

Subjects and methods: Childhood and adolescent psychiatric disorders are characterized by problems in interpersonal relationships, emotional stability, and learning adaptation. Students' psychological disorders were mainly anxiety, terror, neurasthenia, obsessive-compulsive symptoms and depression. Among them, including the family, education, social mores and other social factors, such as great influence. The pathogenic factors of mental illness are complex, including biological factors (genetic or external forces causing brain damage, etc.), psychological factors, environmental factors and social factors.

Study design: The selected schools will be stratified by grade, each grade randomly selected 3-5 classes, the number of students in each class within a specified age group is not less than the required number. Systematic sampling was carried out in selected classes to determine a certain number of transferred students. After the mental disorder was diagnosed, 80 children and adolescents were surveyed by Achenbach Child Behavior Scale. Based on the interview, the investigator explained clearly the content of the investigation and the requirements to be paid attention to, and asked the parents to fill in the informed consent form. Mainly to 80 patients with mental disorders in the school situation, specific activities and social skills and other tests. And 80 normal children in the same period were selected as the subjects of the study.

Methods: The above data were processed by SPSS15.0 software, and the data were consistent with the positive distribution. *T* test was used to express the metering data, χ^2 test was used to express the counting data, $P < 0.05$ was statistically significant.

Results: Because the child's expressive capacity is insufficient, it requires doctors to see whether their behavior is consistent with the symptoms of mental disorders in children. The Achenbach Child Behavior Scale has been widely used in clinical practice, which provides a reference for doctors to observe. The individual differences between children and adolescents are significant, and the pathologic reaction and psychological endurance are also quite different. Through this study, we can find that the main complaints of somatization in children are much higher than those in normal children. In addition, aggression, learning, obsessive-compulsive disorder and depression in children with mental disorders are more prominent.

Table 1. Child and adolescent behavior scale.

Anomaly problem factor	Boy child		Girl child	
	Factor score	Normal child	Factor score	Normal child
Bad communication	5.23±5.27	3.56±4.23	5.51±4.85	3.58±3.48
Activities	7.36±5.29	4.26±3.46	9.49±5.18	7.50±3.63
Breach of discipline	3.99±4.25	2.29±3.08	4.26±3.89	3.79±3.46
Social shrinkage	4.26±3.94	2.77±2.81	Indeterminate	Indeterminate
Learning situation	7.39±2.55	5.70±1.06	8.44±4.71	5.69±1.02
Splitting sample	4.66±4.32	2.21±2.55	3.21±4.49	1.89±2.33
Coercion	2.25±2.66	1.81±2.26	4.83±3.15	3.01±4.65
Somatic complaint	3.03±4.19	2.63±3.19	4.51±3.61	2.23±2.51
Attack	7.58±4.01	5.54±5.51	5.99±5.22	4.93±4.99
Depression	Indeterminate	Indeterminate	6.55±4.61	4.15±4.55
<i>P</i>	<0.05		<0.05	

Conclusions: In a word, children's spirit will be affected by many kinds of unfavorable factors, and it will be expressed by children's abnormal behavior, which can be reflected by Achenbach Scale of Children's Behavior. During the growth of children, it is inevitable to meet many kinds of events, and their defense methods and manifestations are also different. This requires parents to grasp children's normal psychological needs, carefully observe, and communicate with them more, and ultimately create a healthy environment for children to grow up.

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EMPIRICAL ANALYSIS OF USING MATHEMATICAL MODELING TO TREAT COLLEGE STUDENTS' ANXIETY DISORDER

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Background: College students are the high-risk group of inducing psychological problems, and anxiety is especially prominent in college students' mental health problems. With the enhancement of the sense of competitive pressure, college students are more and more troubled by anxiety, which directly interferes with their study efficiency, life rules and physical and mental health. Therefore, the problem of college students' mental health has attracted the attention of all walks of life, but the main concern is the theoretical research on anxiety disorder and negative emotions, and there are few effective measures to improve it.

Mathematical modeling, is based on the actual problem to establish mathematical models, mathematical models to solve, and then according to the results to solve the actual problem. When it is necessary to analyze and study a practical problem from a quantitative point of view, mathematical model should be established with mathematical symbols and language on the basis of deep investigation and study, understanding of object information, making simplified assumptions, and analyzing internal laws. Mathematical modeling can not only combine theory with life and games, but also enhance interest and amusement.

Objective: Mathematical Model is a kind of simulation, which is an abstract and concise description of the essential attributes of a practical subject by means of mathematical symbols, mathematical equations, programs, graphics, etc. It can either explain some objective phenomena, or predict the laws of future development, or provide an optimal or better strategy for controlling the development of a certain phenomenon. Mathematical model is not a direct copy of the real problem. It needs people not only to observe and analyze the real problem deeply, but also to use all kinds of mathematical knowledge skillfully. This process of applying knowledge to abstract and refine mathematical models from real problems is called mathematical modeling. Therefore, the use of mathematical modeling of anxiety disorders in college students is worth studying a topic. Based on a comprehensive analysis of the causes of anxiety among college students, this study aims to explore the therapeutic effect of mathematical modeling on anxiety disorders among college students.

Subjects and methods: In this study, we tested 80 college students who went to the school psychological assessment room by themselves. The age of the students was 19-22 years old. Before the experiment, 80 students were given Zung Anxiety Self-Rating Scale, and 11 of them were screened from high to low, 32 of them were moderate anxiety, 15 of them were moderate anxiety and 22 of them were high anxiety.

