

The Influence of Family Environment on Mental Health

Jiacong Wang¹

¹ Ningbo University of Technology, International Exchange College
201 Fenghua Road, Ningbo, Zhejiang, China
729227658@qq.com

Abstract: *Mental health literacy is a comprehensive manifestation of a set of knowledge, attitudes, behaviors, and skills that help people recognize, address, and prevent mental illnesses and mental health problems. The family environment refers to the internal context of the family that surrounds an individual's growth and life, encompassing various elements such as the family's material conditions, emotional atmosphere, and interaction patterns. Current research mostly focuses on the impact of a single dimension of the family environment on individuals, lacking systematic exploration of the interaction among various elements. In fact, the elements of the family environment are interrelated and mutually influential, jointly constructing a complex ecosystem. This paper employs the ecosystem theory to deeply analyze the collaborative mechanisms among the family physical environment, family atmosphere, family culture, and economic environment, as well as their comprehensive impact paths on the growth and development of family members. Based on this, it provides targeted suggestions for optimizing the family environment and promoting harmonious family development.*

Keywords: Students, Family Environment, Mental Health, Collaborative Mechanism

1. Introduction

The family environment, as the primary place for an individual's growth, has a profound and lasting impact on their mental health. A good family environment, such as a warm and harmonious atmosphere and positive communication patterns, can provide solid psychological support for individuals, facilitate the establishment of self-esteem and self-confidence, enhance psychological resilience, and help an individual better cope with life's pressures and challenges. Therefore, the role of the family environment in mental health cannot be underestimated.

However, current academic research on the relationship between family environment and mental health mostly focuses on the influence of a single family environment factor (such as family economic conditions or parent-child relationship) on specific psychological problems (such as depression and anxiety), lacking systematic exploration of the comprehensive mechanism of the interaction of all family environment elements. In fact, the various elements of the family environment do not exist independently. They are interrelated and interact with each other, jointly influencing

an individual's mental health. Therefore, this paper argues that in addition to the above perspectives, it is necessary to discuss how to improve mental health from the perspective of the comprehensive impact of these interactions on an individual's mental health.

2. Literature Review

Previous researchers generally believe that many factors in the family environment, such as family atmosphere and economic conditions, have a positive impact on an individual's mental health, and I agree with this view.

However, there are also some common issues in the research methods of the above-mentioned researchers. First, the scope of subjects selected is narrow, including only two or three schools, and the selection types are single. Second, the questionnaire is not comprehensive enough, and the questions involved are insufficient to represent all positive psychological qualities of high school students. Generally speaking, they have improved in the universality and broadness of samples.

Table 1: Literature Review

Year	Scholars	Category	Sample	Conclusion
2024	Sun	Positive	600 middle school students	Creating a harmonious and pleasant family atmosphere plays an important role in improving the mental health literacy of junior high school students.
2022	Miao	Positive	600 high school students	The higher the degree of intimacy among family members, the higher the level of mental health literacy.
2019	Zhang	Positive	739 high school students	The higher the level of these factors in the family environment, the higher the level of mental health of new students in high school.
2018	Zeng	Positive	494 rural students	Rural students from good family environments tend to have relatively better mental health.
2016	Wang	Positive	1051 high school students	Family environment has a significant impact on the mental health of high school students.

3. Hypothesis

The effect of family environment on mental health is positive, meaning better family environments are generally

associated with higher levels of mental health. A sound family dynamic system serves as a crucial foundation for an individual's healthy growth. An ideal environment for growth

within the family includes a relaxed and cheerful atmosphere, diversified ways of thinking, and positive attribution of illnesses. Children raised in such an environment tend to have inner security, positive emotional experiences, and psychological harmony and health. They develop a more proactive and objective understanding of mental health issues and psychological illnesses. When faced with psychological illnesses, they are willing to seek help from others in a timely manner, thereby promoting an overall improvement in their level of mental health literacy.

H1: The more positive the family emotional atmosphere is, the higher the individual's mental health level will be.

4. Research Design

4.1 Sample and Data

This study conducted a pre-survey on the collected small sample data. The pre-survey was mainly carried out through the “Wenjuanxing” platform, and the respondents were students from all over the country. A total of 45 questionnaires were sent out during the survey period, and 42 were returned, with a return rate of 93.33%. After eliminating the invalid questionnaires, 35 valid questionnaires remained, and the effective response rate was 83.33%.

4.2. Variables

The independent variable of this paper is family environment. The Family Environment Scale (FES-CV) was adopted, which was developed by American psychologist Moos. According to the connotation of the family environment adopted in this paper, the family environment is a comprehensive manifestation of aspects such as the interaction patterns, emotional atmosphere, and parenting styles among family members (Cox & Paley, 1997). In this study, some dimensions from the Family Environment Scale (FES) developed by Moos and Moos (1974) were adopted. The dimension of "Cohesion" was selected, which consists of 15 items numbered FE - I1 - FE - I15, such as "Do family members often offer help and support to each other?" This dimensional scale can effectively measure the degree of emotional bonding among family members, has high reliability and validity, and is widely used in the field of family research.

