to solve mental health, they can well regulate the adverse effects of life events on mental health. When an individual feels high stress in a life event, the effect on his or her emotional regulation ability is not a buffering effect, but a higher ability to help others' emotional regulation can protect mental health and reduce the pressure of life on mental health. damage. The effect of emotional perception factors on mental health in the structure of emotional intelligence is unique. Although emotional perception is significantly associated with mental health, in regression analysis, as an important part of emotional intelligence, it has no significant predictive effect on mental health. There are also interaction effects when emotional perception and life events have an impact on mental health. However, this kind of interaction effect cannot be understood as the higher the emotional ability of the emotional perception and the ability to regulate their own emotions. They will directly have a positive effect on mental health, so as to avoid Symptoms of various problems occur. Helping others to adjust their emotional abilities can make people adapt to better situations and further have a positive effect on mental health. Individuals are prone to feeling negative emotions such as anxiety and depression in stress situations, and long-term experience of such emotions will lead to difficulties in individual physical reactions, interpersonal problems, and obstacles. People with higher self-emotional regulation can let themselves quickly get out of bad emotions and turn negative experiences into positive experiences and feelings, which will directly affect the mental health of college students. In the face of difficulties, college students who can use emotions to solve

problems can help to establish confidence in problem solving and find more solutions through emotional guidance, so that their psychological tolerance is enhanced and they have a positive impact on mental health. These conclusions provide a certain basis for college students' mental health education activities. Whether college students will encounter difficulties in life, it will be of great benefit to guide them to develop and improve the above three aspects.

By analyzing the interaction effects to observe the buffering effect of some factors of emotional intelligence subordinates on life events, this part of the results supports the buffer model. The adjustment factor that helps others' emotions is stronger in life. Analysis of interaction effects shows that the ability of emotional perception is too strong or too weak to be detrimental to the maintenance of mental health under stress. People with low emotional perception are more likely to have problems than people with emotional perceptions exposed to life events. The reason may be that poor emotional perception cannot have a good understanding of emotional state and causes, and interpersonal conditions will be affected. Will affect the mental health of the individual. The high emotional perception ability will also enhance the impact of life events on mental health, indicating that excessive attention and sensitivity to your own emotions and other people's emotional information is not conducive to mental health when life stress events occur. Therefore, in the life counseling of college students, especially when a stressful life event occurs, the college students can be instructed to pay attention to the emotions appropriately. On the one hand, when they are confused or aware of emotions, they provide guidance and related training to help college students to clearly identify their emotions, emotional difficulties and causes; on the other hand, if college students are too sensitive and concerned about emotions under pressure, you need to guide them to properly transfer attention, and strive to face and solve problems, thereby reducing the damage of stress on mental health.

## **6. Conclusion**

Through the exploratory analysis of the college students' emotional intelligence questionnaire project, it is found that some important demographic variables will have an impact on college students' emotional intelligence. The second-year university students are worse than other students in their emotional perception and ability to solve problems with emotions; the overall score of emotional intelligence of single-child children is higher than that of non-only children; the educational level of mothers has an impact on children's emotional intelligence. Emotional intelligence has both a main effect and a buffering effect in life events-mental health. Controlling the impact of life events, helping others to regulate emotions in emotional intelligence, regulating their own emotions, and using emotions to solve problems can directly affect mental health. At the same time, the adjustment component of emotional intelligence in helping others can alleviate the impact of life events on mental health, the stronger the ability to help others' emotions, and the less negative impact of life events on mental health. Moderate perception of emotions in emotional intelligence can buffer the impact of life events on mental health; too high or too low perceptuality increases the vulnerability of individuals to life events, and the greater the negative impact of life events on mental health.

## **References**

- [1] Joseph Ciarrochi, Deane F P, Anderson S. Emotional intelligence moderates the relationship between stress and mental health[J]. *Personality and Individual Differences*, 2002, 32(2):197-209.
- [2] Montesberges B, Augusto J M. Exploring the relationship between perceived emotional intelligence, coping, social support and mental health in nursing students.[J]. *Journal of Psychiatric & Mental Health Nursing*, 2010, 14(2):163-171.
- [3] Luo Z, Jin C, Psychology D O. A Comprehensive Meta-analysis of the Relationship between Emotional Intelligence and Mental Health with Chinese Samples[J]. *Psychological Development & Education*, 2016.

- [4] Lindebaum D. Does emotional intelligence moderate the relationship between mental health and job performance? An exploratory study[J]. European Management Journal, 2013, 31(6):538-548.
- [5] rasoli, Z, eslami, R, khademi, A. Evaluation of relationship between emotional intelligence and mental health and anger among the Air force personnel[J]. Oncotargets\&\stherapy, 2015, 7(default):1541-50.