Study design: The subjects with high anxiety were randomly divided into two groups, 11 persons in each group, of whom 4 were male and 7 were female, respectively, as the final research subjects (experimental group) and control group. The experimental group was taught the optional course of mathematical modeling, and the control group and the experimental group were arranged to continue the normal course teaching in a consistent manner. The students in the experimental group and the control group all passed the school physical examination when they entered the school.

Methods: The experimental group and the control group were tested for half a year. Six months later, 22 college students with high anxiety symptoms were given the Zung Anxiety Self-Rating Scale. Using Spss13.0 and Excel 2003 software to carry on mathematical operation, descriptive statistical analysis, difference test, correlation analysis and so on to the data.

Results: The statistical results of college students' self-rating anxiety scale before and after the experiment are shown in Table 1. Before the experiment, there was no significant difference between the experimental group and the control group ($P > 0.05$); after half a year of mathematics modeling elective courses, the anxiety score of the experimental group was significantly lower than that of the control group, and the difference between the two groups was statistically significant ($P < 0.05$).

Table 1. Statistical results of patients' anxiety scores before and after the experiment.

Groups	Before experiment	After the experiment
Experimental group	15.3±1.1	9.15±1.9
Control group	16.57±2.8	14.61±3.4
<i>T</i>	1.261	9.537
<i>P</i>	>0.05	<0.05

Conclusions: Mathematical modeling is a practical course of using mathematical knowledge to solve practical problems. It is a medium of mathematics widely used in various fields. It is an important handgrip to improve students' consciousness and ability of using mathematics. Compared with the control group,

there was no significant difference in anxiety index between the experimental group and the control group, the anxiety index of the experimental group was significantly improved. This shows that mathematical modeling can alleviate the anxiety of college students to some extent. In the application of mathematical modeling to college students with anxiety, we should continuously improve the teaching countermeasures, make full use of information resources and explore a new teaching mode. Reform curriculum assessment methods, mobilize the subjective initiative of college students for the relief and treatment of anxiety disorders in college students to provide some help.

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INVESTIGATION AND ANALYSIS OF TRAVELING PSYCHOSIS AND TOURISTS' MENTAL HEALTH

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Background: Journey psychosis refers to a transient psychotic disorder that occurs during travel. Traveling psychosis is also called traveling mental disorder, which is a common sudden mental disorder during travel. This disease is more common among passengers on railway trains and can cause serious personal injury and death accidents. The symptoms of travel disorder are diverse, with varying degrees of severity, and generally have the following characteristics: 1. The onset is more rapid, the duration is short, and can be completely relieved; 2. The basic symptoms are manifested by varying degrees of consciousness disorder, and the understanding and judgment are reduced. Lack of reason, behave naively, behave close to primitive instinct, forget or partially forget afterwards, etc.; 3. Persecution delusion is its most prominent and common symptom; 4. Traveling mental disorders also show psychomotor excitement or anxiety, such as increased speech and movement, loss of laughter, yelling, walking around, inexplicable tension, feeling of imminent disaster, restlessness, etc. Travelling mental disorder is a transient mental illness that generally can be recovered without special treatment. The average recovery time is 8 hours.

There are three reasons for the onset of travel psychosis: 1. Speech gap caused by poor language knowledge; 2. Reduced vitality caused by fatigue; 3. Pre-illness schizophrenic or hysterical personality. The occurrence of travel psychosis is related to pre-ill dependence or withdrawn personality, mental fatigue caused by continuous insomnia, and recurrent physical weakness. Most people with mental illness on the journey are traveling by car for the first time, with low education level, and most of them are farmers and migrant workers. Due to the serious overcrowding of the train and the high concentration of CO₂ in the car, most patients have no seats in the hard-seat car. They are either standing or trapped in a corner, with limited physical activity, and they are bound to be extremely fatigued. The patient has no food or little food for a long time, and the number of times of water supply in the compartment is less, and the amount of heavy drinking water is reduced. Under the above conditions, the patient's internal environment is decompensated and abnormal physiological indicators (such as white blood cell count, blood sugar, blood potassium), Hematocrit, etc.). The patient has an introverted or paranoid personality, manifested as silent, withdrawn, pessimistic, hostile to others, etc., and has a certain psychological quality of susceptibility. Patients often have an unpredictable and anxious mood before getting on the bus, most of them go out for the first time, carry hard-earned entrepreneurial capital with them, are in an unfamiliar vehicle, and lack interpersonal communication.

Objective: According to domestic and foreign survey data, long-distance train travel is the most common cause of mental illness during travel, followed by long-distance navigation, intercontinental aviation flights, and long-distance bus travel. Most patients with mental illness during travel are young and middle-aged, most of whom are men. Most of them are farmers or migrant workers. Most of them are below elementary school. Their education level is low. The vast majority of patients have no family or personal history. Therefore, it is of practical significance to investigate and analyze travel mental illness and the mental health of tourists.

Subjects and methods: The clinical manifestations of travel psychosis are fully in line with the characteristics of transient psychotic disorders, and its manifestations are diverse, mainly depression, anxiety, hostility, terror and paranoia. In the survey results, five levels of 1-5 are used to quantify the impact value of specific factors. 1 represents irrelevant, 2 represents slight impact, 3 represents general impact, 4 represents significant impact, and 5 represents sufficient impact. In order to reduce the impact Individual subjective causes a large error. A test was conducted on 500 traveling psychosis, and the average was finally selected, and the result was determined by rounding.