The dependent variable of this paper is mental health. The Symptom Checklist 90 (SCL-90) developed by Derogatis in 1975 was adopted according to the connotation of the family environment in this paper. Mental health encompasses not only the reduction of psychological symptoms but also the enhancement of positive psychological qualities. In this study, the Youth Mental Health Literacy Assessment Scale developed by Li Danlineal (2021) was adopted. The scale consists of 12 items and includes four dimensions: Knowledge, Recognition, Attitude, and Behavior. A Likert 5-point scoring system is used, with reverse-scoring applied to reverse items.

The control variables of this paper are gender, address, whether it's a single parent family, monthly family income per capita.

4.3 Model

$$\text{Health} = b + a_1 \text{Environment} + a_2 \text{Gender} + a_3 \text{Address} + a_4 \text{Family} + a_5 \text{Income}$$

Health: A positive state of an individual in emotional, cognitive, and social functioning

Environment: The physical and psychological environment in which family members live together.

Gender: Male or female

Address: Where do you live, in the city or the countryside?

Family: Do you live with only one biological or adoptive parent?

Income: How much does each person in your family earn on average?

b: constant

a: coefficient

5. Results and Discussion

5.1 Descriptive Statistics

The results of descriptive statistics for research sample are illustrated in Table 2.

Table 2: Descriptive Statistics

Variables	N	Min.	Max.	Mean	SD
Environment	35	2.67	4.94	3.80	0.62
Health	35	2.17	4.95	3.43	0.52
Gender	35	0	1.00	0.34	0.48
Address	35	0	1.00	0.57	0.50
Family	35	0	1.00	0.89	0.32
Income	35	1.00	4.00	3.29	0.79

5.2 Correlation Analysis

The correlation coefficients among all variables are less than 0.7, indicating that there is no multicollinearity problem.

Table 3: Correlation Matrix

	Environment	Gender	Address	Family	Income
Environment	1.000				
Gender	0.022	1.000			
Address	0.199	0.017	1.000		
Family	-0.178	-0.119	0.052	1.000	
Income	0.001	-0.033	0.244	0.017	1.000

5.3 Regression Results

Family environment has a positive impact on mental health ($b=0.46, p<0.05$), indicating that the better the family environment, the higher the level of mental health. The research hypothesis H1 of this paper is supported.

Table 4: R-square

R²	0.5702
Adjusted R²	0.4961
Standard Error	0.3701
Y Intercept	2.1667

Table 5: Regression Results

	Slope	SE	t-stat	p-value	CI 95%	
Environment	0.455	0.106	4.279	0.000	0.238	0.673
Gender	-0.037	0.133	-0.278	0.783	-0.309	0.235
Address	0.301	0.134	2.247	0.032	0.027	0.574
Family	-0.479	0.202	-2.370	0.025	-0.892	-0.066
Income	-0.061	0.083	-0.734	0.469	-0.231	0.109

Table 6: ANOVA Test of Model Significance

Source	SS	df	MS	F	p-value
Regression	5.2691	5	1.0538	7.6939	0.0001
Residuals	3.9721	29	0.1370		
Total	9.24115873	34			

6. Conclusion

The family environment is composed of multiple dimensions such as emotional atmosphere, cultural traditions, economic conditions, and physical environment. These elements have a significant impact on an individual's mental health. A positive family emotional atmosphere can provide emotional support and a sense of security to an individual, promoting their mental health. Excellent family cultural traditions, such as emphasizing education and advocating virtues, help shape an individual's positive values and good behavioral patterns, and enhance their mental health level. Stable family economic conditions can reduce the uncertainty and anxiety in an individual's life, providing material support for mental health. In conclusion, the more optimized the elements of the family environment are, the more conducive they are to improving an individual's mental health level.

To enhance an individual's mental health, families should strive to create a positive atmosphere, inherit excellent culture, ensure economic stability, and optimize the living environment. Family members should frequently convey care and understanding, attach importance to moral education and knowledge learning, plan family finances reasonably, create a comfortable living space, and comprehensively build a family ecosystem conducive to mental health, thereby helping family members grow healthily.

References

- [1] A. Bonnacorsi, "On the Relationship between Firm Size and Export Intensity," *Journal of International Business Studies*, XXIII (4), pp. 605-635, 1992. (journal style)
- [2] R. Caves, *Multinational Enterprise and Economic Analysis*, Cambridge University Press, Cambridge, 1982. (book style)
- [3] M. Clerc, "The Swarm and the Queen: Towards a Deterministic and Adaptive Particle Swarm Optimization," In *Proceedings of the IEEE Congress on Evolutionary Computation (CEC)*, pp. 1951-1957, 1999. (conference style)
- [4] H.H. Crokell, "Specialization and International Competitiveness," in *Managing the Multinational Subsidiary*, H. Etemad and L. S. Sulude (eds.), Croom-Helm, London, 1986. (book chapter style)
- [5] K. Deb, S. Agrawal, A. Pratab, T. Meyarivan, "A Fast Elitist Non-dominated Sorting Genetic Algorithms for Multiobjective Optimization: NSGA II," *KanGAL*

- report 200001, Indian Institute of Technology, Kanpur, India, 2000. (technical report style)
- [6] J. Gerald, "Sega Ends Production of Dreamcast," *vnunet.com*, para. 2, Jan. 31, 2001. [Online]. Available: <http://nl1.vnunet.com/news/1116995>. [Accessed: Sept. 12, 2004]. (General Internet site)